In-Game Cognitions and Self-Talk of German and Japanese Soccer Players Guido GEISLER*

Abstract

This descriptive study examined general in-game cognitions and deliberate/targeted self-talk of intercollegiate soccer players in Germany and Japan. Participants completed a two-item, open-ended measure that assessed their general or incidental thought processes during competition as well as any planned self-talk or cue words for given game situations. Content analysis indicated that general thought patterns of both sets of players were slightly more negative than positive, but the general ratio showed a near positive/negative balance overall. Moreover, the focus of those cognitions revealed some affinity for individualistic and collectivistic values, respectively, among the German and Japanese players. Anecdotal evidence indicated that deliberate self-talk during matches was positive in both nations, but few players reported using this mental tool. Of those who did, the content of self-talk in Germany was primarily focused on tactical play, with some consideration for technical execution and personal encouragement/effort. In Japan, it was split between words of encouragement and statements oriented toward tactics. For practicing coaches, the results suggest that adherence to positive self-talk guidelines is advisable when training players in Germany. In Japan, however, negative self-talk may be more helpful than positive internal dialogue and more facilitative to performance if it is informational in nature. In terms of existing theory, the research supports the dichotomy of both the "cultural differences" and "athletic imperatives" paradigms in cross-cultural sport research. Further study should examine elite club-level soccer players and utilize more rigorous research methodologies. Investigators might also consider comparisons of self-talk over a full competitive season and examine possible correlations with winning and losing across different cultural groups.

Key words: self-talk, intercollegiate soccer, cross-cultural, individualism, collectivism

Positive self-talk is a mental training tool endorsed by athletes, coaches, and sport psychologists across different sports and competition levels (Gould, Hodge, Peterson, & Giannini, 1989; Vargas-Tonsing, Myers, & Feltz, 2004; Weinberg, Grove, & Jackson, 1992). Through a series of short cue words or longer phrases and statements, self-talk is a system of personal dialogue that allows athletes to interpret their own feelings, perceptions, and convictions and to give themselves corresponding instructions or reinforcement (Cutton & Landin, 2007; Hardy, 2006; Hardy, Gammage, & Hall, 2001; Van Raalte, Brewer, Rivera, & Petitpas, 1994). Self-talk has been described, among other terms, as private speech, inner speech, internal dialogue, verbal rehearsal, and egocentric speech (Depape, Hakim-Larson, Voelker, Page, & Jackson, 2006), but for ease of understanding, the framework adopted here reflects Hardy's (2006) conceptualization of self-talk as a multidimensional phenomenon concerned with overt (spoken out loud) or covert (internal thoughts) verbalizations to oneself.

Current research suggests that individual sport athletes employ self-talk more frequently than team sport athletes, and highly skilled/accomplished performers use it to a greater extent than less skilled competitors (Hanton, Mellalieu, & Hall, 2004; Hardy, Hall, & Hardy, 2004; Neil, Mellalieu, & Hanton, 2006). In addition, although applied in both training and competition settings, self-talk is considerably more prevalent when competing than it is during practice sessions (Hardy et al., 2001). Regardless of setting, sporting context, or competition level, two central considerations in the study and implementation of self-talk are its content and purpose. In terms of content, self-talk is said to fall under three main categories – words or statements that address technique, those that offer encouragement or increase

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effort, and those that improve mood (Landin & Herbert, 1999). As for purpose, self-talk serves a number of specific aims. At times it is focused on increasing simple physical capacities like speed, strength, and power (Leith, 2002). On other occasions, either informal self-talk or more structured self-talk scripts can be enlisted to foster self-confidence, motivation/persistence, attentional focus, or arousal/anxiety control (Conroy & Metzler, 2004; Hardy et al., 2001; Williams, Zinsser, & Bunker, 2010). Additional techniques such as thought-stopping and the re-framing of self-defeating beliefs are designed to halt negative cognitive processes (Holliday et al., 2008).

Alongside content and purpose, the self-talk literature is also concerned with the positive/negative nature of athletes' personal dialogue. To date, the majority of research indicates that self-talk should be positive if it is to enhance sport performance and the aforesaid competition-related cognitions. That is, verbalizations should emphasize the athlete's abilities, past achievements, and capacity to succeed in the current task or situation. Negative self-talk, on the other hand, is underlined by dialogue that is self-attacking, selfblaming, self-controlling, and/or self-neglecting (Conroy & Metzler, 2004) and is more commonly associated with increased anxiety intensity, debilitative anxiety appraisals, and decrements in performance (Eklund, 1996; Gould, Eklund, & Jackson, 1992; Gould, Finch, & Jackson, 1993; Hatzigeorgiadis & Biddle, 2008; McPherson, 2000; Van Raalte et al., 1994). Nevertheless, despite general consensus among theorists and practitioners that the most effective self-talk is positive, there are also indications that this premise is not universal and that it might not generalize so readily across cultures.

Several investigations can be drawn upon to illustrate the latter point. An earlier study by Gould et al. (1993), for example, surveyed elite American athletes and found that 71% of the respondents used positive thoughts as a coping strategy during competition. In contrast, however, research by Park (2004) revealed that this positive thinking strategy was used by only 36.1% of national-level competitors in Korea. A more direct East-West comparison is provided by Peters and Williams (2006), who examined the self-talk of East Asians and European Americans during a dart-throwing task. Predictably, the researchers found that self-talk of the European American participants was predominantly positive and that higher

proportions of negative to positive self-talk related to poorer performance on the task. This was not the case for the East Asians, though, who exhibited a significantly larger amount of negative self-talk. Moreover, not only did fewer negative consequences occur for the Asian group as a result of negative self-talk, but a higher proportion of negative to positive self-talk was actually associated with better task performance.

A further aspect of the Peters and Williams study addressed performance and persistence following positive and negative feedback. Results showed that the European Americans were more motivated to persist at the dart-throwing task after receiving positive feedback, while neither positive nor negative feedback affected the persistence of the East Asian group. Similar enquiry by Heine et al. (2001) demonstrated that Canadian research participants worked on a second task significantly longer after being told that they had succeeded on the first task, whereas Japanese participants showed greater persistence on the second task after learning that they had failed on the first. In explaining their findings, Heine and colleagues concluded that the Canadians were driven by thoughts of success (which were bolstered by positive feedback), while the Japanese were motivated by a fear of failure and a wish to correct their shortcomings (motives that were heightened through negative feedback).

Heine and Lehman (1997, 1999) point out that fear of failure (or the motivation to avoid it) in Asian societies is often linked with a tendency toward self-criticism. It is therefore easy to track the sequence of negative feedback, fear of failure, self-criticism, and ultimately, negative self-talk. Negative feedback can raise fear of failure among Western populations as well, of course, but it does not seem to engender the self-criticism and concomitant increases in effort and persistence as seen among Heine et al.'s (2001) Japanese participants, nor does it foster the important thoughts of success as ascribed to the Canadians above. Instead, negative feedback is more commonly associated with negative effects on achievement (Conroy, 2001) and reduced selfconfidence/self-efficacy (Bandura, 1977). For Westerners, self-efficacy is an important facet of performance because it affects effort and persistence in the face of aversive stimuli (Bandura, 1986). Low efficacious individuals tend to give up more easily, attribute failures internally, and suffer more from depression, worry, or anxiety (Feltz, 1988; Duda &

Treasure, 2006). Efficacious athletes, conversely, are more motivated and resistant to small setbacks. This means that in Western achievement settings, positive feedback can enhance self-efficacy and can trigger the aforementioned thoughts of success (thoughts which are apparently less crucial in Japan) through consequent positive self-talk. It also helps to explain Kamal and Blais' (1992) observations that American elite athletes and physical education majors assessed positive feedback as favourable/accurate and negative feedback as unfavourable/inaccurate. In all likelihood, the athletes' and students' assessments reflected self-serving appraisals that precluded self-critical thinking while maintaining self-efficacy and motivation.

Accounting for these discrepant patterns in responses to positive/negative feedback, self-criticism, and resultant self-talk is aided by an understanding of the sociocultural constructs of individualism and collectivism, as well as their relevance to Western and East Asian societies. Individualistic cultures are defined as those that stress personal goals, independence or uniqueness, autonomy in choice and action, and social assertiveness; information is processed from the standpoint of self. In collectivistic cultures, emphasis is on social interdependence, group connectedness/solidarity, and mutual compromise or deference; information is sampled from the standpoint of the group (Bochner, 1994; Markus & Kitayama, 1991; Triandis, 1989; Triandis, Bontempo, Villareal, Asai, & Lucca, 1988). A large body of research suggests that Japanese and other East Asians identify more strongly with the tenets of collectivism, interdependence, hierarchy, and community than people in Europe or North America, where the predominant values emphasize independence, individuality, and horizontal relationships (e.g., Kerr et al., 2000; Kim & Gill, 1997; Markus & Kitayama, 1991; Moy, 1992).

Evidence from various social science disciplines supports the notion that collectivists are generally more self-critical than those from individualistic societies (Bond & Cheung, 1983; White & Chan, 1983) and that viewing themselves critically produces fewer ill effects (Heine & Lehman, 1999; Marsella, Walker, & Johnson, 1973; Yanagida & Marsella, 1978). Kashiwagi (1986), for instance, states that negative self-evaluation and awareness of weaker aspects of the self are hallmarks of the Japanese self-concept. Heine (2001) adds that a self-critical orientation helps collectivists identify problems and deficiencies that may prevent them from fulfilling

their roles and obligations to others, and that selfcriticism is part of a collective practice of ongoing selfimprovement. Taken together, these assertions capture the Japanese custom of *hansei*, or the process of regularly recognizing and reflecting on one's shortcomings as a means toward personal development and improvement (Kitayama, 2002). Thus, unlike in Western nations, where the act of being (overtly) self-critical is often equated with self-handicapping behaviour to preserve one's self-presentation (Prapavessis et al., 2004), selfcriticism in collectivistic cultures may provide an impetus for continued or renewed effort by identifying areas of need, reducing the pressure of expectation, and allowing one to focus more directly on performance. In fact, Steinberg, Dornbusch, and Brown (1992) suggest that self-criticism in these cultures may actually have a facilitative effect on achievement. Presumably, this extends to self-talk during sport competition as well, but the research comparing team sport athletes (and soccer players in particular) in Japan and Western nations is not yet sufficient to draw such conclusions.

Therefore, on the basis of literature review, this study sought to identify and compare both the general in-game cognitions/thoughts and the deliberate or targeted selftalk of intercollegiate soccer players in Germany and Japan – countries that have frequently been classified, respectively, as individualistic and collectivistic nations. General cognitions and deliberate self-talk were addressed separately in order to clarify whether players actually used pre-planned, purposeful self-talk during games. Additional objectives were to categorize the content of any deliberate self-talk as per Landin and Herbert's (1999) classifications, and to determine the extent to which general thoughts and deliberate self-talk were positive or negative in both nations. Given the descriptive nature of the study, no formal hypotheses were proposed, but in light of the extant research there was an informal expectation that in-game thoughts and self-talk overall would be more negative in Japan than in Germany. There were no a priori expectations regarding the content or categorization of self-talk for either cohort.

Method

Participants

The study involved 119 male soccer players (59 in Germany and 60 in Japan) drawn from four university soccer teams in each of the two countries. The players' ages ranged from 20–30 years in Germany (M = 22.8, SD

= 2.27) and 18-22 years in Japan (M=19.6, SD=1.13), and all were full-time students. Although the level of university soccer in Japan is generally higher than that in Germany, it is reasonable to describe all of the participating players as skilled and experienced by amateur standards.

Research Measure

Participants were administered a two-item, open-ended measure as follows:

- 1. To your best recollection, please list or describe all of the <u>unplanned</u> words, thoughts, and/or feelings that entered your mind during the game you just played.
- 2. In addition, please list any <u>deliberate</u> or planned cue words, self-talk, or self-statements you might have used for different game situations during the match (if there are any). Include both those that were internal (in your mind only) and those that you said to yourself out loud.

Item 1 of the research measure aimed to elicit the players' general or incidental thought processes during the game. Item 2 was meant to reveal more deliberate, targeted, and/or planned self-talk (e.g., specific cue words) for given game situations. The investigator and one native German speaker conducted the German translation of the research measure and the participants' responses. Two Japanese colleagues were enlisted for the Japanese translations, and all were familiar with the applicable constructs and terminology. As per common procedure, individual translation was followed by back translation, and differences were discussed before final wording was agreed upon (Brislin, 1986).

Data Analysis

For Item 1, the data were analyzed with the conceptual analysis variant of content analysis, an inductive process whereby respondents' words or statements are grouped into conceptual clusters which represent ideas that emerge from the data (Sanders & Pinhey, 1983). The participants' responses comprised the raw data, and consensus was reached by the investigator and aforementioned assistants on the organization of these raw data into common higher-order themes for each country. Thus, instances of certain statements (raw data themes) in the research measure (unit of analysis) were counted as individual scoring units of the corresponding conceptual clusters (higher-order themes) that emerged and provided a means of numerical expression for each

cluster (e.g., 3 instances of applicable statements equaled 3 scoring units). Percentages were then determined for each of the clusters, revealing patterns within and between the two sets of athletes. This process resembled the one used by Dale (2000), who extracted eight higher-order categories from 32 raw data themes in his analysis of decathletes' distractions during competition. Content analysis allows researchers to categorize respondents' statements through links to specific concepts or frameworks (Patton, 1990), but it is a coding procedure rather than a type of statistical test (Sanders & Pinhey, 1983). As a result, the information obtained frequently remains at the descriptive level (Dale, 2000; Park, 2000, 2004).

For Item 2, deliberate self-talk statements were recorded and grouped in accordance with Landin and Herbert's (1999) categories of technique, encouragement/ effort, and mood. As will be outlined in the discussion of results, a fourth category was added after consideration of the data from both sets of players.

Notes were also taken on the positive or negative nature of responses for both items on the research measure, and again, the investigator and colleagues discussed the data before agreeing on these designations. For Item 1, the main criteria consisted of (1) whether the statements were self-/team-praising (positive) or self-/ team-critical (negative); and (2) whether the statements suggested that the player or team should continue with a certain pattern of play (positive) or change/improve a pattern (negative). On the second criterion, some might argue that statements advocating change could be construed as constructive or problem-solving oriented and, thus, positive. However, the positive/negative designations focused primarily on self- or team-oriented feelings of satisfaction and acceptance (positive) versus those of dissatisfaction and concern (negative) during games. If a statement appeared to be neither positive nor negative, or if it was unclear whether the positive or negative criteria had been met, the statement was designated as neutral. For Item 2, self-talk was considered to be positive if it served to guide the players' actions or feelings in a favourable manner. Negative self-talk applied to statements or cue words that were pejorative or drew upon performance errors.

Procedure

In both countries, the research measure was administered to players immediately after a league game

in the latter part of the season. Although this schedule was primarily a function of team and researcher availability, self-talk's tendency to increase linearly over a competitive season (Heine et al., 2001) raised the possibility that the timing of administration (i.e., late in the season) would provide more elaborate or informative data. All participants were told that there were no favourable or unfavourable responses and that all of the data would be kept confidential through a coding system on the forms and in the analysis.

Results

The results for Item 1 and Item 2 of the research measure are presented in both text and tabular form. Brief summaries are also provided on the overall positive/negative nature of general in-game cognitions and deliberate self-talk in each nation.

General Cognitions/Thoughts (Item 1)

The analysis for Item 1 produced 110 raw data themes for the 119 participants (53 themes in Germany and 57 in Japan) with respect to their general in-game cognitions. The mean number of responses was 0.90 per German player and 0.95 per Japanese player, which provided only a modest amount of data. When combined, the mean number of responses for all of the 119 participants was 0.92, with a range of 0-4. This led to a total of 12 broad conceptual clusters (higher-order themes) in Germany, but this became 22 clusters when broken down into positive, negative, and neutral cognitions. In Japan, 9 broad conceptual clusters were drawn from the data; this became 19 clusters when divided into positive, negative, and neutral cognitions. Table 1 reveals all of the higherorder themes that emerged as well as the number of scoring units and percentages for each.

In the sample of German players, the highest number of scoring units pertained to positive thoughts about personal performance, negative emotions/feelings, and profanities linked to losses or poor performance (5 scoring units [9.4%] each from the 53 in total). The next most frequently reported cognitions were related to negative aspects of personal performance, positive as well as negative aspects of team performance, negative thoughts about outcome/score, positive comparisons to the opposing team, positive feelings about tactical execution, doubts about the tactics being employed, and negative assessments of the referee (each with 3 scoring units). The remaining clusters received only 1 or 2

scoring units, while negative thoughts about team spirit (acknowledged by the Japanese players) did not arise at all. The following are some salient examples of general thoughts (raw data themes) that were reported by the German players for Item 1, and which were used to form the conceptual clusters (higher-order themes) in Table 1:

"I'm playing poorly" / "I'm playing poorly" (with profanities) / "We're playing poorly" / "We're playing poorly" (with profanities) / "I'm playing very well" / "I'm one of the best players here" / "We should be winning" / "We're the better team" / "We need to score" / "I'm in the zone (on a high)" / "Why haven't we made a substitution?" / "This formation isn't working" / "This referee is terrible" / "I hope my calf holds out" / "I'm spent; I want the game to end"

For the Japanese participants, 8 of the 57 scoring units (14.0%) were related to positive thoughts about team spirit. The next most frequent cognitions were about negative aspects of personal performance (5 scoring units), followed by both negative and neutral thoughts about game outcome/score and negative feelings about tactical execution (each with 4 scoring units). Clusters with 3 scoring units included both positive and negative cognitions about team performance, negative comparisons with the opposing team, both positive and negative emotions/feelings, negative thoughts about team spirit, and negative body-/fitness-oriented thoughts. Other clusters received only 1 or 2 scoring units, while four themes that emerged from the German players did not arise at all in Japan (negative thoughts about teammates, doubts about tactics, negative assessments of the referee, and profanities linked to losses or poor performance). The following are some examples of raw data themes from the Japanese players that were used to make up the conceptual clusters in Table 1:

"I'm playing poorly" / "I'm letting the team down" /
"We're playing poorly" / "We need to win" / "We need
to show we're as good as them" / "We need to score" /
"We need more discipline" / "We're not moving the
ball quickly" / "We're not keeping the ball" / "Play to
keep your (starting) position" / "We need to fight more"
/ "I'm tired (fatigued)"

In terms of the positive/negative nature of general ingame thoughts, both the German and Japanese players

Table 1

General In-Game Cognitions/Thoughts as Revealed by Item 1

	Germany		Japan	
Cluster (Focus of Thoughts)	Scoring Units	Percent (%)	Scoring Units	Percent (%)
Personal Performance (positive)	5	9.4	2	3.5
Personal Performance (negative)	3	5.7	5	8.8
Team Performance (positive)	3	5.7	3	5.3
Team Performance (negative)	3	5.7	3	5.3
Team Performance (neutral)	1	1.9	1	1.8
Teammates (positive)	1	1.9	2	3.5
Teammates (negative)	1	1.9	-	-
Outcome/Score (positive)	1	1.9	2	3.5
Outcome/Score (negative)	3	5.7	4	7.0
Outcome/Score (neutral)	1	1.9	4	7.0
Team Comparison (positive)	3	5.7	1	1.8
Team Comparison (negative)	1	1.9	3	5.3
Tactics – performance/execution (positive)	3	5.7	2	3.5
Tactics – performance/execution (negative)	1	1.9	4	7.0
Tactics – questioning/doubt (negative)	3	5.7	-	-
Referee (negative)	3	5.7	-	-
Emotions/Feelings (positive)	2	3.8	3	5.3
Emotions/Feelings (negative)	5	9.4	3	5.3
Team Spirit (positive)	1	1.9	8	14.0
Team Spirit (negative)	-	-	3	5.3
Body/Fitness (positive)	2	3.8	1	1.8
Body/Fitness (negative)	2	3.8	3	5.3
Profanities – re: losses/poor performance (negative)	5	9.4	-	-
Total	53	100.4	57	100.3

reported more negative cognitions than positive ones overall. In Germany, there were 21 scoring units (39.6%) related to positively toned thoughts and 30 (56.6%) that were negative in nature. Two scoring units (3.8%) were associated with neutral cognitions. The Japanese data contained 24 scoring units (42.1%) for thoughts that were

positive in tone and 28 (49.1%) that were negative. Five scoring units (8.8%) were deemed to be neutral. However, a caveat in the German results warrants mention. Specifically, 6 of the negative-cognition scoring units were unrelated to players' self-assessments or to the team's performance/capability. Instead, they

represented doubts about the coach's tactical decisions and displeasure with the referee, neither of which was listed by the Japanese players. If those scoring units are removed from the analysis, the German balance becomes 21 positive thoughts (44.7%) versus 24 negative cognitions (51.1%). As such, the ratio of positive to negative in-game thoughts was essentially the same for the players in both countries.

Deliberate/Targeted Self-Talk (Item 2)

For Item 2 on the research measure, deliberate self-talk statements or cue words were recorded and grouped as per Landin and Herbert's (1999) content categories of technique, encouragement/effort, and mood. After consideration of the data, however, a fourth category – *tactics* – was added to more accurately delineate the content of the players' statements. The mean number of responses was 0.22 per German player and 0.28 per Japanese player. The mean number of responses for all of the participants combined was 0.25, with a range of 0–2, which provided only a modest amount of data once again.

In Germany, there were 13 reported instances (scoring units) of deliberate self-talk that encompassed 9 different

sets of self-talk statements/cue words. Of those 13 instances, 3 were associated with technique, 3 were focused on encouragement/effort, and 7 dealt with tactics. None of the self-talk was intended to improve mood. Table 2 reveals all of the self-talk/cue words used by the German participants, plus the number of scoring units and the content category for each.

The Japanese players reported 17 instances of deliberate self-talk that incorporated 10 sets of self-talk statements/cue words. In contrast to the reports of the German players, most of the self-talk instances sought to offer encouragement/increase effort (11 scoring units) while the other 6 were focused on tactics (though one of the 6 tactics-oriented instances could also be interpreted to some extent as technique focused). There was also some overlap with the German group, however, in that none of the self-talk addressed mood. Table 3 provides all of the self-talk/cue words reported by the Japanese players, plus the number of scoring units and the content category for each.

Other than two reported self-statements in Germany ("no free shots" and "give no space") and one in Japan ("don't commit"), the deliberate self-talk statements/cue words were positively toned for both sets of players.

Table 2

Deliberate/Targeted Self-Talk of the German Players, as Revealed by Item 2

Self-Talk/Cue Words	Scoring Units	Content Category
"Dominance"	2	Encouragement/Effort
"No free shots"	2	Tactics
"Look for (name)"	2	Tactics
"Control the ball"	2	Technique
"Over the ball"	1	Technique
"Stay with the striker"	1	Tactics
"Stay compact"	1	Tactics
"Give no space"	1	Tactics
"Do the dirty work"	1	Encouragement/Effort
Total	13	

Table 3

Deliberate/Targeted Self-Talk of the Japanese Players, as Revealed by Item 2

Self-Talk/Cue Words	Scoring Units	Content Category
"Fight"	3	Encouragement/Effort
"Be the best"	3	Encouragement/Effort
"Shoot"	2	Encouragement/Effort
"I can (beat him/stop him)"	2	Encouragement/Effort
"Stay with (number)"	2	Tactics
"Close the gap"	1	Tactics
"Circulate (move) the ball"	1	Tactics
"Counter"	1	Tactics
"Don't commit"	1	Tactics (+ <i>Technique</i>)
"Be strong"	1	Encouragement/Effort
Total	17	

Looking more closely, these three cases were not negative per se since they acted as pro-active guidelines most likely associated with the implementation of tactics. Examples of truly negative self-talk would have been expressions such as "don't lose the ball in our defensive third" or "don't get beaten by the winger", among others. Accordingly, deliberate self-talk/cue words as assessed by Item 2 produced results that were similarly positive in the two countries. This is in keeping with general self-talk principles in the sport psychology literature. Very slight differences emerged, however, in the content of those statements.

Discussion

This study examined the content and positive/negative nature of general in-game cognitions and deliberate self-talk statements among intercollegiate soccer players in Germany and Japan. The following is a discussion of the most noteworthy findings.

To begin, Item 1 revealed that both the Japanese and German players reported more negative general thoughts than positive ones during games, and that the ratio of positive to negative cognitions was very similar for the two sets of participants. In actuality, the edge in negative thinking was rather slight, with a near balance overall between positive and negative thought processes for both cohorts, which is not so surprising given the natural ebb and flow of momentum and performance moments during team sport matches (e.g., successful sequences/ execution versus breakdowns/mistakes). However, there was no support for the informal expectation that in-game thoughts would be more negative in Japan than in Germany. The fact that differences between the two nations were marginal is perhaps best explained through the "athletic imperatives" paradigm (Chelladurai, Imamura, Yamaguchi, Oinuma, & Miyauchi, 1988) that, due to universally-endorsed performance requirements in sport competition, there is often a considerable degree of cultural congruence in athletes' thoughts and behaviours. The "athletic imperatives" viewpoint is often cited when cross-cultural research produces negligible variation, and in the current study, the results for positivity/negativity on Item 1 support this perspective. They also suggest that cultural congruence may incorporate some of the general thoughts experienced by intercollegiate soccer players during games.

Nevertheless, previously outlined research on selfcriticism in Japan and East Asia necessitates consideration of why the Japanese responses were not appreciably more negative than those in Germany. To address this question, one can look to the nature of the sport itself. Broader observations of contemporary Japanese soccer suggest that at higher levels of competition, there is less emphasis on traditional values than in sports with a stronger national history. An investigation by Otake et al. (2004), for example, provides empirical evidence that upper-level soccer players in Japan do in fact think differently from their less accomplished counterparts, and that they may learn to do so from an early age. The researchers found that young players from the developmental youth teams of professional J-League clubs exhibited what was referred to as better "psychological competitive abilities" than players belonging to middle school teams. These psychological competitive abilities included confidence, aggressiveness, and volition to win, as well as such individualistic measures as decisiveness, volition for competition, and volition for self-realization. What these patterns imply is that to be selected and to succeed as the competition level increases, Japanese soccer players must develop a competitive mindset that challenges some of the purported collectivistic traditions of everyday life. Soccer in Japan is an adopted Western activity that has evolved outside the scope of thinking of more traditional Japanese activities such as martial arts and baseball (or "yakyu-do"). In other words, Japanese soccer may possess less of a traditional Budo spirit because it has been shaped by foreign influence and has adopted foreign methods that are interpreted as being "correct" or "appropriate" for the activity. At higher levels of competition, this may blur some of the differences between Japanese and Western competitors, including those related to players' in-game cognitions, and likely plays a role in aligning Japanese soccer with the "athletic imperatives" perspective on cultural comparisons in sport.

There were, however, points of contrast that emerged between the nations as well – not in the positive/negative nature of cognitions, but with respect to the *focus* of players' general in-game thoughts. Consequently, the ensuing discussion accounts for those conceptual clusters in Table 1 with the most conspicuous differences between the German and Japanese participants. Foremost among those differences were cognitions about team spirit, a

higher-order theme that was much more prominent in Japan than in Germany. In fact, scoring units for both positive and negative assessments reveal that team spirit on the whole was an important feature of the Japanese players' experience, which strongly underscores the notion of collectivistic thought patterns among this cohort. Other results from Table 1 hint at an equally collectivistic propensity for self-criticism, as demonstrated by the higher Japanese scores for negative team comparisons and negative assessments of personal tactical performance. Such an individualistic/ collectivistic distinction was apparent in the German data as well. Specifically, higher scores for positive thoughts about personal performance, positive team comparisons, questioning team tactics (i.e., questioning coaching decisions), and expressing displeasure with the referee correspond to individualistic notions of personal achievement, self-serving performance assessments, and social assertiveness. Lastly, it is telling that three presumably individualistic themes of the German players did not arise at all in Japan (negative thoughts about teammates, questioning of team tactics, and negative assessments of the referee).

To recap, while the general in-game cognitions of the Japanese players were not overwhelmingly negative in comparison to those of the Germans, the focus or content of those cognitions showed a lean toward collectivistic thinking and a slightly more self-critical nature. This does not contradict the blurring of differences, as mentioned earlier, that may exist between Japanese and Western competitors at higher levels of play, as there is indeed reason to believe that soccer fosters thought processes which have become increasingly universal over time. By the same token, small nuances gleaned from Item 1 cannot be wholly overlooked, and those nuances as they pertain to the focus of in-game thoughts lend support to Chelladurai et al.'s (1988) "cultural influences" perspective in sport. As a counter paradigm to the "athletic imperatives" viewpoint noted previously, the "cultural influences" perspective contends that at times, culture does affect thought processes and behaviours in competitive sport settings. Against this backdrop, then, the current results make a contribution to existing theory by reinforcing the utility of this dual framework (i.e., some aspects of sport are universal and dictated by athletic imperatives; others are subject to cultural influences). For one, they corroborate the notion that certain behaviours and cognitive patterns in

competitive team sports may be characteristically Japanese and rooted in a collectivistic value system. At the same time, they illustrate the fact that there are also aspects of competition which are prone to commonalities across cultures. This dichotomy is best understood through esteemed psychologist and sometime sport researcher Richard Lazarus, whose acknowledgement of cultural variation was moderated by the recognition that this variation is sometimes overstated by researchers (Lazarus, 1999). Extrapolating from Lazarus and Chelladurai et al. (1988), the message for ongoing crosscultural studies is to appreciate this duality and temper preconceptions when interpreting research results.

Turning to Item 2, deliberate in-game self-talk was similarly positive in both countries, and the few players who employed self-talk statements or cue words during matches followed general self-talk guidelines. However, there were some marginal differences in the content of the self-talk that was used. The German players' responses contained an equal proportion of techniqueoriented and encouragement/effort emphases, but the majority of reported statements were focused on tactical play. In Japan, self-talk statements were split between words of encouragement/effort and those oriented toward tactics. It is tempting to suggest that these patterns exemplify the individualistic characteristic of autonomy in Germany (i.e., self-direction and personal problemsolving regarding technical and tactical execution) and the collectivistic trait of obligation (through adequate effort) amongst the Japanese. In reality, though, they are more likely a reflection of the level of university soccer in the two nations and the possibility that the German participants were somewhat less skilled or accomplished than those in Japan. This would explain why the Japanese players did not address technique, the assumption being that they were already very adept at technical skills and therefore put more self-talk emphasis on the implementation of (advanced) tactics and the aforesaid obligation of effort. The German players, in contrast, might have felt a greater need to employ selftalk that assisted with the execution of technical skills and tactical plans that were less automatic.

It should be mentioned, of course, that these suggestions are based on a very limited set of data since the majority of players in both countries did not report using any deliberate or specifically-targeted self-talk during games. This is indicated by the mean number of reported instances per player (0.22 in Germany and 0.28

in Japan) and implies that self-talk is not a common or promoted technique among the sampled sets of participants. The extension of this assertion is that intercollegiate soccer players in both nations might require more formal coaching in self-talk if it is to be used as an effective and methodical mental tool.

To that end, the subsequent points of discussion address practical advice for coaches. As a preface, though, the premise bears repeating that attempting to curb self-criticism and negative self-talk patterns has been shown to increase anxiety and hinder the performance of athletes from collectivistic backgrounds (Heine, 2001; Heine & Lehman, 1999; Marsella et al., 1973; Peters & Williams, 2006; Yanagida & Marsella, 1978). As noted, in-game cognitions of the Japanese players here were largely negative, but recent research by Oliver, Markland, and Hardy (2010) provides new insights as to why negative self-talk might not be debilitating to Japanese athletes and why it might actually enhance performance. The researchers addressed people's personal experiences with self-talk and their interpretations of its function, and drawing from cognitive evaluation theory (CET; Deci & Ryan, 1985), they proposed that self-talk represents an internal regulatory event to individuals that can be experienced as either informational or controlling (Oliver et al., 2010). The former is thought to engender direction, selfencouragement, and well-being, whereas the latter is linked to anxiety, self-imposed pressure, and unpleasant affect. Oliver et al. (2010) found that the functional significance of self-talk is optimal when it is informational rather than controlling to the athlete, which means that the important consideration is not what is said during self-talk but, rather, the way that it is said. Thus, if negative self-talk amongst Japanese competitors is articulated in a manner that identifies areas of need and offers solutions that facilitate improvement (i.e., if it is informational), as has been suggested, then Oliver and colleagues' findings can further explain why it might enhance the performance, motivation, and well-being of athletes in Japan.

The corresponding take-home point for practitioners is that coaches should *talk to their players* regularly to learn what they are thinking and saying to themselves. The concept is a simple one, and advocated by top coaches at the professional and youth academy levels (S. Neely, personal communication, July 13, 2011), but a regular process of engagement between coaches and individual

athletes is not practiced as widely as might be expected. In Japan especially, traditional group dynamics are said to prevent strong interpersonal coach-athlete cooperation (Polster, 2004), and research by Yoshida, Matsuo, Yamamoto, and Taniguchi (1998) suggests that Japanese coaches do not closely monitor their relationships with the athletes on their teams. Information obtained from such discussions, however, and the resulting knowledge of players' personalities, appraisals, and problem-solving tendencies can help coaches ensure that their athletes' internal dialogue is optimally suited to the individual, the context, and the level of competition. More specifically, if a player's personal dialogue (including negative dialogue) is informational as opposed to controlling, then the best intervention might actually be no intervention at all. That is, it may not necessarily be productive to change what Western observers perceive as negative precompetition or in-competition feelings. Sport contains an array of both positive and negative emotions, all of which can either benefit or hinder performance (Lazarus, 2000), and it is a realistic assumption that (informational) negative self-talk serves much the same purpose as "hansei" by triggering cognitive appraisals and action tendencies that identify areas of need and appropriate solutions to problems. In such cases, coaches should accept that the most effective internal dialogue for Japanese competitors may in fact be more negative than that which is customary in the West, and should select their interventions accordingly. But again, the relevant information can only be obtained through in-depth discussions with players.

With respect to coaches in Germany, talking to players is equally important in determining their in-game cognitions and self-talk. In this case, however, intervention should be governed by the prevailing research evidence that positive thinking is more facilitative to the performance of Western athletes. As a result, if players' cognitions and/or personal dialogue are largely negative, it is recommended that coaches teach methods of re-framing negative thought patterns in a manner that makes them more positive. Techniques are numerous, such as "parking" and thought stopping, among others, and readers are directed to the plethora of applied sport psychology resources available to coaches, consultants, and academics.

The discussion closes with three recommendations for follow-up study. First, researchers extending this line of enquiry might wish to compare positive and negative self-talk over a long-term basis or full competitive season across different cultural groups, and examine possible correlations with winning and losing games. A model for such research is offered by Geisler and Kerr (2008), who examined the relationships between game outcome, arousal levels, and motivational states among Canadian futsal players over the course of several matches. Further study should also consider more elite soccer players (especially in Germany) or those at advanced club level, as well as larger sample sizes and more rigorous methods of data analysis within quantitative research designs. Thirdly, on account of the self-talk content reported by the current set of participants, investigators employing Landin and Herbert's (1999) self-talk classifications are advised to incorporate a "tactics" category into their data analysis schemes.

Finally, it must be stated once more that this study provided only descriptive information that offers insights into the patterns of soccer players in both countries. Those insights can serve to inform follow-up research initiatives, but they do not allow for objective conclusions to be drawn and the results cannot effectively be generalized beyond the current subset. Those limitations notwithstanding, the study addresses a knowledge gap in the self-talk literature and makes a functional contribution to existing theory on crosscultural research in sport.

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