Stress and Coping Among International Adolescent Golfers

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Stress and Coping Among International Adolescent Golfers

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Participation in competitive sport during adolescence has the potential to be extremely stressful (Goyen & Anshel, 1998). However, little is known about how young athletes cope with the stressors associated with their competitive sport involvement (Crocker & Isaak, 1997). This is a limitation of research findings to date because the inability to cope with stress is a significant factor in athletes’ performance failures (Lazarus, 2000). Adolescent athletes must learn how to cope with stress and respond positively to setbacks if they wish to pursue careers in elite adult sport (Holt & Dunn, 2004).

Coping represents “constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person” (Lazarus & Folkman, 1984, p. 141). Coping responses have been categorized into two broad ‘higher-order’ functions: problem and emotion focused (Lazarus, 1999). Problem-focused coping describes strategies directed at managing the environment (e.g., problem solving, planning, or increasing efforts). Emotion-focused coping involves managing emotional responses to stress (e.g., relaxation, acceptance, or wishful thinking). Researchers have advocated a third factor, avoidance coping, for describing the coping experiences of adolescent athletes (Kowalski & Crocker, 2001). Avoidance coping involves behavioral (e.g., removing...
self from the situation) and psychological (e.g., cognitive distancing) efforts to disengage from a stressful situation (Krohne, 1993).

Golf is a unique sport to study from a coping perspective because golfers have an inordinate amount of time between shots. During this ‘downtime’ there is the potential for extensive stress appraisals and the subsequent deployment of coping responses. Gaudreau, Lapierre, and Blondin (2001) examined pre-competitive, during competition, and post-competitive coping responses among adolescent golfers. Results indicated that golfers’ coping responses changed across all three phases of competition. In a similar study, Gaudreau, Blondin, and Lapierre (2002) replicated these findings, but also found that those golfers who did not achieve their performance goal for their round of golf decreased task-oriented, emotion, and avoidance coping from pre- to post-competition. Those golfers who achieved their performance goal reported stable coping strategies usage from pre- to post-competition. Similar to other researchers (e.g., Crocker & Isaak, 1997), Gaudreau and colleagues observed that active coping, increased effort, and positive reappraisal were the most commonly used coping strategies by adolescents in sport.

Given that coping is a process, longitudinal studies are required for examining coping over time (Lazarus, 1999). Initial studies (Gaudreau et al., 2002; Gaudreau et al., 2001) provided evidence about the dynamic nature of coping across specific golf performances. However, there are little data on how elite adolescent athletes cope with longer term day-to-day stressors (i.e. ‘daily hassles’ coping) in specific sporting contexts such as golf. Consequently, the first purpose of this exploratory study was to establish stressors perceived by elite adolescent golfers over a 31-day competitive period. The second purpose was to examine the coping strategies used by the golfers to manage these stressors.

METHOD

Participants

Participants were 11 international golfers ($M$ age = 16.4 years, $SD = 1.9$) who were affiliated with the Welsh Golf Union’s talent identification program. All participants were middle class, Caucasian, attended high school, and possessed handicaps ranging from 0 to 4, ($M$ handicap = 1.3, $SD = 1.4$). Participants were recruited by letter and written informed consent was provided by all participants and a parent (if the participant was under 18 years old).

The 31-Day Competitive Period

Data were collected during the month of July, the most competitive period of the season when there were eight national or international competitions. From days 1–5 of the study all 11 participants played in the Glamorgan Boys championship (a one-day stroke-play competition). Between days 6–10 there were no national or international competitions, just practice rounds. During days 11–15 five participants played in the Tucker Trophy (a two-round national stroke-play competition), whereas the other six played in the European Boys Championships.

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1The fourth author was the sport psychology consultant for the group of golfers studied here. During the 31-day diary period he held two group meetings with the players. A goal setting exercise was conducted in the first meeting, and the second meeting involved a discussion of pre-shot routines. He did not deliver a coping intervention to any of the participants in this study. As such, the data presented here intended to portray the golfers’ perceptions of stress and coping in a naturalistic setting rather than evaluate the outcomes of a coping intervention.
(a four-day team event played in the Czech Republic). From days 16 to 20 all 11 golfers played in the South Wales Open (a national two-round stroke-play competition). Between days 21 to 25 all the participants played in a ‘North against South’ inter-squad match and the Welsh Boys Under-18 Championship (a one-day stroke play competition followed by a three-day match play knockout competition). During the final period (days 26–31), eight participants played in the British Boys Under-18 Championship and the remaining three played in the Welsh Amateur (i.e., open-age/adult) Championship. Both these competitions lasted for five days.

Data Collection

Daily Diary

The diary comprised a stressor checklist and an open-ended coping responses section. The stressor checklist was adapted from one used by Anshel (1996), who reported an acceptable goodness-of-fit index of .87, with alphas for each stressor ranging from .83 to .92. The checklist included the following categories: making a physical or mental error; being criticized by coach; observing an opponent cheat; sustaining pain, injury, or illness; receiving a wrong call from an official; observing an opponent perform well; difficult weather conditions; and being distracted by the crowd or someone watching. The open-ended response section required the golfers to write what they did to manage each of the stressors they had marked on the checklist. The dairy was piloted with an elite golfer for five days. Based on his feedback, some changes were made to the structure of the diary, the most important of which was separating physical and mental errors into discrete categories, and creating a space for any additional stressors which were not on the list.

All golfers received a package of 31 diary sheets (dated July 1st through July 31st), instructions, and one example of a completed diary sheet. They were asked to complete the appropriately dated diary sheet on the evening of each day they played golf (either competitively or in practice). They were not required to complete the diary on days when they did not play (i.e., rest days or travel days). All participants were telephoned by the first author two days before the study commenced, on the evening of the first day of the study, and every five days hence to answer any procedural questions and help ensure adherence. Originally, 18 golfers who consented to participate in the study were sent diary packages, but fully complete diaries (i.e., data reported for every day of golf performance or practice) were returned by 11 participants. The seven incomplete data sets were excluded from this study.

Data Analysis

Stressors

Data from the checklists were tallied to identify the four most frequently reported stressors. Data were analyzed longitudinally (following Udry, 1997) by creating five time periods of five days, and a period with six days (days 1–5, 6–10, 11–15, 16–20, 21–25, 26–31). The four most frequently reported stressors in each time period were then tallied and divided by 11 to produce mean scores and standard deviations (see Figure 1).

Coping

The open-ended coping responses data were transcribed verbatim and subjected to an inductive content analysis procedure (Maykut & Morehouse, 1994). Similar coping strategies
were grouped together as first-order themes and assigned a descriptive label and a rule of
inclusion was written for each theme. For example, one first-order theme was descriptively
labeled ‘technical adjustments’ and the rule of inclusion was ‘The golfers changed technical
elements of their game while on the course playing. These modifications included changes to
swing plane, stance, grip, and technique.’ Alternatively, for the first-order theme ‘blocking’ the
rule was ‘attempts to ignore stressful thoughts.’ Eventually, all of the coping strategies were
categorized into 40 discrete first-order themes, and the frequencies by which each theme was
cited were tallied (see Table 1).

Similar first-order themes were grouped under more abstract labels as second-order themes
(e.g., ‘technical adjustments’ was assigned to the second-order theme of ‘Behavior Technique
Coping’ whereas ‘blocking’ was assigned to the second-order theme of ‘Cognitive Avoid-
ance’). Second-order themes were then classified according to the coping function that they
were apparently intended to serve using the dimensions of problem-focused, emotion-focused,
and avoidance coping that have been recommended in the literature (Kowalski & Crocker,
2001). Following some discussion and modification of the coding scheme, inter-rater reliabil-
ity checks revealed 99% agreement between the first and second authors’ classifications, and
97% agreement between the first and third author. To produce mean scores for each time period,
the number of coping first-order themes in the three coping functions were tallied across the
sample during each time period and then divided by 11 and standard deviations were calculated
(see Figure 2).

RESULTS

Participants reported that they played golf on 250 of the 341 total available days in July.
On average, golf was played for 22.7 days per person (SD = 3.9). From the 250 daily diaries
received, participants reported 369 stressors and 460 coping responses.

Stressors

The four most frequently reported stressors were making a physical error (cited 109 times
or 29.5% of total stressors), making a mental error (cited 88 times, 23.8%), observing an
opponent play well (cited 49 times, 13.3%), and difficult weather conditions (cited 32 times,
8.7%). In the first three time periods, making a physical error was most frequently cited,
Table 1
Classification and Frequencies of Coping Responses Over 31 Days

<table>
<thead>
<tr>
<th>Coping Function</th>
<th>Second-Order Theme</th>
<th>First Order Theme (Frequencies)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem-focused coping</td>
<td>Behavioral technique coping</td>
<td>Technical adjustments (41)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Practiced (14)</td>
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<tr>
<td></td>
<td></td>
<td>New shots (10)</td>
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<tr>
<td></td>
<td></td>
<td>Rhythm (3)</td>
</tr>
<tr>
<td>Cognitive technique coping</td>
<td>Swing thoughts (28)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Trusted swing (18)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Trying, but not trusting stroke (3)</td>
</tr>
<tr>
<td>Behavioral coping</td>
<td>Pre-shot routine (24)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Weather protection (11)</td>
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<tr>
<td></td>
<td></td>
<td>Increased effort (10)</td>
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<tr>
<td></td>
<td></td>
<td>Drunk water/energy drink (6)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not giving up (4)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Walked slower (2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Warmed up (1)</td>
</tr>
<tr>
<td>Preparation</td>
<td>Stuck to strategy (28)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Took more time/care (8)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Changed strategy (6)</td>
</tr>
<tr>
<td>Concentration</td>
<td>Increased concentration (42)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Focused on their own game (23)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Committed to the shot (19)</td>
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<tr>
<td></td>
<td></td>
<td>One shot at a time (9)</td>
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<tr>
<td></td>
<td></td>
<td>Played off opponent (3)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Focused on opponent (2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Focused on the target (2)</td>
</tr>
<tr>
<td>Goal setting</td>
<td>Set achievable goals (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thought ahead (1)</td>
</tr>
<tr>
<td>Emotion-focused coping</td>
<td>Relaxation techniques</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Visualization (4)</td>
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<td></td>
<td></td>
<td>Breathing exercises (1)</td>
</tr>
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<td></td>
<td></td>
<td>Physical relaxation (1)</td>
</tr>
<tr>
<td>Acceptance</td>
<td>Positive appraisal (24)</td>
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<td></td>
<td></td>
<td>Positive re-appraisal (13)</td>
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<tr>
<td></td>
<td></td>
<td>Accepted mistakes (8)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acceptance of others (1)</td>
</tr>
<tr>
<td>Social</td>
<td>Social support (13)</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Sought advice (3)</td>
</tr>
<tr>
<td>Avoidance coping</td>
<td>Cognitive avoidance</td>
<td>Blocking (52)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ignoring other people (7)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Laughing (6)</td>
</tr>
<tr>
<td>Behavioral avoidance</td>
<td>Left course (1)</td>
<td></td>
</tr>
</tbody>
</table>

whereas making a mental error was most frequently cited in the last three time periods (see Figure 1). Golfers reported the most stressors during days 11 to 15, which coincided with two of the most important competitions of the season (Tucker Trophy and European Boys Championships). The mean number of reported physical and mental errors declined during days 16–20 and then again from days 21–25 (when an inter-squad match was played along with the Welsh Boys championship). Stressors increased again during the final period of the study (when the players were competing in the more prestigious British or Welsh (adult) amateur championships).
Coping

Blocking (cited 52 times or 11.3% of total coping responses) was the most frequently cited single response, followed by increased concentration (cited 42 times, 9.1%), and technical adjustments (cited 41 times, 8.9%). In terms of coping function, problem-focused coping was reported more than either emotion-focused or avoidance coping. The mean number of problem-focused, avoidance, and emotion-focused coping strategies declined during days 6–10 compared to days 1–5 (see Figure 2). There was an increase in all of the coping functions during days 11–15 (during the two most important competitions of the season). Problem-focused coping remained relatively stable during days 16–20 and 21–25, whereas avoidance coping increased during days 21–25 and emotion-focused coping decreased during the same period. During the final six days of the study there was an increase in problem- and emotion-focused coping but a decrease in avoidance coping.

DISCUSSION

This study revealed several findings about day-to-day stress appraisals and coping responses among elite adolescent golfers. Four stressors comprised over 75% of all stressors reported across 11 participants over 31 days. This is somewhat contrary to other research findings that suggest athletes appraise a vast range of stressors (e.g., Gould, Finch, & Jackson, 1993). Whereas athletes might appraise many stressors at any given single time point, our results suggest that a small number of stressors recur over time.

Making a mental error was cited more frequently than making a physical error as the season progressed. This finding is important from an applied perspective because it suggests that initially athletes were primarily concerned with their physical performance, but later mental performance became more salient. Thus, the role of the sport psychology consultant may become more important as the season progresses.
Fluctuations in the frequency by which stressors were reported coincided with the relative importance of the golf competitions played. For example, the highest number of stressors were reported during the period of most important European competitions (days 11–15), whereas the frequency of reported stressors declined during less prestigious competitions. Thus, stress-appraisals appear to be related to the relative importance of, and athletes’ commitment to, their goals (cf. Lazarus, 1999).

Golfers reported a wide range of specific coping responses deployed to manage the most frequently cited stressors (see Table 2). Blocking was the most frequently cited specific coping response (i.e., first-order coping strategy). Blocking is a form of cognitive avoidance, which can be an effective coping strategy for minor stressors that are likely to change (Aldwin, 1994). However, blocking is likely to be ineffective for longer-term stressors because it may not enable the athlete to feel like an active agent of change (Crocker, 1992). Future studies that include assessments of coping effectiveness over time should establish the efficacy of specific-coping responses.

Strategies that were classified as serving a problem-focused coping function were cited more frequently than those serving emotion-focused or avoidance coping functions. The highest frequency of coping strategies coincided with the period when the most stressors were reported (days 11–15; see Figure 2). Overall though, problem-focused coping strategies were used more than any other type of coping, which is consistent with previous findings reflecting adolescent athletes’ preferences for active coping strategies (Crocker & Isaak, 1997; Gaudreau et al., 2001, 2002). Notably, the golfers reported 369 stressors and 460 coping responses overall (i.e., they used more than one coping strategy per stressor). This is important from a measurement perspective because it implies that measures which provide respondents with opportunities to report all the coping strategies they used to manage stressors may help to portray a complete picture of their coping experiences.

Our small and homogeneous sample limits the generalizability of these findings to other groups of elite adolescent male golfers. However, daily diaries overcome some of the limits of retrospective studies that dominate the literature. With retrospective approaches participants are likely to report how they would normally behave, whereas with daily reports participants are more likely to report how they actually behaved in a particular situation (Smith, Leffingwell, & Ptacek, 1999). Daily diaries also facilitate analysis of changes in stress-appraisals and coping over time, which is important because coping is a dynamic process (Lazarus, 1999; Lazarus & Folkman, 1984). As such, continued use of dairy approaches to examine coping in sport may reveal important information for practitioners and researchers. Future research using daily diaries may examine coping effectiveness, gender differences, and/or possible relations between coping and performance variables.

REFERENCES


