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Elite Academy Soccer Players' Perceptions towards Cognitive Behavioural Therapy

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Abstract

The purpose of the present study was to address perceptions towards Cognitive Behavioural Therapy (CBT) in soccer. Twenty-four male, elite academy soccer players (*M* age = 20.04) completed a custom-made questionnaire which included education on CBT. The results found that: i) initially, only 8% of players had heard of CBT whilst only 4% of players knew what CBT was, ii) players strongly agreed that CBT should be offered to all players, iii) not knowing how/where to seek help was identified as the main barrier to CBT, iv) players indicated a preference for one-to-one and face-to-face CBT, as opposed to small-group or online-CBT, and v) players perceived they would receive most support from family/friends, and least support from teammates, if they were to undertake CBT. These findings demonstrate that whilst initial awareness and knowledge of CBT is low, general perceptions towards CBT are positive once athletes are educated on the area.

Keywords

Cognitive Behavioural Therapy; soccer; elite; knowledge; awareness

Introduction

Increasing attention has been given to address mental health issues that may be present in elite athletes. According to a recent systematic review, the prevalence of mental health issues is similar for athletes (active and retired) and the general population (Rice et al., 2016). One cohort that has received considerable research interest in the sports domain is that of elite soccer players. Studies have reported a number of disconcerting findings including, but not limited to: i) a prevalence rate for anxiety and depression of 26% for current professional soccer players and 39% for retired players (Gouttebarge, Frings-Dresen, & Sluiter, 2015), ii) that 96% of retired professional players believe that mental disorders influenced their playing performance (van Ramele, Aoki, Kerkhoffs, & Gouttebarge, 2017), iii) a perception amongst players that they needed to conceal their emotional vulnerabilities (Wood, Harrison, & Kucharska, 2017), and iv) that elite adolescent players who are released from academies are at greater risk of experiencing clinical levels of mental distress compared to players who are retained in academies (Blakelock, Chen, & Prescott, 2016). Addressing these mental health concerns in soccer players requires attention.

Cognitive Behavioural Therapy (CBT) is one of the most evidence-based ways used to treat mental health difficulties, such as anxiety and depression (Hofmann et al., 2012). It addresses unhelpful or distorted thoughts and negative cognitions to change an individual's reactions and behaviours resulting from their mental health-related difficulties. It is a structured approach incorporating goal setting, a timeframe for completion (generally 6–10 weeks), active participation, relapse prevention, and assignments between sessions (Beck, 2011). It has been successfully used to treat a range of health and mental-health related conditions including depression, anxiety,

insomnia, chronic pain, and chronic health conditions (see systematic reviews by Cuijpers et al., 2013; Hind et al., 2014; Hutton & Taylor, 2014; Jauhar et al., 2014; Trauer, Qian, Doyle, Rajaratnam, & Cunnington, 2015).

Despite the large evidence base supporting CBT (Butler, Chapman, Forman, & Beck, 2006), there has been limited research conducted within the sports domain. Cognitive-behavioural approaches have been utilised within more general interventions, though they have tended to focus on optimising emotions as opposed to addressing mental health issues (e.g. Thomas, Maynard, & Hanton, 2007). One of the few studies that investigated whether a CBT-only intervention could be beneficial in athlete populations was by Didymus & Fletcher (2017). The study of four elite, female hockey players found that anxiety decreased through provision of a CBT intervention for all players and that results were maintained at a 3-month follow up. Similarly, a CBT intervention provided to four male golfers led to anxiety being interpreted in a more facilitative manner (Neil, Hanton, & Mellalieu, 2013). Interestingly subjective and objective golf performance also improved following the intervention. It should be noted, though, that in both studies, participants were selected because of sub-optimal scores on stress/emotion-related questionnaires, as opposed to being clinically diagnosed with a mental health disorder. Thus, whether the results are generalisable to clinically depressed or anxious athletes is unclear.

The existing literature would support the use of CBT for managing mental health issues in athletes competing at the elite level. It is perhaps surprising, then, that little work has been conducted with athletes using CBT interventions. A recent review identified a wide range of factors that act as barriers to athlete engagement with

mental health services, including stigma, lack of awareness, lack of time, and financial cost (Moreland, Coxe, & Yang, 2018). Stigma in particular has been highlighted in a number of studies (Gulliver, Griffiths, & Christensen, 2012; Kaier, Cromer, Johnson, Strunk, & Davis, 2015) and therefore may be an important barrier for athletes. Given the lack of literature relating specifically to CBT, it remains unclear whether the same barriers apply. Finally, it is important to also consider athlete preferences within the CBT process. Internet-based CBT, for example, has become increasingly common in the literature (Beukes, Baguley, Allen, Manchaiah, & Andersson, 2017), and may offer a more effective modality for athlete populations; this is something that warrants investigation.

The present study aimed to explore perceptions towards CBT in elite academy soccer players. By utilising a custom-made questionnaire, quantitative data pertaining to the following themes was collected: i) awareness and knowledge of CBT, ii) thoughts towards the incorporation of CBT within soccer, iii) perceived barriers to engaging in CBT, iv) preferences with regards the format of CBT, and v) perceived support of significant others with regards hypothetical CBT engagement. The findings from this study are important as they address some of the as-yet unanswered questions with regards CBT in the sports domain and help direct and underpin future research.

Method

Participants

Perceptions towards CBT were obtained from 24 male, elite academy soccer players with a mean age of 20.04 (SD = 1.52). At the time of the study, all individuals were

full-time, professional players within the under-23 squad at a Premier league club in England. Participation in the study was voluntary, with all players being made aware of what the study involved and their right to withdraw at any time. The Faculty of Medical Sciences Research Ethics Committee (part of Newcastle University's Research Ethics Committee) approved the study. The study adhered to the tenants of the Declaration of Helsinki.

Procedure and Measures

As no standardised measure was available, a custom-made paper questionnaire that sought to examine perceptions towards CBT was developed (see Appendix A). Demographic data were obtained (questions 1–4), after which players were asked about: i) their awareness and knowledge of CBT (questions 5–6), ii) if/how CBT should/could be incorporated into soccer (question 7), iii) perceived barriers to engaging in CBT (question 8), iv) preferences with regards the format of CBT (questions 9–10), and v) perceived support of significant others with regards hypothetical CBT engagement (questions 11–13). Following the awareness and knowledge questions the players were given a brief description of CBT. They were told that if they had any questions or misunderstood this or any other part of the questionnaire then they should ask the principal researcher for further explanation before continuing. Responses to questions were either categorical (e.g. "Yes", "No") or ordinal using a 10–point Likert scale that ranged from 1 ("not at all" or item equivalent) to 10 ("very much so" or item equivalent).

The questionnaire was completed in a large classroom at the soccer academy in the presence of one male and one female researcher, both of whom were affiliated with

a local University and had no actual or perceived association with the soccer club. All players completed the questionnaire at the same time and in the same room, though care was taken to ensure that players were evenly spread out to ensure privacy and confidentiality with regards responses. Completion of the questionnaire took between 10 and 20 minutes.

Data Analysis

Data were analysed using SPSS Statistics version 23. Following an initial exploration it was found that one participant did not respond to question 8d (item relating to perceived stigma acting as a barrier to accessing CBT). Consequently, the mean score of the sample as a whole was inserted here to aid in statistical analyses. No other missing data were found, nor were any outliers or erroneous responses identified. For all analyses an alpha level of p = 0.05 was used to indicate significance. In instances where Mauchley's Test of Sphericity was violated, Greenhouse-Geisser corrections were applied.

For the exploration of soccer player awareness and knowledge of CBT, as well as their preferences with regards the format of CBT, chi-square goodness-of-fit tests were carried out. Paired-samples *t*-tests were conducted to investigate player's perceptions about how CBT could be incorporated within soccer.

Post-hoc testing was conducted to investigate whether responses differed depending upon the demographic attributes of education and religion. Players were grouped for educational and religious differences and Chi-square tests of independence were carried out to compare the awareness and knowledge, and preferences data

between these groups. Independent samples *t*-tests were carried out for the incorporation of CBT, barriers, and perceived support data.

Results

In terms of education, 14 players had completed A-Levels or equivalent, whilst 10 players had completed GCSEs or equivalent. Half (12 players) identified themselves as religious, whilst the other half stated that they were not religious.

Awareness and knowledge of CBT

Current soccer players were asked if they had heard of or knew what CBT was (Table 1). Significantly fewer players (8%) were aware of CBT compared with those who had no CBT awareness (92%); $[X^2(1) = 16.67, p < 0.01]$. Only one player knew what CBT was, indicating significantly more players had no knowledge of CBT $[X^2(1) = 20.17, p < 0.01]$.

Table 1. Responses to items assessing awareness and knowledge of CBT. Numbers are reported as percentages to one decimal place.

No significant differences in awareness or knowledge of CBT was found when comparing players for either education or religious classification (all p > 0.05).

Incorporation of CBT in soccer

After explaining what CBT was, players were asked to rate (scale of 1 to 10) the extent to which they agreed with three questions: i) whether CBT should be offered

to all players, ii) whether education on CBT should be compulsory for all players, and iii) whether players should be responsible for seeking out CBT themselves.

Mean scores indicate that generally soccer players strongly agreed with the statements that CBT should be offered to all players, however, players neither agreed nor disagreed with the statements that education on CBT should be compulsory and that players should be responsible for seeking out CBT themselves (Figure 1). Paired-samples t-tests indicated that agreement with the "Offered" statement was significantly higher than for the "Compulsory" (t(23) = 5.302, p < 0.01) and "Own Responsibility" statements [t(23) = 4.420, p < 0.01]. Differences between "Compulsory" and "Own Responsibility" were not significant (both p > 0.05).

Independent-samples t-tests found there to be no difference in an individual's thoughts towards the incorporation of CBT into soccer as a result of differences in education or religious classification (all p > 0.05).

Figure 1. Agreement with items relating to the incorporation of CBT in soccer. Scale ranged from 1 ("completely disagree") to 10 ("completely agree"). Offered = "CBT should be offered to all players"; Compulsory = "Education on CBT should be compulsory for all players"; Own Responsibility = "Players should be responsible for seeking out CBT themselves".

Barriers to accessing CBT

Players were asked to rate (scale of 1–10) the extent to which a number of factors would prevent them from seeking out CBT. Mean scores (Figure 2) show that the greatest barriers to CBT reported by elite academy soccer players were: 1) Not

knowing how/where to seek help, 2) Lack of knowledge about what to expect in a CBT session, and 3) Not knowing when to seek help. Religious beliefs and a lack of transport were the smallest barriers, however, a post-hoc exploration of the data indicated that both of these factors were highlighted as the largest barrier by two individuals.

Independent-samples t-tests found no significant differences in perceived barriers as a result of religious classification (all p > 0.05). However, for education, it was found that individuals who had completed A-Levels or equivalent perceived the "Process" of CBT to be a significantly greater barrier than individuals who had completed GCSEs or equivalent: M = 7.07 (SD = 1.73) vs M = 5.20 (SD = 1.62); t(22) = 2.681, p = 0.01.

Figure 2. Responses relating to the extent to which each potential barriers would prevent the individual from seeking out CBT. Scale ranged from 1 ("not at all") to 10 ("very much so"). When = "Not knowing when to seek help"; How/Where = "Not knowing how/where to seek help"; Knowledge = "Lack of knowledge about what to expect in a CBT session"; Stigma = "Opinions of peers (i.e. negative attitudes of others, stigma)"; Process = "Find the process uncomfortable (i.e. discussing thoughts, feelings, and behaviours)"; Religion = "Religious beliefs"; Time = "Lack of time"; Money = "Lack of money"; Transport = "Lack of transport".

Preferences regarding the format of CBT

Players were asked two questions with regards the format of CBT: i) whether they would prefer CBT if it were on a one-to-one basis, as part of a group, or did not mind, and ii) whether they would prefer CBT if it were face-to-face, online, or did not mind.

As shown in Table 2, significantly more players indicated a preference for CBT if it

were completed one-to-one versus in a small group ($X^2(1) = 13.50$, p = 0.01) and face-to-face versus online ($X^2(2) = 23.25$, p = .01).

Chi-square tests of independence revealed no significant differences in preferences for either education or religious classification (all p > 0.05).

Table 2. Responses to items assessing preferences within the CBT process. Numbers are reported as percentages to one decimal place.

Perceived support of others

Players were asked to rate (scale of 1-10) how supportive their coach, teammates, and family/ friends would be if they undertook CBT. The mean ratings shown in Figure 3. A one-way repeated measures ANOVA indicated that there was a significant difference in how much support the players perceived they would receive from their coach, their average teammate, and their family and friends: F(1.29, 29.58) = 23.979, p < 0.001, $\eta_p^2 = 0.510$. Pairwise comparisons revealed that significant differences existed between each group, that is, players perceived that they would receive more support from family and/or friends compared to their coach (p = 0.001) and teammates (p < 0.001), and more support from their coach compared to their teammates (p < 0.001).

Independent-samples t-tests found there to be no difference in an individual's perceived support from any of the significant others as a result of education or religious classification (all p > 0.05).

Figure 3. Responses relating to perceptions of how supportive relevant others would be if the individual were to undertake CBT. Scale ranged from 1 ("not at all") to 10 ("very much").

Discussion

The present study aimed to examine the perceptions of elite, academy soccer players towards CBT. It was found that 92% had not heard of CBT, whilst 96% did not know what CBT was. After being given written information about what CBT entails, players strongly agreed that it should be offered to current soccer players. Players identified not knowing how/where to seek help as the main barrier to accessing CBT, and this was greater than the barriers of stigma, religious beliefs, and lack of time, money and transport. Not knowing when to seek help, a lack of knowledge of what to expect during CBT, and the belief that the CBT process is "uncomfortable" were also deemed substantial barriers. Almost all players stated that they would be more inclined to undertake CBT if it were carried out one-to-one and face-to-face (as opposed to in a small group or online). Finally, players generally perceived that they would receive good levels of support from significant others, though it was felt that family and friends would be most supportive, whilst fellow teammates would be least supportive.

It is important to consider these findings within the context of the questionnaire provided and the sample studied. The questionnaire was designed specifically for this study as no validated and appropriate questionnaire was available. The lack of psychometric information could affect the interpretation of the questions presented

and a validation of the updated version of the questionnaire would be worthwhile. The sample included individuals from the academy of a Premier League football club in England, and as such, the prospect of "making it" is likely to be perceived as very tangible (whether this assessment is realistic or not is another matter). Given the high-profile status of soccer in England, and the financial rewards that come with it, it is perhaps reasonable to expect that the data collected here may not generalise to other cultures or athletes of sports where the profile and finances are considerably lower. Similarly, perceptions towards CBT may also differ for younger players for whom the possibility of "making it" is less imminent, or older players who have already reached the highest level of the sport. Finally, this sample consisted of only male soccer players; recent research suggests that female athletes may be at greater risk of depressive symptoms than males, and therefore it is important to explore whether gender differences also exist in perceptions towards CBT (Gorczynski, Coyle, & Gibson, 2017).

These findings demonstrate that whilst initial awareness and knowledge of CBT is almost non-existent, general perceptions towards CBT are very positive once athletes are educated on the area. This lack of awareness is perhaps surprising given the considerable recent interest in mental health issues in sport. Consequently, it seems prudent for teams, national governing bodies, and mental health organisations to address this issue by educating athletes about CBT and providing the pathways for them to undertake CBT if they so wish. Moreover, it appears that this education does not need to be extensive; the perceptions of players in the present study were based on just a short amount of written information regarding CBT.

Interestingly, stigma ("negative opinions of peers") was not identified by the players as being one of the main barriers to accessing CBT. This fits with the data relating to perceived support, as even though teammates were deemed least supportive of the three significant others listed, the mean score (6.38 out of 10) still indicated a fairly positive response. Such findings, however, are in contrast to much of the existing literature with regards mental health issues in athletes, where stigma is routinely found to be the number one barrier to mental health engagement (Gulliver et al., 2012; Kaier et al., 2015). One possible explanation for these contradictory findings may be related to the lack of awareness and knowledge of CBT already discussed. This absence of understanding may allow players to dissociate CBT from the concept of mental health for which stigmas generally apply. This presents an interesting dilemma with regards to the education of CBT within the sports domain. Whilst it is clearly an important strategy (indeed, the three greatest barriers reported by soccer players in this study related to aspects of knowledge), care must be taken to ensure that CBT – like mental health in general – is not portrayed in a negative light.

The present study has reported the perceptions of elite, academy soccer players towards various issues within CBT. Further comparable data are needed to examine whether these perceptions are unique to the sample studied, or if they can be generalized to females, older and younger athletes, athletes at other stages in their career (particularly retired players), athletes at other levels of sporting competition (e.g. elite amateur), and athletes competing in other sports. It has been reported that the prevalence and implications of mental health disorders may be greater for retired

athletes (Cosh, Crabb, & LeCouteur, 2012; Gouttebarge et al., 2015). A longitudinal study looking at a cohort as they progress through their career to retirement will be of value.

In terms of other preferences towards CBT, it was quite clear that players would be more inclined to undertake CBT if it is done on a one-to-one basis and face-to-face. Similar findings have been previously reported in that pre-intervention, Internetbased treatments may be rated lower than the usual care (eg. Baumeister et al. 2015; Kaldo et al., 2008). This may partly be attributed to familiarity. Postintervention, ratings of Internet-based care have generally improved and can be higher than the usual treatment in some studies (Jasper et al., 2014). Previous work has shown that acceptance of Internet interventions can be substantially increased by a short informational video (Baumeister et al. 2015; Ebert et al. 2015). Alternative therapy formats will need to provide more information in aid of adding acceptance. Considering the high prevalence of mental health difficulties and possible stigma attached to seeking help, an Internet-based intervention may be of value for this population. Systematic reviews and meta-analysis have indicated equivalence in outcomes between guided Internet-based interventions and face-to-face CBT interventions for psychiatric and somatic disorders (Andersson, Cuijpers, Carlbring, Riper, & Hedman, 2014; Carlbring, Andersson, Cuijpers, Riper, & Hedman-Lagerlof, 2018). Provision of a guided Internet-based programme (supported online throughout the duration of the study) and more information about this format may lead to higher acceptance ratings.

Investigating the efficacy of the CBT provider (e.g. a licenced CBT provider versus a mental conditioning coach) is also required. Although a few studies have compared clinical outcomes using different CBT providers (e.g. Titov et al. 2010), more work is required to determine if there is a preference towards different types of CBT provider, especially in sport. In light of the present results, some adaptions to the present questionnaire are indicated when used in the future. These include providing a more comprehensive description of CBT for the athletes, the use of more amenable terminology such as "interventions" instead of "therapy" and including some additional questions. Nevertheless, the current format demonstrates that even when only a small amount of information regarding CBT is provided, positive perceptions towards it are brought about. Thus, education interventions may not necessarily need to be exhaustive, time-consuming, or expensive.

Clinical Implications

The results of this study indicate that elite athlete's value psychological care for addressing mental health concerns. Ensuring adequate provision of this care should be a priority for sports. Research has stressed the applicability of CBT-based approaches to the sporting environment (McArdle & Moore, 2012; Puig & Pummell, 2012), yet there is still limited work using CBT interventions with athlete populations. As discussed earlier, this seems unusual considering that athletes routinely experience unique or exaggerated sources of anxiety and depression, such as potential injury, media scrutiny, and the consequences of failure. In addition, a wealth of evidence exists demonstrating the effectiveness of CBT for various mental health conditions in clinical settings (Butler et al., 2006). Together with the findings of the present study, it appears that CBT interventions would be both beneficial and

welcomed by athletes, and thus clinicians and practitioners should look to adopt this where appropriate. The present work also highlights the importance of educating athletes on CBT, and so a useful initial step for sports teams and clubs may be to approach clinicians (or vice versa) to achieve this.

Conclusion

The present study has reported the perceptions of elite, academy soccer players towards various issues within CBT. The results suggest a positive response to CBT, with the majority believing that it should be offered to players. Whilst a number of key barriers to accessing CBT were identified, stigma was surprisingly not amongst the highest rated. Players had a lack of awareness and knowledge of CBT, though paradoxically, this lack of awareness may serve to make CBT a more appealing option compared to other interventions. Further comparable data is needed to examine whether these perceptions are unique to the sample studied, or generalizable to other populations.

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Authors' contributions

LW conceived of the study design, developed the questionnaire, analysed and interpreted the results, and drafted the manuscript. JS assisted in developing the questionnaire and carried out the data collection and data analysis. ZZ assisted in developing the questionnaire and edited the manuscript. CN and ST assisted in carrying out the data collection. EB and PA assisted in developing the questionnaire

and edited the manuscript. All authors have read and approved the final version of the manuscript, and agree with the order of presentation of the authors.

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