Prevalence of Anxiety and Depression Symptoms Among Handball Players in Iceland and Their Attitude Towards Seeking Psychological Help

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Foreword

Submitted in partial fulfilment of the requirements of the BSc Psychology degree, Reykjavik University, this thesis is presented in the style of an article for submission to a peer-reviewed journal.
Abstract

Anxiety and depression symptoms among athletes have been widely discussed over the past few years, but it seems like athletes hide their mental problems more than the average person. Recent research has shown that depression and anxiety symptoms are equally common among athletes and the general public. The purpose of the present research was to study the prevalence of depression and anxiety symptoms among handball players in the top and first division in Iceland, and the players’ attitude towards psychological help seeking. A survey was administered through social media where 254 players participated from 38 teams in the top and first division in Iceland both, males, and females. The results of this study showed that 56.4% of Icelandic handball players showed some symptoms of anxiety and 58.2% showed some symptoms of depression. In addition, 23.6% of the players had clinical anxiety symptoms and 17.9% had clinical depression symptoms. Despite the anxiety and depression symptoms among the players, only 5.7% used psychological help even though their attitude towards psychological seeking help was positive and there were approximately 81% who would use psychological service if it were available within their team.

Keywords: mental health, athletes, handball players, anxiety, depression, injury, psychological help, help seeking, attitude

Útfráttur

Þunglyndis og kvíðaeinkenni meðal íþróttafólks hefur verið mikið til umræðu síðast líðin ár, en það virðist vera að það sé meiri leynd yfir einkennunum þegar fólk stundar íþróttir heldur en ekki. Rannsóknin hafa sýnt að einkennin eru alveg jafn algeng meðal íþróttafólks og almennings. Núverandi rannsókn var framkvæmd í þeim tilgangi að skoða algeng þunglyndis- og kvíðaeinkenni meðal handboltafólks í efstu og 1. deild á Íslandi og viðhorf leikmannanna til sálfræðihjónustu. Lögð var fyrir könnun fyrir leikmenn í gegnum internetið og voru alls 254 leikmenn sem tóku þátt úr 38 líðum. Niðurstöður rannsóknarinnar sýndu að 56,4% sýndu einhver einkenni kvíða og að 58,2% sýndu einhver einkenni þunglyndis. Prátt fyrir að viðhorf handbolta fólks á Íslandi til sálfræðihjónustu var jákvætt voru aðeins 5,7% sem höfðu leitað sálfræðihjálpur til að ná bata eftir meiðslu, en tæplega 81% leikmanna myndu nýta sér sálfræðihjónustu ef hún væri í boði innan þeirra félagsliðs.

Lykilorð: andleg heilsa, íþróttafölk, handboltamenn, kviði, þunglyndi, meiðslu, sálfræðiaðstoð, leita sér hjálpar, viðhorf
Prevalence of Anxiety and Depression Symptoms Among Handball Players in Iceland and Their Attitude Towards Seeking Psychological Help

In recent years, awareness of athletes’ mental health problems has increased. The main focus has been on professional athletes that play a sport that is both physically demanding as well as being mentally challenging (Schaal et al., 2011). Athletes that play in a top league in competitive sports, often experience failure, which can lead to serious anxiety symptoms (Weinberg & Gould, 2015). It is well known that being active may serve as prevention for many psychological disorders such as depression or anxiety. However, participation in a sport as a professional player, creates a completely different situation, where players feel pressure by their surroundings to achieve a certain level of performance (Schaal et al., 2011).

Exercise and participation in sports contribute to the positive effects of stress, inject social connection, increase self-confidence and self-esteem, and improves overall educational performance (Allegrante, 2004). Exercise and sport participation is generally considered to have a positive effect on anxiety and depression, and there are research that describe connections between general well-being and body-functionality (Henrikson & Sundberg, 2010; Vuori, 2001). One the one hand these research state that exercise has beneficial effects on mental health, which makes it possible to conclude that athletes should be mentally healthy. One the other hand, studies have shown that athletes also experience mental health problems just like the general public (Gulliver, Griffiths, & Christensen, 2012; Gulliver, Griffiths, Mackinnon, Batterham, & Staniimirovic, 2015; Markser, 2011) and according to Markser (2011) depression is the most common mental problem that athletes struggle with.
Engaging in a sport can be a stressful environment that is characterized by intense pressure, and competition where high expectations are placed on athletes (Jones, 1995). In a research that was conducted in 2015, among current professional male football players, symptoms of common mental disorders were studied (Gouttebarge, Aoki, & Kerkhoffs, 2015). Over 600 players took part in the research were 38% had anxiety or depression symptoms. In another study by Gouttebarge et al. (2015) on the prevalence of mental disorders in both former and current professional male footballers, the findings showed that the highest prevalence was found for anxiety or depression symptoms or 39% among former players and 26% among current players. Gouttebarge, Aoki and Kerkhoffs (2016) results showed that out of 219 retired professional footballers that took part in the study, 35% had symptoms for either anxiety or depression. Various research have been conducted about frequent cases of elite athletes suffering from depression, or other mental problems (Hammond, Gialloreto, Kubas, & Davis, 2013; Schaal et al., 2011) and recent reviews on this subject indicate that depression among elite athletes is related to sport-specific resources and elements, such as overtraining, exceeding stress or injuries (Frank, Beckmann, & Nixdorf, 2013; Wolanin, Gross, & Hong, 2015).

Multiple studies (Appaneal, Levine, Perna, & Roh, 2009; Hutchison, Mainwaring, Comper, Richards, & Bisschop, 2009; Kerr, Marshall, Harding, & Guskiewicz, 2012) have shown that athletic injury can have negative effects on mental health. Injuries are very common in sports, particularly in sports that include frequent physical contact (Peterson & Renström, 2001). Some athletes only experience minor injuries, that need a short recovery time, while others have to deal with more serious injuries that take a long time to heal, and results in players not being able to participate in practice and games. Despite the fact that handball is
increasingly growing and gaining more popularity, there are relatively few published studies on injuries in handball compared to for example football and basketball.

Serious injuries and long rehabilitation can have long-term effect on athletes and increase stress formation in individuals (Granito, 2001; Ivarsson & Johnson, 2010). Ivarsson and Johnson (2010) conducted a research about the relationship between coping variables, personality factors, stress and injury risk among Swedish elite football players. The results indicated that four personality factors could predict injuries; physical anxiety, psychological anxiety, sensitivity to stress and irritability. Athletes who experienced a lot of stress on a daily basis were more likely to suffer a sports injury (Ivarsson & Johnson, 2010; Weinberg & Gould, 2015).

It seems like there is a certain secrecy of mental illness in sports, and studies indicate that athletes are less likely to seek psychological help than the general public (Corrigan, 2004; Gulliver et al., 2012; Rüsch, Angermeyer, & Corrigan, 2005). According to Christakou and Lavallee’s (2009) research athletes seek assistance, preferably from doctors, physiotherapist or coaches to get help with rehabilitation, but do not get any psychological help. Research has shown (Barney, Griffiths, Jorm, & Christensen, 2006; Rüsch et al., 2005) that the main reason why athletes do not seek psychological help are for example, stigma, mark of shame and brand marking related to mental health problems. The experience of athletes with poor mental health has not been researched thoroughly nor the reasons for why they are reluctant to seek help from psychologists (Gulliver et al., 2012). Possible reasons could be stigma, or expectations by the society. It has also been shown that negative attitudes towards help-seeking is among the problems that influence and inhibits athletes to get help for mental health problems. Athletes are “afraid” to show their feelings, out of fear
that could affect their performance, they are afraid that other players and/or coaches could see it as a weakness (Gee, 2010; Gulliver et al., 2012).

Recent research has been conducted on the mental health of athletes in Iceland (Björnsson & Balduressson, 2016; Ólafsson, 2015; Pálsson, 2016; Sigrúnarson, 2013; Viðarsdóttir, 2015), for example similar studies were conducted among Icelandic professional players (Viðarsdóttir, 2015) and among Icelandic footballers (Pálsson, 2016) were the results in both studies showed symptoms of anxiety and depression among those Icelandic athletes. Therefore, after looking at research in this category, the goal of the current research is to explore the prevalence of depression and anxiety symptoms among handball players in Iceland and their attitude towards psychological help, also to explore if injuries can affect athlete’s mental health.

To the researcher’s best knowledge there has not been any research in this sector, among handball players. Because of lack of information and knowledge about athlete’s mental health, this study would aim to raise awareness, and improve society’s knowledge about the importance of mental health in sports. Following research questions are: (1) What is the prevalence of anxiety and depression symptoms among Icelandic handball players? (2) Is there a gender difference regarding the prevalence of anxiety and depression among Icelandic handball players? (3) What is the attitude of Icelandic handball players towards psychological services? (4) What is the attitude of Icelandic handball players that show symptoms of clinical anxiety and depression towards psychological services? (5) Do Icelandic handball players who suffer from serious injury show more symptoms of anxiety and depression than those who have not suffered serious injury? (6) Do Icelandic handball players use psychological services to recover after injury? Finally (7) Would
Icelandic handball players use psychological services if it were available within their team?

**Method**

**Participants**

The participants in this study were handball players, both male and female in the two highest divisions in Iceland, named “Olís deildin” and “1. deildin”. A chain referral sampling was used, were players were offered to take part in the research through social media and players encouraged other players to participate. In total, 786 Icelandic handball players over 18 years old were under contract during season 2016 – 2017 (Róbert Geir Gíslason, personal communication, April 26, 2017). The response rate of the total population was approximately 32%, where a total of 254 players from 38 teams answered the questionnaires, 141 males and 112 females. The age of the participants was 18 or older where most of the players were aged between 18 and 21 years old. The study was conducted in Icelandic and the condition to participate was to be over 18 years old and practice handball with a team in either “Olís deild” or “1. Deild”. Players were not obliged to participate even though they were requested. The participants did not get paid for being a part of the study.

**Measures**

The survey was created on a website called Google Forms. The questionnaire had seven background information, with questions about participant’s characteristics (Appendix B), such as, gender, age, how many hours the players practice each week and 14 questions about injury (Appendix F) such as, if or how they got injured, where on their body they were injured and about their recovery process.

GAD-7 (General Anxiety Disorder-7) is a 7-item self-reported standardized anxiety questionnaire (Spitzer, Kroenke, Williams, & Löwe, 2006) that was used to
screen for the severity of anxiety. The questionnaire includes seven questions about player’s wellbeing, how often in the last two weeks they have experienced specific problems such as problems sleeping or controlling emotions for example distress or anxiety (Appendix C). GAD-7 is answered on a 4-point scale ranging from 0-3 points for each question and the score combined measures the severity of the anxiety, the response options are from 0 (not at all) to 3 (nearly every day), and the total scale score for GAD-7 ranges from 0-21. The clinical cutoff for GAD-7 is all the participants that score ≥ 8 and it is appropriate for participants that score over the caseness to initiate treatment. The internal reliability (Cronbach’s alpha) for GAD-7 in this present study was good (α = .867). In both English and Icelandic the psychometric properties of GAD-7 have been tested, and the result showed that 7-item anxiety scale had a good criterion as well as good reliability, factorial, procedural validity and construct (Ingólfsdóttir, 2014; Spitzer et al., 2006).

PHQ-9 (Patient Health Questionnaire-9) is a 9-item standardized depression questionnaire (Kroenke, Spitzer, & Williams, 2001) that was used to screen for the severity of depression. The scale has 9 questions and the participants are asked how often in the last two weeks they have experienced certain problems such as low energy and lack of appetite or overeating (Appendix D). PHQ-9 is answered on a 4-point scale, ranging from 0 (not at all) to 3 (nearly every day). The clinical cutoff for PHQ-9 is all the participants that score ≥ 10 and it is appropriate for participants that score over the caseness to initiate treatment. The internal reliability (Cronbach’s alpha) for PHQ-9 in this present study was good (α = .86). Psychometric properties were tested both in English (Kroenke et al., 2001) and in Icelandic version of PHQ-9 (Pálsdóttir, 2007), and the results showed that the 9-item depression scale had a valid measure of depression severity and is reliable (Spitzer et al., 2006).
An Icelandic version of BAPS (Beliefs About Psychological Services) was used to screen for the Beliefs About Psychological Service, which is based on an 18-item scale (Ægisdóttir & Gerstein, 2009) but the Icelandic version has 22-item scale (Ægisdóttir & Einarsdóttir, 2012). The I-BAPS has 13 positively worded items and 9 negatively worded items. I-BAPS shares/partitions 16 items with the BAPS (English language) and has six indigenous Icelandic items. The items are answered on a 6-point scale and scores range from 1 to 6, where 1 is strongly disagree and 6 is strongly agree (Appendix F). The internal reliability for the total I-BAPS was good ($\alpha = .91$).

The I-BAPS includes three factors: expertness (7 items), (e.g., It is good to talk to psychologist because they help you to see things in new light), intent (6 items), (e.g., I might want to see a psychologist in the future) and stigma tolerance (9 items), (e.g., If I seek for psychological help means that I’m a weak person). The internal reliability (Cronbach’s alpha) for all the three factors were good, expertness ($\alpha = .89$), intent ($\alpha = .86$) and stigma ($\alpha = .80$).

**Procedure**

After an ethical application was approved from both Reykjavík University and the National Bioethics Committee of Iceland (VSN-16-194), the researcher contacted one player in each team, 38 players in total, and informed them about the research and asked them to encourage their team players to participate. The player that was contacted from each team initially was asked to post the research survey into a closed group on Facebook. The Facebook groups only contained players of the team and team staff. The researcher also had contact with the coaches of all the teams and informed them about the research. At the beginning of the survey, information sheet and informed consent was presented (Appendix A), were the players were encouraged to answer the questions on the questionnaire honestly. In addition,
players were informed that they could deny answering questions that made them feel uncomfortable and that the survey was anonymous and answers could not be traced back to individual participant. The study was divided into five sections, at first participants were asked about background information, second about their depression symptoms using GAD-7 questionnaire, third, their anxiety symptoms with PHQ-9 questionnaire and in the fourth section participants were asked about their beliefs about psychological services and the last section, questions about injuries. Participants were informed that if they would experience a discomfort following their participation a psychologist was available free of charge.

**Design and data analysis**

Data was analyzed in the statistical program *SPSS Statistics*, figures and tables was designed in Excel and Word. Descriptive statistics were used to analyze information about participant’s characteristics. The independent variables for anxiety symptoms and depression symptoms were computed to measure the prevalence of anxiety and depression symptoms among the participants. An independent sample t-test was conducted to compare anxiety symptoms and depression symptoms between genders. To analyze I-BAPS, nine items on the stigma tolerance factor that were negatively worded had to be reversed. A one-way ANOVA was conducted to compare the symptoms of clinical anxiety and depression symptoms on the factors of the dependent variable beliefs about psychological services. Cronbach’s alpha was used to measure internal consistency of the measurement scales for the independent variables anxiety and depression symptoms and the dependent variables I-BAPS scale and its subscales.
Results

A total of 254 handball players in Olís deildin and 1. deildin Iceland participated in the study, 141 males and 112 females, wherein 53.4% were 18 – 21 years old. 232 players had struggled with injuries in their handball career but only 53 players had been seriously injured in the last six months. There were 213 players that answered that they had an active physiotherapist in their team but 17 players answered that they had an active psychologist in their team.

Table 1

<table>
<thead>
<tr>
<th>Descriptive statistics, participants number and percent for background and injury information</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>141</td>
<td>55.7%</td>
</tr>
<tr>
<td>Females</td>
<td>112</td>
<td>44.3%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 – 21 years old</td>
<td>135</td>
<td>53.4%</td>
</tr>
<tr>
<td>22 – 25 years old</td>
<td>69</td>
<td>27.3%</td>
</tr>
<tr>
<td>26 – 29 years old</td>
<td>26</td>
<td>10.3%</td>
</tr>
<tr>
<td>30 years or older</td>
<td>23</td>
<td>9.1%</td>
</tr>
<tr>
<td>Got injured</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>232</td>
<td>91.3%</td>
</tr>
<tr>
<td>No</td>
<td>22</td>
<td>8.7%</td>
</tr>
<tr>
<td>Serious injury last six months</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>53</td>
<td>21%</td>
</tr>
<tr>
<td>No</td>
<td>199</td>
<td>79%</td>
</tr>
<tr>
<td>Physiotherapist in team</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>213</td>
<td>83.9%</td>
</tr>
<tr>
<td>No</td>
<td>41</td>
<td>16.1%</td>
</tr>
<tr>
<td>Psychologist in team</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>17</td>
<td>6.7%</td>
</tr>
<tr>
<td>No</td>
<td>237</td>
<td>93.3%</td>
</tr>
</tbody>
</table>

Note: In some demographics data were missing

Participants total score on the GAD-7 severity of anxiety and the PHQ-9 severity of depression among handball players in Iceland is described in table 2, which shows that the majority of players showed little or no symptoms of anxiety and depression. A total of 131 players had either mild or moderate anxiety symptoms, and 10 players had severe anxiety symptoms. PHQ-9 showed that there were 124
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players with either mild or moderate depression symptoms, and 19 players that had moderately or severe depression symptoms. Therefore, 56.4% players experienced some anxiety symptoms, and 58.2% players experienced some depression symptoms. A total of 59 (23.6%) players scored over 8 points on the GAD-7 which is cutoff for caseness and 44 (17.9%) players scored over 10 points on the PHQ-9 which cutoff for caseness.

Table 2

<table>
<thead>
<tr>
<th>Severity categories for GAD-7 and PHQ-9</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAD-7</td>
</tr>
<tr>
<td>Minimal</td>
</tr>
<tr>
<td>Mild</td>
</tr>
<tr>
<td>Moderate</td>
</tr>
<tr>
<td>Severe</td>
</tr>
<tr>
<td>PHQ-9</td>
</tr>
<tr>
<td>Minimal</td>
</tr>
<tr>
<td>Mild</td>
</tr>
<tr>
<td>Moderate</td>
</tr>
<tr>
<td>Moderately</td>
</tr>
<tr>
<td>Severe</td>
</tr>
</tbody>
</table>

Note: In some demographics data were missing

An independent sample t-test was conducted to compare anxiety symptoms and depression symptoms between genders. There was a significant difference in anxiety symptoms between male players and female players $t(247) = 2.419, p = .016$, where female players showed higher levels of anxiety ($M = 6.58, SD = 4.03$) than male players ($M = 5.31, SD = 4.2$). The difference in depression symptoms was marginally significant $t(244) = 1.900, p = .059$, where female players showed higher levels of depression ($M = 7.2, SD = 5.25$) than male players ($M = 6, SD = 4.62$).

Table 3 shows mean and standard deviation on the GAD-7 questionnaire ($M = 5.86, SD = 4.16$). The minimum value for GAD-7 was 0 and the maximum value was 24. The mean and standard deviation for the PHQ-9 questionnaire ($M = 6.54, SD = 4.94$) and the minimum value for PHQ-9 was 0 and maximum value was 24. As can be seen in table 3 the biggest difference in the mean and standard deviation on the I-BAPS was between the intent factor ($M = 26.27, SD = 6.47$) and the expertness
factor \((M = 33.65, SD = 5.90)\). The minimum value for I-BAPS was 6 (intent) and the maximum value was 54 (stigma tolerance).

Table 3

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAD-7</td>
<td>250</td>
<td>5.86</td>
<td>4.16</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>PHQ-9</td>
<td>246</td>
<td>6.54</td>
<td>4.94</td>
<td>0</td>
<td>24</td>
</tr>
<tr>
<td>I-BAPS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intent</td>
<td>248</td>
<td>26.27</td>
<td>6.47</td>
<td>6</td>
<td>36</td>
</tr>
<tr>
<td>Stigma Tolerance</td>
<td>237</td>
<td>45.18</td>
<td>6.87</td>
<td>17</td>
<td>54</td>
</tr>
<tr>
<td>Expertness</td>
<td>241</td>
<td>33.65</td>
<td>5.90</td>
<td>16</td>
<td>42</td>
</tr>
</tbody>
</table>

Note: In some demographics data were missing

A one-way ANOVA was used to compare the symptoms of clinical anxiety and clinical depression symptoms on the factors of the dependent variable beliefs about psychological services. The research showed that there was insignificant difference of anxiety symptoms on all levels of beliefs about psychological services, the intent \(F(3,240) = .00, p = 1.00\), the stigma tolerance \(F(3,229) = .80, p = .49\) and the expertness \(F(3,233) = .67, p = .57\). As well as insignificant difference of depression symptoms on all levels of beliefs about psychological services, the intent \(F(4,237) = 1.07, p = .37\), the stigma tolerance \(F(4,226) = .35, p = .84\) and the expertness \(F(4,229) = .80, p = .53\).

An independent sample t-test was conducted to compare beliefs about psychological services between the genders. In the Intent factor male players had a lower score \((M = 4.28, SD = 1.03)\) than female players \((M = 4.49, SD = 1.12)\) even though the difference between the groups was non-significant, \(t(245) = 1.533, p = .127\). Stigma Tolerance factor showed that male players had a lower score \((M = 4.89, SD = .78)\) than female players \((M = 5.18, SD = .72)\). The difference between groups was significant, \(t(235) = 3.032, p = .003\). In the Expertness factor male players had a
lower score \((M = 4.74, SD = .80)\) than female players \((M = 4.88, SD = .89)\) but the difference between groups was non-significant, \(t(238) = 1.289, p = .199\).

Approximately 21\% of the players had been seriously injured in the last six months but there was an insignificant difference in anxiety symptoms between those that had been injured and the players who had not been seriously injured \(t(246) = -1.015, p = .311\). There was no difference in depression symptoms between players who had gotten serious injuries and those who had not \(t(242) = 0.082, p = .935\).

Almost 91\% of the players had struggled with injury in their career. About 89\% had been incapable of playing handball for a period of time, both practice and competition because of injury, and 26\% of the players were struggling with injury when they participated in the study. Around 26\% of the players had been injured for more than 3 months. About 81\% of the players would use psychological service if it were available in their team. Although, most of the players went to a physiotherapist (82.1\%) to recover from injury, remarkably only 5.7\% used psychological help.

**Discussion**

The aim of the present study was to observe the prevalence of anxiety and depression symptoms among Icelandic handball players in the two highest divisions in Iceland and to evaluate their attitude towards seeking psychological help. The main findings of the present study were that the prevalence of anxiety symptoms (question 1), ranging from minimal to severe, was 56.4\% and 58.2\% of depression symptoms. Most of the players had minimal or mild symptoms. In anxiety, there were 23.6\% that scored over the caseness for GAD-7, and 17.9\% that scored over the caseness for PHQ-9. The caseness is a threshold for when it is appropriate to initiate treatment. These results indicate that these players need a psychological treatment for either anxiety or depression symptoms.
The second research question was if there was a difference in anxiety and depression symptoms between genders. The findings showed that female players scored higher on both GAD-7 and PHQ-9, but the difference was only significant for GAD-7 and not for PHQ-9. These results are consisted with previous research by Schaal et al. (2011) where females were diagnosed twice as often than males with anxiety and depression. These findings are also consistent with an earlier study performed by Viðarsdóttir (2015) among Icelandic professional ball sports athletes and Pálsson (2016) among Icelandic footballers, where females scored higher on both anxiety symptoms and depression. Out of the Icelandic professional athletes, 19.5% were over caseness in anxiety and 6.5% in depression symptoms. Of the Icelandic footballers, 20.4% were over caseness in anxiety and 14.6% in depression. These results indicate that Icelandic handball players experience more severe depression symptoms and anxiety than both Icelandic professional athletes and footballers, but the biggest difference is among depression symptoms among handball players and professional athletes.

The third question was about the player’s attitude towards psychological services, and the results showed that handball players have a positive attitude towards psychological services. However, the findings also showed very interesting results where it had no effect on the player’s attitude towards seeking psychological help if they had any clinical anxiety or depression symptoms (question 4) which is inconsistent with several research that have shown that athletes have negative attitudes towards seeking psychological help (Barney et al., 2006; Gee, 2010; Gulliver et al., 2012; Rüsch et al., 2005).

The fifth research question asked if players who had suffered from serious injuries showed more anxiety and depression symptoms than those who had not
suffered from serious injuries. It seems to be no or little difference between those who had suffered from serious injuries and those who have not in regards to anxiety and depression symptoms in this current study. This is inconsistent with previous research that have indicated that injuries can affect athletes mental health (Appaneal et al., 2009; Frank et al., 2013; Hutchison et al., 2009; Kerr et al., 2012; Leddy, Lambert, & Ogles, 1994; Wolanin et al., 2015) and other research have shown that serious injuries can also affect mental health (Granito, 2001; Ivarsson & Johnson, 2010; Weinberg & Gould, 2015).

Despite of the positive attitude towards seeking psychological help only 5.7% of the players used psychological help to recover from injuries (question 6). That result matches with the result by Christakou and Lavallee’s (2009) were athletes prefer to go to doctors or physiotherapist rather than seek psychological help during their rehabilitation. The last research question was if players would use psychological help if it were available in their team. The majority of the players, approximately 81% would use the psychological help, which is reflective of the finding on their positive attitude towards seeking psychological help.

This study had some limitations; firstly, this was a self-reported questionnaires. Secondly, it is hard to guarantee that the players that participated were all current players of the teams, were in some cases players that used to be in the team can still be members on the Facebook group. Only 254 players out of approximately 790 players participated in the study. Therefore, it is questionable whether these players can be representatives for the population of Icelandic handball players and the generalizability of the findings are limited. The present study also has its strengths. First and foremost, this is the first cross-sectional study, to this day, to examine mental health among handball players and among the first studies that
examine athletes attitude towards psychological help, especially here in Iceland. Second, it is important to examine this agenda better in the future as well as the relationship with injuries and attitudes towards psychological service. Finally, the scales that were used all had high to excellent internal reliability.

To conclude, the results of this study showed that anxiety symptoms among Icelandic handball players is 56.4% and the symptoms of depression is 58.2%. As a result, 23.6% of the players that had clinical anxiety symptoms and 17.9% that had clinical depression symptoms should be treated by a psychologist. Despite the anxiety and depression symptoms among the players, only 5.7% used psychological help even though their attitude towards seeking psychological help was positive. That is why it is important to investigate subject like this in the sports community and open the discussion about mental disorders among athletes even more, because the subject like this has been taboo for many the recent years. Furthermore, it is important to make psychological service equally accessible as physiotherapist for athletes, especially here in Iceland.

Based on the results of this study as well as Pálsson (2016), Viðarsdóttir (2015) and Ólafsson (2015), where mental illness among athletes in Iceland is more acknowledge than now a days. There is a need to increase the importance of mental health in sports, introduce available resources and utilize psychological training. The researcher believes that it is important to increase awareness concerning mental health problems in sports, especially among players under 18 years old. By this study, the researcher hopes that self-awareness will raise/increase among handball players and other athletes in Iceland.
References


MENTAL HEALTH SYMPTOMS AMONG ICELANDIC HANDBALL PLAYERS AND THEIR ATTITUDE TOWARDS PSYCHOLOGICAL HELP

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https://doi.org/10.1016/j.jsams.2014.04.006


PLAYERS AND THEIR ATTITUDE TOWARDS PSYCHOLOGICAL HELP

Appendix A
Information sheet

Ágæti þátttakandi

Þér er boðið að taka þátt í rannsókn á algengi þunglyndis og kviðaeinkenna meðal leikmanna í Olís og 1.deild karla og kvenna. Rannsókninn er hluti af BSc verkefni Sigrúnar Maríu Jörundsdóttur (rannsakandi) við sálfræðisvið í Háskóla Reykjavíkur. Ábyrgðarmaður rannsóknarinnar er Hafrún Kristjánsdóttir, lektor við íþróttafráðeisvið Háskólans í Reykjavík, sími: 8941713, netfang: hafrunkr@ru.is. Meðleineðbeinandi er Berglind Gísladóttir, lektor við menntavisindasvið Háskóla Íslands og aðjúnkt við Háskólann í Reykjavík, sími: 8555854, netfang: berglindg@ru.is.

Markmið þessarar rannsóknar er að meta algengi þunglyndis- og kviðaeinkenni hjá íslenskum handboltamönnum og konum sem spila handbolta í efstu og fyrstu deild. Algengi verður metið þannig að tvö sálfræðileg próf verða lögð fyrir þátttakendur sem meta þunglyndiseinkenni sem og kviðaeinkenni. Einnig verða lagðar fyrir bakgrunnspurningar, auk spurninga varðandi viðhorf til sálfræðiþjónustu. Ætlara má að það taki 7-10 mínútur að svara öllum spurningum. Spurningarnar verða lagðar fyrir með rafrænu hætti og fá þátttakendur hlekki á spurningalistann þar sem þeir verða beðnir um að veita samþykkj í sitt fyrir þátttöku. Farið verður með öll gögn sem trúnaðarmál, nafn mun hvergi koma fram og þú þarf ekki að gefa upp neinar persónulegar upplýsingar, sem dæmi verðu ekki spurt um nafn þíns felagsliðs né um nafn þitt og því engin leið fyrir rannsakendur að vita hver það er sem hefur svarað. Farið er eftir lögum um persónuvernd skv. íslenskum lögum.

Rannsakendur telja enga áhættu fylgja þátttöku aðra en hugusanlegt álag við að svara spurningum og spurningalistum um líðan sina. Þátttakendur geta neitað að svara einstökum spurningum eða spurningalistum. Rannsóknarinnar vegna er hins vegar mikilvægt að öllum atríðum sé svarað af alfðu og til hagsbota fyrir rannsóknina að öllum spurningum sé svarað. Ef þátttakandi finnur fyrir vanlíðan við að svara spurningum getur hann haft samband við Lindu Bárú Lýósdóttur sálfræðing, sími: 8253706, netfang: linda@virk.is sér að kostnaðlarlausu.


Í von um góðar undirtektir,
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Hafrún Kristjánsdóttir, lektor við Háskólann í Reykjavík
Sími: 8941713, netfang: hafrunkr@ru.is
Berglind Gísladóttir, aðjúnkt við Háskólann í Reykjavík
Sími: 8555854, netfang: berglindg@ru.is
Appendix B
Background information

Vinsamlegast svara eftirfarandi spurningum með því að merkja í þann reit sem á best við um þig.

1. **Hvert er kyn þitt?**
   - [ ] Karl
   - [ ] Kona
   - [ ] Annað

2. **Hver er aldur þinn?**
   - [ ] 18 – 21 ára
   - [ ] 22 – 25 ára
   - [ ] 26 – 29 ára
   - [ ] 30 ára og eldri

3. **Í hversu margar klukkustundir æfir þú handbolta á viku?**
   - [ ] Færri en 5 klukkustundir
   - [ ] 5 – 10 klukkustundir
   - [ ] 11 – 15 klukkustundir
   - [ ] Fleiri en 15 klukkustundir

4. **Í hversu margar klukkustundir æfir þú aukalega fyrir utan skilgreindar handboltaæfingar á viku?**
   - [ ] Aldrei
   - [ ] 1 – 2 klukkustundir
   - [ ] 3 – 4 klukkustundir
   - [ ] 5 – 6 klukkustundir

5. **Hvað hefur þú spilað lengi í meistaraflokki?**
   - [ ] 0 – 2 ár
   - [ ] 3 – 5 ár
   - [ ] 6 – 8 ár
   - [ ] Lengur

6. **Hefur þú verið í byrjunarlíði undanfarinn vetur?**
   - [ ] Já, í öllum leikjum sem ég hef tekið þátt í
   - [ ] Í flestum leikjum sem ég hef tekið þátt í
   - [ ] Byrja um það bil jafn oft í byrjunarlíði og á varamannabekknum
   - [ ] Nánast aldrei í þeim leikjum sem ég hef tekið þátt í
   - [ ] Aldrei í þeim leikjum sem ég hef tekið þátt í

7. **Hvar á skalanum 0-10 (þar sem 0 er mjög lítið og 10 er mjög mikið) metur þú eigið sjálfsoyrði?**
   - [ ] Mjög lítið 0
   - [ ] 1
   - [ ] 2
   - [ ] 3
   - [ ] 4
   - [ ] 5
   - [ ] 6
   - [ ] 7
   - [ ] 8
   - [ ] 9
   - [ ] 10 Mjög mikið
### Appendix C

**GAD-7**

Í eftirfarandi spurningum vinsamlegast merktu við þann svarmöguleika sem á best við um líðan þína síðastliðnar tvær vikur. Merktu aðeins í einn reit.

<table>
<thead>
<tr>
<th>Hversu oft á síðastliðnum tveimur vikum hefur þú upplifaað eftirfarandi?</th>
<th>Aldrei (0)</th>
<th>Nokkra daga (1)</th>
<th>Oftar en helming daganna (2)</th>
<th>Næstum daglega (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Verið spennt/-ur á taugum, kviðin/n eða hengð/ur upp á þráð</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>2. Ekki tekist að bægja frá þér áhyggjum eða hafa stjórn á þeim</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>3. Haft of miklar áhyggjur af ýmsum hlutum</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>4. Átt erfitt með að slaka á</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>5. Verið svo eirðarlaus að þú átt erfitt með að sitja kyrr</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>6. Orðið gröm/gramur eða pirruð/pirradur við minnsta tilefni</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>7. Verið hrædd/-ur eins og eitthvað hræðilegt gæti gerst</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
Í eftrífarandi spurningum vinsamlegast merktu við þann svarmöguleika sem á best við um liðan þína síðastliðnar tvær vikur. Merktu aðeins í einn reit.

**Hversu oft hefur eftrífarandi vandamál truflað þig síðastliðnar tvær vikur?**

<table>
<thead>
<tr>
<th></th>
<th>Alls ekki (0)</th>
<th>Nokkra daga (1)</th>
<th>Meira en helming tímans (2)</th>
<th>Nánast a daga (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Líttill áhugi eða gleði við að gera hluti</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Verið niðurdregin/n, döpur/dapur eða vonlaus</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Ætt erfitt með að sofna eða sofna alla nóttina</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Þreyta og orkuleysi</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Lystarleysi eða ofát</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Liðið illa með sjálfa/n þig eða fundist að þér hafi mistekist eða ekki staðið þig í stykkinu gagnvart sjálfum þér eða fjölskyldu þinni</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Ertfóleikar með einbeitingu við t.d. að lesa blóðin eða horfa á sjónvarp</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. Hreyft þig eða talao svo hægt að aðrir hafa tekið eftir því</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Hugsað um að það væri betra að þú væri dái/n eða hugsað um að skáða þig á einhvern hátt</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Leiðbeiningar: Vinsamlega merktu við staðhæfingarnar hér að náðan með því að nota meðfylgjandi skala. Veldu þann svarmóguleika sem lýsir skoðunum þínnum best með því að velja númer 1-6 (þar sem 1 er mjög ösammála og 6 er mjög sammála) við hverja staðhæfingu. Það eru engin rétt eða röng svör. Svara eins og þér þykir best lýs því hversu sammála þú ért viðkomandi staðhæfingu. Það er mikilvægt að þú metir hverja staðhæfingu eftir þínni bestu getu.

<table>
<thead>
<tr>
<th>Mjög ósammála</th>
<th>Mjög sammála</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

___ 1. Ef að góð(ur) vinur/vinkona leitaði ráða hjá mér vegna erfiðs vanda, myndi ég mæla með að hann/hún leitaði til sálfræðings

___ 2. Ég gæti vel hugsaði mér að trúa sálfræðingi fyrir mínunum dýpstu áhyggjuefnun

___ 3. Það er gagnlegt að leita til sálfræðings þegar erfiðeleikar steðja að í lífi manns

___ 4. Ég mun hugsanlega leita til sálfræðings einhverntíma í framtíðinni

___ 5. Ef ég teldi mig eiga við alvarleg vandamál að stríða yrði það fyrsta sem mér dytti í hug að leita hjálpar hjá sálfræðingi

___ 6. Sálfræðingar eru færir um að aðstoða félag við lausn vandamála vegan þeirrar menntunnar sem þeir hafa

___ 7. Það að leita til sálfræðings súnir að ég er veikgeðja mannskja

___ 8. Það er gott að tala við sálfræðinga því þeir ásaka mannk ekký fyrir þau mistök sem maður hefur gert

___ 9. Það settur smáarbeilt á líf manns að þurfa á aðstoð sálfræðings að halda .

___ 10. Sum vandamála eru þess eðlis að maður rædir þau ekki við ókunnugt félag eins og sálfræðinga

___ 11. Ég myndi leita til sálfræðings ef ég hefði áhyggjur eða fyndi til vanliðunnar í lengri tíma

___ 12. Sálfræðingar látu félag finnst sem það sé ekki fært um að takast á við eigin vandamál

___ 13. Af því að trúnaður ríkir hjá sálfræðingum þá er gott að tala við þá um sín mál

___ 14. Það er ekki góð leið til lausnar á tilfinningalegum vanda að leita til sálfræðings
15. Sálfræðingar veita gangnleg ráð vegna þeirrar þekkingar sem þeir hafa á mannlegri hegðun

16. Það er erfitt að tala um einkamál sín við mikið menntað fólk eins og sálfræðinga

17. Sálfræðimeðferð er gagnleg því hún hjálpar manni að öðlast styrk til að takast á við vandamálin

18. Það er gott að tala við sálfræðinga því þeir hjálpa manni að sjá hlutina í nýju ljósi

19. Sálfræðingar eru færir um að veita fagleg ráð vegna þeirrar menntunar sem þeir hafa

20. Sálfræðimeðferð er einungis fyrir alvarlega geðveikt fólk

21. Það er til skammar að leita hjálpar hjá sálfræðingi

22. Sálfræðingar geta með engu móti sett sig í spor annarra
Appendix F
Injury questions

1. Hefur þú glímt við meiðslí?
   ☐ Já
   ☐ Nei

2. Ert þú meidd/ur núna?
   ☐ Já
   ☐ Nei

3. Hefur þú verið frá handbolta (bæði æfingum og keppni) vegna meiðsla?
   ☐ Já
   ☐ Nei

4. Hefur þú eða hefur þú ekki orðið fyrir alvarlegum meiðslum undanfarna 6 mánuði (t.d. beinbrot, hné- eða ökklameiðsl)?
   ☐ Ég hef orðið fyrir alvarlegum meiðslum sem héldu mér frá keppni í 6 mánuði eða lengur
   ☐ Ég hef ekki orðið fyrir alvarlegum meiðslum sem héldu mér frá keppni í 6 mánuði eða lengur

5. Hefur þú orðið fyrir meiðslum í handbolta frá árinu 2011 til dagsins í dag?
   ☐ Já
   ☐ Nei

6. Hvar meiddir þú þíg?
   ☐ Hné
   ☐ Ökkla
   ☐ Öxl
   ☐ Baki
   ☐ Olnboga
   ☐ Fingri
   ☐ Annað: ____________

7. Meiddir þú þíg í leik eða á æfingu?
   ☐ Í leik
   ☐ Á æfingu
   ☐ Á aukaæfingu
   ☐ Annað: ____________
8. Hvað varstu lengi frá vegna meiðslanna?
☐ 1-2 vikur
☐ 3-4 vikur
☐ 1 mánuð
☐ 2-3 mánuði
☐ Lengur

9. Hvað gerðir þú til að ná bata vegna meiðslanna? Má merkja við fleiri en eitt svar
☐ Hvild
☐ Sjúkrapjálfun
☐ Styrktaræfingar
☐ Með sálfræðihiðjálp
☐ Annað: __________

10. Hefur þú spilað meidd/ur?
☐ Já
☐ Nei

11. Er starfandi sjúkrapjálfari með liðinu þínu?
☐ Já
☐ Nei

12. Er starfandi sálfræðingur með liðinu þínu?
☐ Já
☐ Nei

13. Hversu sammála eða ósammála ert þú því að aðgangur leikmanna að sálfræðing sé í boði?
☐ Mjög sammála
☐ Frekar sammála
☐ Hvorki né
☐ Frekar ósammála
☐ Mjög ósammála

14. Myndir þú nýta þér sálfræðiþjónustu ef hún væri í boði hjá þínu liði?
☐ Já
☐ Nei