Anxiety and Depression Symptoms in Athletes and Their Attitudes Towards These Problems

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Abstract
This study examined symptoms of general anxiety, sport performance anxiety and depression among 117 basketball players in the top league in Iceland. Furthermore, stigma towards anxiety and depression problems was explored. The Sport Anxiety Scale (SAS-2) was used to measure sport performance anxiety. The Hospital Anxiety and Depression Scale (HADS) was used to measure symptoms for general anxiety and depression. The Depression Stigma Scale was used to measure both personal and perceived stigma towards anxiety and depression. The results showed that measures of sport performance and general anxiety were strongly related (r=0.74) but not to the degree that they could be considered to be redundant of each other. There was a gender difference on SAS-2 and HADS anxiety subscale with female players scoring significantly higher than male players. There was no significant difference in scores between injured and non-injured players on the HADS anxiety and depression subscales. However, within the group of injured players, those who missed five or more practices scored significantly higher on the anxiety subscale. Players scored higher on measures of perceived stigma than personal stigma. The results suggest that when exploring levels of general anxiety in samples of athletes, it is important to take sport performance anxiety into account to avoid inflated estimates of symptom severity.
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Societies often view athletes to be the stereotypes for good physical and mental health. It’s not uncommon for people to draw the conclusion that being in good physical health makes a person more likely to be in good mental health. Studies have also shown a positive link between exercise and psychological well-being (Hassmén, Koivula, & Uutela, 2000), with, for example, exercise improving self-esteem, and reducing anxiety and negative mood (Callaghan, 2004). However, it has also been found that being an athlete does not necessarily protect people from mental disorders (Armstrong & Oomen-Early, 2009; Gulliver, Griffiths, Mackinnon, Batterham, & Stanimirovic, 2015; Schaal et al., 2011; Yang et al., 2007), and the most common mental disorders among athletes are depression and anxiety (Schaal et al., 2011).

**What is depression?**

Sadness and downturn in mood are symptoms that most people have experienced, and can be normal reactions to trauma or difficulties in life. The main difference between normal downturn in mood and depression is the severity of the symptoms, duration, and the gravity of impairment depression can have on person’s daily functioning (Nolen-Hoeksema, 2014).

Depression falls under mood disorders in *The Diagnostic and Statistical Manual of Mental Disorders* or DSM-5, where it is called Major Depressive Disorder (American Psychiatric Association, 2013). To be diagnosed with MDD an individual must have five of the following symptoms every day during two weeks: depressed mood most of the day or markedly diminished interest or pleasure in activities, significant weight loss, insomnia or hypersomnia, psychomotor agitation or retardation, fatigue, feelings of worthlessness or inappropriate guilt, inability to think or concentrate, and recurrent thoughts of death. These symptoms have to be that severe that they are disturbing the daily life of the individual, and do not appear as a result of substance use or to another medical condition (American Psychiatric Association, 2013). Depressive episodes are categorized by the severity of the symptoms, mild, moderate, or severe. Symptoms of depression can take a variety of forms, and it is common that they are mild in the beginning and can stay mild for a few months before they start to disturb the daily life of the individual. Therefore, it is important to detect these symptoms early to increase the possibility of preventing the development of a serious
illness (Nolen-Hoeksema, 2014). People with mental disorders, specifically depression, are at high risk for suicide attempts (Nock et al., 2008).

According to the World Health Organization (WHO), 350 million people of all ages suffer from depression, and women are twice more likely than men to develop the disorder (World Health Organization, 2012). Lifetime prevalence of MDD falls between 8 to 12% in most countries, with the 30 day to 12 months prevalence between 45% to 65%, and 12 months to lifetime is in the range from 40 to 55% (Andrade et al., 2003). MDD has been found to co-morbid with anxiety disorders, chronic diseases like arthritis, asthma, diabetes, and heart diseases (Jiang, Krishnan, & O'Connor, 2002; Moussavi et al., 2007).

There are effective psychological treatments available for depression. For example, research on Cognitive Behavior Therapy has shown to be as effective as medications for MDD (DeRubeis et al., 2005). Physical exercise has also been linked to decreased symptoms of depression, and research on aerobic exercise indicates that it can be an effective treatment for MDD of mild to moderate severity (Dunn et al., 2005). In spite of this, the majority of people with depression are likely to not receive any treatment at all for their disease. A possible explanation might be stigma towards mental disorders, lack of access to treatments, and lack of knowledge about the symptoms (World Health Organization, 2012).

What is anxiety?
Fear plays an important role in human nature. When a person faces a threat the body reacts to it with a physical and psychological response that helps the person to fight the threat or flee from it, often referred to as the fight or flight response. Normally the fear disappears as soon as the threat is gone. However, fear can turn into anxiety if the fear is unrealistic, excessive, and persists long after the threat has gone (Nolen-Hoeksema, 2014). Anxiety is an unpleasant emotional state or reaction that is characterized by feelings of apprehension, intensity, preoccupation, and disturbance, and is often associated with biological changes in the body (Nolen-Hoeksema, 2014).

Anxiety is usually divided into two components; somatic and cognitive anxiety (Smith, Smoll, & Schutz, 1990). The physical response refers to the somatic part of anxiety and the psychological response refers to cognitive anxiety. Somatic anxiety is the perception of a person’s physiological change in the body, for example sweat, tremble, and increased heart rate, blood pressure, breathing, and muscle tension. Cognitive anxiety is the
psychological expression of anxiety and can be emotions/thoughts/feelings of terror, fear, worries, negative thoughts, frustration, and restlessness (Weinberg & Gould, 2015). It is also necessary to make a distinction between momentary states and more permanent traits of anxiety (Spielberger 1966, 1972; Spielberger, Vagg, Barker, Dunham, & Westbury, 1980). Trait anxiety reflects the personality of the individual. People with high trait anxiety show signs of stress and anxiety in many situations, and they are more likely than people with low trait anxiety to notice information related to threats. State anxiety is the individual’s perception of the changes in cognitive and somatic anxiety in a specific situation (Spielberger, 1966, 1972). People with high trait anxiety usually have high state anxiety (Broadbent & Broadbent, 1988; Weinberg & Hunt, 1976).

According to DSM-5 (American Psychiatric Association, 2013) anxiety disorders can be divided into separation anxiety, selective mutism, specific phobia, social anxiety disorder, panic disorder, agoraphobia, and generalized anxiety disorder. Anxiety disorders have high comorbidity with other mental disorders such as MDD, substance abuse, and drug addiction (Leray et al., 2011).

In this research the focus is on symptoms of Generalized Anxiety Disorder (GAD). People with GAD are anxious in almost all situations, they are usually worried about many things, and spend a lot of time preparing for, or avoiding situations they fear. They frequently worry about their performance at work, school, relationships, and health. Symptoms usually develop slowly and tend to be more serious when a person is experiencing more stress in their life (Nolen-Hoeksema, 2014). According to the DSM-5 (American Psychiatric Association, 2013), generalized anxiety disorder (GAD) is characterized by excessive anxiety and worry most days of the week during the last 6 months. The individual finds it difficult to control his or her worry, and the anxiety and worry are associated with at least three of the following symptoms; restlessness, being easily fatigued, difficulty concentrating, irritability, muscle tension, and sleep disturbance. These symptoms have to cause clinically significant distress or impairment in daily life (American Psychiatric Association, 2013).

Prevalence of mental disorders in Europe is estimated to be as high as 38% and anxiety disorders are the most prevalent disorders (14%; Wittchen et al., 2011). The 12 month prevalence of GAD in the general population is estimated to be between 2 to 5% (Lieb, Becker, & Altamura, 2005; Wittchen, 2002). Females, young adults, and people with low income are at greater risk of developing GAD (Leray et al., 2011).
Both medication and psychological treatments, for example relaxation and cognitive behavioral therapy, have been shown to be effective treatments for anxiety disorders (Gorman, 2002), as well as physical exercise (Carek, Laibstain, & Carek, 2011).

**Theories on anxiety in sport**

During the last decades several theories have been formulated that focus on the relationship between arousal and anxiety, and how they are linked to performance in sports (Jones, 1995). These different theories all give an important insight into how arousal and anxiety can have an effect on athletes’ performances.

Arousal is the person’s physiological and psychological response, and it refers to the intensity state of action that motivates the person to perform at a specific moment. Arousal intensity can have a positive or negative consequence on person’s performance (Weinberg & Gould, 2015). High arousal or anxiety can for example cause an increased muscle tension, fatigue, and lack of concentration (Landers, Wang, & Courtet, 1985; Nieuwenhuys & Oudejans, 2012; Pijpers, Oudejans, Holsheimer, & Bakker, 2003).

One of the first theories about arousal and performance, the Drive Theory (Spence & Spence, 1966), proposed a linear relationship between the two. Thus, an increase in drive (i.e., arousal, state anxiety, and stress) is associated with an increase in performance - for example the more aroused an athlete is before a game the better he will perform. However, it matters how skilled the athlete is. If an athlete’s skill level is not high the performance will become progressively worse as arousal increases (Weinberg & Gould, 2015). The theory might explain why elite athletes perform better under pressure, but it does not explain why elite athletes often fail when they are highly aroused. The Drive Theory has been criticized for being too simple and not explaining the relationship between arousal and performance well enough (Harmison, 2006; Martens 1971; Weinberg 1990).

For an answer to this criticism, sport psychologists turned to the Inverted U hypothesis (Yerkes & Dodson, 1908) to try to explain the relationship between arousal and performance. Inverted U hypothesis proposes that the relationship between arousal and performance is in the form of a symmetrical inverted U. With increased arousal, performance will improve, but only up to a certain point, which is called the optimal point and is located in the middle of the arousal continuum. Arousal that goes over the optimal point will result in a gradual decrease in performance (Arent & Landers, 2003; Sonstroem & Bernardo, 1982). However, this theory
has been criticized for the shape of the curve and that it does not take individual differences into account (Weinberg, 1990). Research has shown that a catastrophic decrease happens in athletes’ performances when arousal reaches above the optimal level instead of slightly decreasing like the Inverted U hypothesis assumes (Hardy & Parfitt, 1991). In support of the criticism on the shape of the Inverted U hypothesis a research on female volleyball players, showed that the players reported their best performances when their anxiety was either low or high, but not in the moderate range (Raglin & Morris, 1994).

The theory of Individual Zone of Optimal Functioning (IZOF; Hanin, 1980) proposes that there are individual differences in the relationship between arousal and performance. The optimal level of state anxiety is not always at the midpoint of the continuum. Each person has their own zone of optimal level for their best performance. If the state anxiety lies outside of the person’s optimal zone, their performance will be impaired. Therefore, athletes with state anxiety within their zone should perform better than athletes with state anxiety outside of their zone (Gould & Krane, 1992). This theory also accounts for other emotions that can have an effect on the performance of athletes such as disappointment, frustration, excitement, and joy. How an athlete perceives these emotions, negative or positive, is the key to understand the relationship between arousal and performance. Thus, for some athletes, increased anxiety or anger can help them improve their performance, but for others it might diminish it (Hanin, 2000, 2007). There is research that supports the theory of IZOF (Gould & Tuffey, 1996; Raglin, Morgan, & Wise, 1990). A meta-analysis of 19 studies showed a better performance from athletes that were within their optimal individual zone then those athletes who were outside of their zone (Jokela & Hanin, 1999).

The Catastrophe Model (Hardy & Fazey, 1987) suggests a three dimensional relationship between cognitive anxiety, physiological arousal (somatic anxiety) and performance. The physiological arousal is related to performance in an inverted U under the condition of low cognitive anxiety. Increased cognitive anxiety will enhance performance under conditions of low physiological arousal. However, if the cognitive or the physiological arousal becomes too high it will at some point go over the individual’s threshold and cause a rapid decline in his or her performance, i.e. catastrophe will occur (Hardy 1990, 1996; Hardy & Parfitt, 1991). This model predicts that a person will perform better with some level of anxiety provided that his or her physiological arousal level does not become too high.
Therefore, experiencing cognitive anxiety does not always have to impact performance in a negative way (Weinberg & Gould, 2015).

Athletes, as well as people in general, usually look at anxiety as something that will affect their performance negatively, but in fact, it can have an opposite effect (Ntoumanis & Jones, 1998; Swain & Jones, 1996). Two athletes that are experiencing similar anxiety prior to competition can perceive those symptoms very differently. For some athletes’ anxiety before a game can facilitate their performance and for others it might debilitate it. The impact anxiety has on performance depends on the individual interpretation of anxiety, and the individual’s believes in their ability (Jones, 1995). Research has shown that elite athletes report their cognitive anxiety as being more facilitative to their performance then non-elite athletes (Jones, Hanton, & Swain, 1994; Jones, Swain, & Hardy, 1993). Jones and Hanton (2001) found, for example, that swimmers who reported competitive anxiety to be facilitating for their performance before competition also reported more positive feelings than athletes that reported competitive anxiety to be debilitating for the performance.

**Sources of stress in sport**

Stress can be defined as a substantial imbalance between demands and response capability under conditions where failure to meet the demands has important consequences (McGrath, 1970). Every athlete can relate to this definition, the demands to do well and the worry that their skill or talents are not good enough against their opponent.

Sources of stress for athletes have been related to negative aspects of competition, interpersonal problems with teammates and coaches, financial concerns, injuries, lack of social support, personal struggles, and traumatic experience (Woodman & Hardy, 2001; Scanlan, Stein, & Ravizza, 1991). It has also been shown that more attention from the media and interest from supporters can be perceived as an added stressor to perform (Kristiansen, Halvari, & Roberts, 2012).

Injuries can have a substantial impact on the mental health of athletes. They could experience uncertainty regarding the severity of the injury, their recovery, and worry about the possibility of losing their position in the team. Leddy, Lambert, and Ogles (1994) conducted a research on psychological reactions to injury on collegiate athletes, and found that injured athletes were experiencing more symptoms of depression and anxiety then non-injured athletes. They also found that athletes that were still dealing with their injury two
months later had more symptoms of depression than athletes that were injured in the beginning of the research but had returned back to practice. Research has shown that athletes with injuries are at greater risk then non-injured athletes to develop depression, and are also at higher risk for suicidal attempt (Appaneal, Levine, Perna, & Roh, 2009; Smith & Milliner, 1994).

Stigma of mental health in sports
Negative attitudes and prejudices can have a negative effect on the lives of individuals with mental disorders, and prevent individuals from seeking help (Sirey et al. 2001; Wells, Robins, Bushnell, Jarosz, & Oakley-Browne, 1994). Women are more likely to seek help for mental health problems than men, and younger people are more reluctant to seek help then older people (Rickwood, Deane, Wilson, & Ciarrochi, 2005).

Stigma can be defined as the negative attitudes and beliefs towards something or someone and often leads to discrimination (Corrigan, 2004). A definition can be made between personal stigma and perceived stigma. Personal stigma is the negative attitudes and beliefs the individual has, and perceived stigma can be defined as the negative attitudes and beliefs that the individual thinks the general public has (Griffiths, Christensen, & Jorm, 2008). Perceived stigma can have an effect on the willingness of the person with mental disorder to seek help (Vogel, Wade, & Hackler, 2007). Pedersen and Paves (2014) found that people report higher perceived stigma then personal stigma.

Over the last few decades there has been an awakening regarding attitudes towards mental disorders in sports, which has resulted in more athletes coming forward and talking about their experience having a mental illness. However, there is more need for research on stigma in relation to athletes. Watson (2005) did a research on help seeking behavior of college students, and found that athletes were less likely to seek help then their peers.

The biggest barrier for athletes to seek help seems to be stigma, other barriers are denial, lack of mental health literacy, and negative past experience of help seeking. However, encouragement from others, having an established relationship to the provider of support, pleasant previous interactions with providers of support, the positive attitude of others, and access to the internet can all increase the likelihood of athletes seeking support (Gulliver et al., 2012).
Education and opportunities to meet and get to know people with mental disorders have shown to be effective ways to decrease stigma towards mental illness. Furthermore, education seems to work better for adolescents, and talking with people with mental disorders seems to have more influence on decreasing stigma for adults (Corrigan, Morris, Michaels, Rafacz, & Rüsch, 2012).

Prevalence of mental disorders among athletes

The findings of studies on prevalence of mental disorders in athletes are inconsistent. Armstrong and Oomen-Early (2009) found that collegiate athletes had fewer symptoms of depression than non-athletes. Yang et al. (2007) found that 21% of 257 collegiate students athletes playing in Division I in the USA experienced symptoms of depression (male 19,2% and female 25,6%), and that freshmen and female athletes were more likely to have symptoms of depression than men.

On the other hand recent research has shown that the prevalence of mental disorders in athletes is similar to prevalence rates in the general population. Schaal et al. (2010) found that the prevalence of mental disorders in a sample of French high-level athletes was similar to the prevalence rates in the general population. In this study 17% of the athletes met the criteria for at least one current or recent (i.e. within last six months) mental disorder, and lifetime prevalence rate was 25%. Women were 1.3 times more likely to have at least one mental disorder, and 2 times more likely to have two or more disorders. GAD had the highest prevalence among the athletes or 6%, and major depression was in third place with 4%.

Similar results have been reported in Australia. Gulliver et al. (2015) found prevalence rates of symptoms of mental disorders in a group of elite Australian athletes, to be similar to prevalence rates in community studies. In this study, 46% of 224 athletes experienced symptoms of at least one mental disorder, or 39% of males and 53% of females in the sample. Symptoms of depression had the highest prevalence (27%), and GAD was number five (7%). Athletes who were dealing with injuries were more likely to have symptoms of depression and GAD than non-injured athletes.

A study published in 2015 on current and former professional footballers suggests that the prevalence of anxiety disorders and depression is higher among athletes than in the general population (Gouttebarge, Frings-Dresen, & Sluiter, 2015). The prevalence of depression and anxiety disorders was 26% in current players, and 39% in former players.
It is important to distinguish between general anxiety and sport performance anxiety in studies in athlete samples. Sport performance anxiety is the anxiety that the athlete experiences in sport situations. It is normal for an athlete to experience anxiety before a competition, such as feeling nervous and worried about his performance, so it is not unlikely for athletes to have high state anxiety when they are in an important sport situation (Smith et al., 1990). These feelings that athletes experience around competition, are similar to symptoms that are listed in questionnaires on general anxiety. It is possible that around competition day an athlete could score high for general anxiety when asked to answer the following statements on Hospital anxiety and depression scale: “I feel tense or wound up, worrying thoughts go through my head, I feel restless as I have to be on the move” (Zigmund & Snaith, 1983).

Therefore, it is important to look critically on the methods that are used in the research on anxiety and mental disorders in athletes. Most studies on the prevalence of mental disorders in athletes do not distinguish between general anxiety and sport performance anxiety. This can be seen, for example, in the fact that researchers have not used measurement tools specifically designed to measure sport performance anxiety.

Furthermore, when using measurements on general anxiety it is important that athletes are instructed to answer the questions about their well-being while excluding their feelings that are related to their performance in competition (right before or around competition day).

It is also unclear in some studies at what time point, in relation to competition day the subjects answered the questionnaires. If a questionnaire on general anxiety is administered on the day of competition, the results could possibly indicate greater general anxiety because of performance anxiety. Thus the general anxiety measurement does, not necessarily reflect the athlete’s general anxiety but performance anxiety.

The purpose of the current study is to examine the level of anxiety and depression symptoms among basketball players in the top league in Iceland when distinguishing between general anxiety and sport performance anxiety. Furthermore, stigma towards these mental disorders is explored. Five hypotheses are put forth.

Hypothesis 1 proposes a positive correlation between sport performance anxiety and general anxiety as well as between sport performance anxiety and depression. Those who score high on sport performance anxiety are expected to report more symptoms of general
anxiety and depression. Studies have shown that individuals that have high trait anxiety do also have high state anxiety (Broadbent & Broadbent, 1988; Weinberg & Hunt 1976).

Hypothesis 2 proposes that female players will report more symptoms of sport performance anxiety, general anxiety and depression. Studies have shown that females are more likely than men to develop symptoms of anxiety and depression (Leray et al., 2011; Schaal et al., 2010; World Health Organization, 2012).

Hypothesis 3 proposes that players that have experienced injury the week before the data collection will report more symptoms of anxiety and depression than non-injured players. In addition it is proposed that those players that have missed more practices due to their injuries will report more symptoms of anxiety and depression. Studies have shown that players that are injured are at more risk of developing symptoms of anxiety and depression (Appaneal et al., 2009; Leddy et al., 1994).

Hypothesis 4 proposes that players that have played for the national team will report anxiety as more facilitating on their performance than players that had not played for the national team. Studies have shown that experienced players are more likely to perceive anxiety as facilitative on performance (Jones et al., 1994; Jones et al., 1993).

Hypothesis 5 proposes that players will report significantly higher perceived stigma than personal stigma. A study has shown that perceived stigma is higher than personal stigma within the general public (Pedersen & Paves, 2014).
Method

Participants
Participants were athletes who played basketball in the top league in Iceland the 2015-2016 season. Players younger than 18 years old and foreign players were excluded from the study. Data were collected from 117 players, 65 males (55.6%) and 52 females. The athletes’ mean age was 24 years with an age range of 18 to 37. The mean age for women was 23, with the range from 18 to 36. The mean age for men was 24, with the range from 18 to 37. Participants were recruited using convenience sampling, in which teams located on the South-West coast of Iceland were contacted. In Iceland, the top league in basketball has seven women’s teams and 12 men’s teams. All the women’s teams participated in this study and seven men’s teams.

Instruments and Measures
The questionnaires used in this study can be found in Appendix 1 to 4. In the Background questionnaire athletes were asked questions to use as independent variables (see Appendix 1). For example age, gender, whether they had played for the national team, and how many practices they had missed last week because of an injury. They were also asked whether they felt that anxiety had positive effects on their performance, and if they use any strategies to decrease or increase anxiety before a game. Participants answered on a 6-point scale: 1=never, 2=very rarely, 3=rarely, 4=neutral, 5=often, 6=very often.

Sport Anxiety
The Sport Anxiety Scale-2 (SAS-2; Smith, Smoll, Gumming, & Grossbard, 2006) measures cognitive and physical symptoms of anxiety associated with athletic performance (see Appendix 2). The SAS-2 is a revised version of the original edition of the SAS (Smith, Smoll, & Schutz, 1990) because, although the SAS showed good reliability and validity (Smith et al., 1990), it was only suited for adults. However, the SAS-2 has shown good validity and reliability for both adults and youths (Grossbard, Smith, Smoll, Cumming, 2009; Smith et al., 2006).

SAS-2 has 15 statements that are divided into three factors: Worry, Somatic Anxiety, and Concentration Disruption. Athletes are requested to read every statement with the
headline “Before or while I compete in sports”. Each factor has five statements which the participants answer on a 4-point scale: \(1 = \text{not at all}, \ 2 = \text{a little bit}, \ 3 = \text{pretty much}, \ 4 = \text{very much}\). The highest possible score is 60 and the lowest is 15. Participants that have lower scores are less likely to have sport competitive anxiety then participants that score high on the questionnaire. Examples of statements: “Before or while I compete in sports” … “it is hard to concentrate on the game”, “my body feels tense”, and “I worry that I will not play” (Smith et al., 2006). The SAS-2 was translated from English to Icelandic with a direct translation (McKay et al., 1996) and committee translation method (Harkness & Schoua-Glusberg, 1998). The translation was then assessed by three experts in psychology.

**Anxiety and Depression**

The Hospital Anxiety and Depression Scale (HADS; Zigmund & Snaith, 1983) measures both symptoms of anxiety and depression (see Appendix 3). The questionnaire consists of 14 statements about the participants’ well-being over the last week and is divided into an anxiety subscale and a depression subscale. Participants answer the statements on a 4-point scale rated from zero to three points. The scores are counted separately for each subscale, which makes the highest score 21 and the lowest zero. Scores below eight are classified as no disorder, scores from eight to ten are classified as borderline abnormal and scores over 11 points are classified as abnormal and could indicate a possible diagnosis of depression or anxiety disorder (Zigmund & Snaith, 1983). Examples of statements on the anxiety subscale are; “I get a sort of frightened feeling as if something awful is about to happen”, and “I get sudden feelings of panic.” Examples of statements on the depression subscale are; “I still enjoy the things I used to enjoy”, and “I have lost interest in my appearance.” The HADS has shown good psychometric properties in both healthy subjects and patients, and has shown good validity in use with different languages (Hermann, 1997). The HADS has been translated from English to Icelandic (Schaaber, Smári, & Óskarsson, 1990) and shown good validity and reliability (Magnusson, 2000).

**Stigma**

The Depression Stigma Scale (DSS; Griffiths, Christensen, Jorm, Evans, & Groves, 2004) measures both personal stigma and perceived stigma associated with depression (see Appendix 4). Personal stigma, measured by nine statements, is the participants own attitudes
towards depression, and perceived stigma, also measured by nine statements, is what participants think the attitudes of others in the society are. Answers are rated on a 5-point scale: 0 = strongly disagree to 4 = strongly agree. The total score can range from 0-36 for each subscale, where higher scores indicate a higher level of stigma towards depression. An example of a statement on the personal stigma subscale is; “depression is a sign of weakness” and an example on the perceived stigma subscale is; “Most people think that depression is a sign of weakness”. The DSS has shown good reability, \( r = .71 \) for personal stigma and \( r = .67 \) for perceived stigma (Griffiths, Christensen, & Jorm, 2008; Griffiths et al., 2004). The first author of the DSS gave permission for the use of the scale in this study. The wordings of two questions were adjusted for the purpose of this study to explore players stigma related to the sport. The questions from the DSS; “I would not employ someone if I knew they had been depressed” and “I would not vote for a politician if I knew they had been depressed” were replaced with “I would not want to play with someone that I knew had depression” and “I would not want to have a coach who I knew had depression”. A direct translation (McKay, 1996) and committee translation method (Harkness & Schoua-Glusberg, 1998) was used to translate the DSS from English to Icelandic. To measure attitudes toward anxiety the word depression was replaced with the word anxiety disorder.

Procedure
When the National Bioethics Committee had approved this study, team coaches in the sample were contacted to find an appropriate date for the data collection. Collection of the data took place in November and December. The researcher attended one practice of every team in the sample where the questionnaires were administered (see Appendix 1-4). The data was not collected the day before a game or on game day, to minimize the possibility that sports performance anxiety would inflate scores on a measure of general anxiety. The questionnaires consisted of 78 items which took participants about 13 to 16 minutes to complete. Participants were informed that participation was anonymous and they did not have to disclose any traceable personal information. Participants were also informed that they could discontinue their participation in the study at any time without explanation. Finally they were offered to talk to a licensed psychologist would they experience any discomfort during or after they had answered the questionnaires.
Design and data analysis

Three independent variables; gender, injury, and national team experience were used in this study and three dependent variables; scores on the SAS-2 and the HADS anxiety and depression subscales. Scores on stigma for both depression and anxiety was used to compare perceived stigma with personal stigma. All the analysis was processed with IBM SPSS Statistics.

The frequency of anxiety and depression symptoms in players was calculated, and Person correlation was used to explore the relationship between the SAS-2 scores and HADS anxiety and depression scores. Further on, an independent-samples t-test was used to calculate if there was a gender difference on scores on the SAS-2, HADS anxiety and HADS depression, and if injured and non-injured players had a significant difference in their score on the HADS anxiety and depression subscales. A one-way between subjects ANOVA were executed to test differences between the number of practices missed due to injury and HADS anxiety and depression. Also, an independent samples t-test was used to compare differences in views on the effects of anxiety on performance based on national team experience. Finally, a paired-samples t-test was used to compare differences between scores on perceived stigma and personal stigma scores on the DSS.
Results

The Sport Anxiety Scale-2 was found to be highly reliable (15 items; \( \alpha = .84 \)). Cronbach’s alpha coefficients for the 7 items HADS anxiety subscale and 7 items HADS depression subscale were .84 and .61. Cronbach’s alphas for Depression Stigma scale 9 items Perceived Stigma subscale was .85 and 9 items Personal Stigma subscale was .57. However, the Cronbach’s alphas for Depression Stigma scale when the word depression was replaced with the word anxiety was .89 for the 9 item Perceived Stigma subscale and .68 for the 9 item Personal Stigma subscale. In the data there was one missing value regarding age and one participant did not answer the DSS for depression. Data for 117 participants was used in this study, except for DSS depression, where data from 116 participants was used.

The mean score on the HADS anxiety subscale was 4.93 (SD = 3.53), the maximum score was 17, and the lowest score was zero. For the HADS depression subscale the mean score was 3.15 (SD = 2.61), the maximum score was 12 and the lowest was zero. The mean score on the SAS-2 was 26.96 (SD = 7.45). The maximum score for performance anxiety was 51 and the lowest was 15.

Symptoms of anxiety and depression

Percentages of participants having anxiety and depression symptoms scores within the normal range, borderline abnormal, or in the abnormal range, are shown in table 1. The percentage of players with symptom scores in the abnormal range was 8 for anxiety and 2 for depression.

Table 1
Prevalence of anxiety and depression symptoms within the players

<table>
<thead>
<tr>
<th></th>
<th>Anxiety</th>
<th>Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>No disorder (total score: 0-7)</td>
<td>78.6</td>
<td>94.0</td>
</tr>
<tr>
<td>Borderline abnormal (total score: 8-10)</td>
<td>13.7</td>
<td>4.3</td>
</tr>
<tr>
<td>Abnormal (total score: 11-21)</td>
<td>7.7</td>
<td>1.7</td>
</tr>
</tbody>
</table>

The relationship between sport performance anxiety and anxiety and depression

A Person product-moment correlation coefficient was used to evaluate the relationship between scores on the SAS-2 with scores on the HADS anxiety subscale and the HADS
depression subscale (see figure 1 and 2). There was a strong positive correlation between scores on the SAS-2 and the HADS anxiety subscale, \( r (115) = 0.74, p < .001 \). The correlation between the SAS-2 and the HADS depression subscale was weaker but moderate, \( r (115) = 0.53, p < .001 \). Overall, there was a positive relationship between levels of sport related anxiety, measured with the SAS-2, and symptoms of general anxiety and depression, measured with the HADS.

Figure 1. Relationship between total scores on SAS-2 and HADS anxiety subscale

Figure 2. Relationship between total scores on SAS-2 and HADS depression subscale
Gender difference

Table 2 displays mean scores for HADS anxiety, HADS depression, and the SAS-2, by gender. Women had higher mean scores on anxiety, depression, and performance anxiety than men. An independent-samples t-test was conducted to compare scores between genders. There was a significant difference between scores on the HADS anxiety subscale for women and men, \( t(115) = -4.13, p < .001 \). There was also a significant gender difference on the SAS-2 scores, \( t(115) = -3.28, p = .01 \). However, an independent-samples t-test did not show a significant gender difference on the HADS depression subscale between genders, \( t(115) = -0.35, p = .72 \).

Table 2

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Depression</td>
<td>3.08</td>
<td>2.18</td>
</tr>
<tr>
<td>Anxiety</td>
<td>3.80</td>
<td>2.56</td>
</tr>
<tr>
<td>Sport Performance Anxiety</td>
<td>25.02</td>
<td>5.86</td>
</tr>
</tbody>
</table>

Injured versus non-injured

Table 3 shows mean HADS anxiety and depression scores for injured and non-injured players. There were 33 players (28%) that had experienced injury the week before the data collection. To compare the scores between injured and non-injured players an independent-samples t-test was conducted. There was no significant difference in the scores on the anxiety subscale for injured athletes and non-injured athletes \( t(115) = -1.74, p = .08 \). Furthermore there was not a significant difference between the scores on the depression subscale for injured athletes and non-injured athletes \( t(115) = 0.54, p = .58 \).
Table 3
Mean scores and standard deviation on the HADS anxiety and depression subscales for injured and non-injured players.

<table>
<thead>
<tr>
<th></th>
<th>Anxiety</th>
<th></th>
<th>Depression</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Non-injured</td>
<td>84</td>
<td>5.28</td>
<td>3.59</td>
<td>3.07</td>
</tr>
<tr>
<td>Injured</td>
<td>33</td>
<td>4.03</td>
<td>3.23</td>
<td>3.36</td>
</tr>
<tr>
<td>1-2 practices lost</td>
<td>15</td>
<td>3.00</td>
<td>2.20</td>
<td>2.87</td>
</tr>
<tr>
<td>3-4 practices lost</td>
<td>9</td>
<td>3.11</td>
<td>2.67</td>
<td>2.78</td>
</tr>
<tr>
<td>5 + practices lost</td>
<td>9</td>
<td>6.67</td>
<td>3.94</td>
<td>4.78</td>
</tr>
</tbody>
</table>

Looking only at the data from the players that had experienced injury, a one-way between subjects ANOVA was conducted to compare scores on the HADS anxiety and depression subscales across number of practices the players missed due to their injuries (1-2 practices, 3-4 practices and 5 or more practices). There was a significant difference between the level of anxiety symptoms in terms of the number of practices missed, $F(2.30) = 5.18, p = .01$. A Bonferroni Post Hoc test indicated that the mean score for the 5 or more practices missed was significantly different than 1-2 practices missed and 3-4 practices missed. However, 1-2 practices missed did not significantly differ from the 3-4 practices missed. There was not a significant difference between the level of depression symptoms depending on the number of practices missed, $F(2.30) = 1.99, p = .15$.

**Anxiety facilitating on performance**

Figure 3 shows distribution of the scores with players that had played for the national team compared to players that had not on the answers to the statement: *Anxiety has a positive effect on my performance*. There were 31 players that had played for the national team at some point during their career. An independent-samples t-test was used to compare the groups. There was a significant difference between the scores for those who had played for the national team ($M = 4.09, SD = 1.42$) and those who had not ($M = 3.23, SD = 1.13$), $t(115) = 3.22, p < .01$. 
Figure 3. The scores distribution on the statement: “Anxiety has a positive effect on my performance” and whether players had played for the national team or not. Score is the possible answer the participant could give for the statement, 1=never, 2=very rarely, 3=rarely, 4=neutral, 5=often, 6= very often.

Perceived stigma and Personal stigma
Table 4 shows mean scores for both personal stigma and perceived stigma towards anxiety and depression on the DSS and a modified version of the DSS for anxiety. A paired-samples t-test was conducted to compare personal stigma and perceived stigma. There was a significant difference between the scores on the personal stigma scale and the perceived stigma scale for both anxiety, $t(116) = -9.180$, $p < .001$, and depression, $t(115) = -11.41$, $p < .001$. Players had lower mean scores on the personal stigma scale then on the perceived stigma scale.
Table 4

*Mean scores and standard deviation on the personal stigma scale and the perceived stigma scale for anxiety and depression on the DSS. A greater score indicates greater stigma.*

<table>
<thead>
<tr>
<th></th>
<th>Depression</th>
<th></th>
<th>Anxiety</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>Personal stigma</td>
<td>7.51</td>
<td>4.24</td>
<td>7.11</td>
<td>4.82</td>
</tr>
<tr>
<td>Perceived stigma</td>
<td>14.45</td>
<td>6.56</td>
<td>13.44</td>
<td>7.44</td>
</tr>
</tbody>
</table>
Discussion

The purpose of the present study was to evaluate anxiety and depression among basketball players in the top league in Iceland. The key difference between this study and others that have explored the prevalence of anxiety and depression among athletes is the use of the SAS-2 questionnaire together with the HADS questionnaire. The aim of using the SAS-2 was to avoid that anxiety symptoms related to athletes’ sport performance would affect the score on measurements for general anxiety.

As expected in hypothesis 1, the results showed a positive correlation between symptoms of sport performance anxiety and general anxiety. Those who had high sport performance anxiety were more likely to have high general anxiety. This is in line with other studies on state anxiety and trait anxiety, which have found that those who have high trait anxiety are more likely to have high state anxiety (Broadbent & Broadbent, 1988; Weinberg & Hunt, 1976). However, the correlation was not perfect which suggests that some players could have high sport performance anxiety but low general anxiety. This indicates that athletes can have symptoms of anxiety that relate to their sport performance, but does not have to mean that they fall under the criteria of general anxiety. There was also a positive correlation between sport performance anxiety and depression, but that relationship was much weaker. These results emphasize the importance of differentiating between sport performance anxiety and general anxiety to avoid overdiagnosis.

According to the data from the present study, Icelandic athletes are experiencing more symptoms of anxiety (8%) and less symptoms of depression (2%) than the Icelandic general public (Smári, Ólason, Arnarson, & Sigurðsson, 2008). Magnusson, Axelsson, Karlsson and Óskarsson (2000) conducted a study on seasonal mood change in Iceland using The HADS questionnaire and found that the prevalence of anxiety symptoms was 4% and 3% for depression. Another study on Icelandic college students found prevalence of 6% for symptoms of anxiety and 3% for depression (Smári, Erlendsdóttir, Björgvinsdóttir & Ágústsdóttir, 2003).

The scores for sport performance anxiety and general anxiety were significantly higher among female than male players, which indicates that women are more likely to have symptoms of general anxiety as well as symptoms of sport performance anxiety. This is in line with hypothesis 2. However, the scores for depression did not show any gender differences. This differs slightly from other studies that have shown that women are more
likely to be diagnosed with both anxiety and depression than men (Leray et al., 2011; Schaal et al., 2010; World Health Organization, 2012). In addition, studies on athletes have shown that female athletes are more likely to develop symptoms of depression than male athletes (Schaal et al., 2010; Yang et al., 2007).

When looking at how injuries affect players, injuries did not seem to predict more symptoms of anxiety or depression. This is interesting since the opposite results were expected in hypothesis 3. This is not in accordance with other studies which have found higher prevalence of anxiety and depression among injured athletes than non-injured athletes (Appaneal et al., 2009; Leddy et al., 1994). However, in the present study non-injured players reported more anxiety symptoms than injured players, and this difference was nearly significant. When looking at the number of practices players missed due to their injuries, the players that missed one to four practices reported fewer symptoms of anxiety than non-injured players. A possible explanation for this might be that self-handicapping could be influencing the scores (Prapavessis, Grove, Maddison, & Zillmann, 2003). It could be assumed that some players perceive their injuries as a relief, that is, there is less pressure on them to perform because of their injuries and they have a valid excuse if their performance falls short in competition.

When examining further the results from the injured players, there was a significant difference between the number of practices missed due to injuries for anxiety, but not depression. Players who had missed five or more practices the week before data collection showed more symptoms of anxiety than players who missed one to four practices. This could indicate that athletes that are absent from their sport for longer periods of time, due to their injuries, are at greater risk of developing symptoms of anxiety, and possibly depression. Even though there was not a significant difference on the scores for depression it is possible that it might with higher number of participants. The difference on the mean score for athletes that missed five or more practices was a lot higher than athletes that lost one to four practices. Thus, it is important for coaches to follow up on injured players to ensure that they get appropriate support to decrease the likelihood of them developing more severe symptoms of mental disorders.

Players that had played for the national team reported anxiety as more facilitating on their performance than players that had not played for the national team. This was expected in hypothesis 4 and is in accordance with other studies (e.g., Jones et al., 1994; Jones et al.,
These results suggest that the ability of the players could have an effect on how athletes perceive anxiety, either as a positive or negative influence on their performance.

Perceived stigma was significantly higher than personal stigma for both anxiety and depression as was expected in hypothesis 5. These results are similar to a study from Pedersen & Paves (2014). Although most players reported low personal stigma, their perception of the attitudes and beliefs of others towards mental disorders, was higher. This could possibly hinder an athlete dealing with anxiety or depression to inform the coach or teammates about his or her struggles. Therefore, leaders and managers of sports associations and clubs need to take responsibility in educating and raising awareness of mental disorders to decrease stigma of those disorders in sport. Furthermore, it is important for clubs to have a clear policy on how to react when a player is dealing with mental illness. Coaches can play a critical role in the early detection of symptoms due to their close relationship with players. Also, it is important that appropriate support is available for players.

The main limitation of the present study is that the Icelandic versions of the measurements SAS-2 and DSS have not been used before and, therefore, more psychometric research is needed. Another limitation can be found in the homogeneity of the sample as all the participants came from the same sport and participants were all adults.

In future studies on the prevalence of mental disorders among athletes it would be interesting to look at a more diverse sample, especially adolescence. In some sports in Iceland it is not uncommon that players start in the top league as early as 14 years old while still playing with their age group. It would be interesting to explore how this could affect their mental well-being.
References


Appendix I - Background questionnaire

Vinsamlegast fylltu út eftirfarandi:

1. Kyn: Karl □ Kona □

2. Hvaða ár ertu fædd/ur)? ____________________

3. Hvað varstu gömul/gamall þegar þú byrjaðir að spila með meistaraflokki? ________

4. Hvað varstu að spila með mörgum flokkum þegar þú byrjaðir að spila með meistaraflokki (að meistaraflokki undanskildum)? ______________________

5. Hvað ertu að spila með mörgum flokkum í dag? ______________________

6. Hefur þú spilað með unglingalandsliði í körfubolta? Já □ Nei □


8. A) Hefur þú verið frá vegna meiðsla síðustu viku? Já □ Nei □

   B) Ef þú svaraðir já við spurningunni fyrir ofan þá máttu svara þessari spurningu.
   Hversu margar æfinger misstir þú af í síðustu viku vegna meiðsla
   1-2 æfinger □ 3-4 æfinger □ 5 eða fleiri æfinger □

9. Merktu við viðeigandi svarmöguleika frá 1 til 6 eftir því hversu mikilvæg ástæðan er.
   Mikilvægasta ástæðan fær gildið 6, næst mikilvægasta ástæðan fær gildið 5 og svo
   framvegis (minnst mikilvægasta ástæðan fær gildið 1).
Afhverju æfir þú körfubolta?

____ Skemmtilegt
____ þrýstingur frá öðrum
____ Vil skara fram úr
____ Að halda mér í formi (auka hreysti)
____ Til að ná árangri
____ Annað ______________________


<table>
<thead>
<tr>
<th></th>
<th>Aldrei</th>
<th>Mjög</th>
<th>Sjaldan</th>
<th>Sjaldan</th>
<th>Hlutlaus</th>
<th>Oft</th>
<th>Mjög</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Kviði getur haft jákvæð áhrif á frammistöðu mína í leikjum</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>2. Ég nota aðferðir til að draga úr kviða fyrir leiki</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>3. Ég nota aðferðir til að auka kviða fyrir leiki</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>
Appendix II – Sport Anxiety Scale 2 in Icelandic


<table>
<thead>
<tr>
<th>Áður en eða á meðan ég keppi...</th>
<th>Alls ekki</th>
<th>Aðeins</th>
<th>Frekar mikið</th>
<th>Mjög mikið</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. er erfitt að einbeita sér að leiknum</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. er líkami minn uppspenntur</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. hef ég áhyggjur af því að ég muni ekki spila vel</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. er erfitt fyrir mig að einblína á það sem ég á að gera</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. hef ég áhyggjur af því að bregðast öðrum</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. finn ég fyrir spennu í maganum</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. missi ég einbeitingu á leikinn</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. hef ég áhyggjur af því að eiga ekki minn besta leik</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. hef ég áhyggjur af því að ég muni spila illa</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10. finnst mér vöðvarnir vera östyrkir</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Áður en eða á meðan ég keppi...</td>
<td>Alls ekki</td>
<td>Aðeins</td>
<td>Frekar mikið</td>
<td>Mjög mikið</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>----------</td>
<td>--------</td>
<td>--------------</td>
<td>-----------</td>
</tr>
<tr>
<td>11. hef ég áhyggjur af því að ég muni klúðra í leiknum</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12. finn ég fyrir ólgu í maganum</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13. get ég ekki hugsað skýrt</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14. finnst mér vöðvarnir stifir því ég er tugaspennt/ur</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>15. á ég erfitt með að einbeita mér að því sem þjálfarinn segir mér að gera</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Dýöing: Hallur Hallsson og Hallur Skúlason
Appendix III - Hospital Anxiety and Depression Scale in Icelandic

Vinsamlega krossaðu við það svar sem best á við þína líðan eins og hún var síðastiðna viku.
Að undanskilinni líðan sem tengist frammistöðu í keppni á keppnisdegi og að meðan þú keppir

1. Ég er uppsptennt(ur) og taugekrekti(ur):
   ( ) næstum allt
   ( ) öft
   ( ) óðru hvoru, þundum
   ( ) alls ekki

2. Ég nýt þess enn, sem ég var von/vanur að gera:
   ( ) ábyggilega eins mikid
   ( ) ekki alveg eins mikid
   ( ) aðeins að litlu leyti
   ( ) varla nokkuð

3. Ég fæ einhvers konar hraðulutilfinningu eins og einithvað hraðulegt sé að fara að gerast:
   ( ) alveg orugglega og öft slæma
   ( ) já, en ekki svo slæma
   ( ) að litlu leyti, en ég haf ekki ábyggjur af því
   ( ) alls ekki

4. Ég get hlegið og séð það skoplega í kringum mig:
   ( ) Eins mikid og óður
   ( ) ekki alveg eins mikid núna
   ( ) ábyggilega ekki eins mikid núna
   ( ) alls ekki

5. Ábyggjur fara í gegnum huggan:
   ( ) svo til stöðugt
   ( ) mjögl oft
   ( ) óðru hvoru, en ekki svo oft
   ( ) aðeins stóku snum

6. Ég er kát(ur):
   ( ) alls ekki
   ( ) ekki oft
   ( ) stundum
   ( ) svo til allt

7. Ég get settið röðleg(ur) og slappað af:
   ( ) allt
   ( ) yfirleitt
   ( ) ekki oft
   ( ) alls ekki

8. Ég er seinni til hugsana og verka:
   ( ) næstum allt
   ( ) mjögl oft
   ( ) stundum
   ( ) alls ekki

9. Ég finn til hraðulakenndar, fæ orðuleiktutilfinningu í magann:
   ( ) alls ekki
   ( ) óðru hvoru
   ( ) nokkuð oft
   ( ) mjögl oft

10. Ég hef misst hriðann við því hvernig ég lit út:
    ( ) alveg orugglega
    ( ) ég hriði ekki um mig eins og ég ætti að gera
    ( ) kannski hriði ég ekki um mig eins og ég ætti að gera
    ( ) ég hriði jafn vel um mig og ódurr

11. Ég er orðleg(ur), eins og ég þurfi allt að vera að döfaste einithvað:
    ( ) mjögl mikid
    ( ) bó nokkuð mikid
    ( ) ekki svo mjögl
    ( ) alls ekki

12. Ég hlakka til þess sem frumundan er:
    ( ) eins mikid og óður
    ( ) einithvað minna en óður
    ( ) órugglega minna en óður
    ( ) eiginlega alls ekki

13. Ég fæ skynilega osaltraskulukost:
    ( ) mjögl oft
    ( ) nokkuð oft
    ( ) ekki mjögl oft
    ( ) alls ekki

14. Ég get notið góðrar bókar eða skemmtilegs efnis í útvarpi eða sjónvarpi:
    ( ) oft
    ( ) stundum
    ( ) ekki oft
    ( ) mjögl sjaldan
### Appendix IV - Depression Stigma Scale for depression and anxiety in Icelandic

*Spurningar 1 til 18 innihalda fullyrðingar um þunglyndi. Vinsamlegast tilgreindu hversu sterklega þú persónulega eða ósammála hvernig þú heldur hversu samþykkt um þunglyndi.*

<table>
<thead>
<tr>
<th>Spurningur</th>
<th>Mjög osammála</th>
<th>Frekar osammála</th>
<th>Hvorki samþykkt um þunglyndi</th>
<th>Frekar samþykkt</th>
<th>Mjög samþykkt</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fólk með þunglyndi gæti rifid sig upp úr því ef það vildi</td>
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<tr>
<td>2. Þunglyndi er merki um veikleika</td>
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<tr>
<td>3. Þunglyndi er ekki raunverulegur sjúkdómur</td>
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<tr>
<td>4. Fólk með þunglyndi er hættulegt</td>
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<tr>
<td>5. Það er best að forðast fólk með þunglyndi til að verða ekki sjálflægtur þunglyndur</td>
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<tr>
<td>6. Fólk með þunglyndi er óútreiknanlegt</td>
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<tr>
<td>7. Ef ég væri með þunglyndi þá myndi ég ekki segja nokkrum manni frá því</td>
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<tr>
<td>8. Ëg myndi ekki vilja hafa einhvern í minu liði sem Ëg vissi að hefði verið þunglyndur</td>
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<tr>
<td>9. Ëg myndi ekki vilja hafa þjálflara sem Ëg vissi að hefði verið þunglyndur</td>
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</tbody>
</table>

*Nú viljum við fá að vita hvernig þú holdur að viðhorf flestra annarra til þunglyndis sé. Vinsamlegast tilgreindu hversu samþykkt um þunglyndi eða ósammála þú eftirfarandi fullyrðingum*

<table>
<thead>
<tr>
<th>Spurningur</th>
<th>Mjög osammála</th>
<th>Frekar osammála</th>
<th>Hvorki samþykkt um þunglyndi</th>
<th>Frekar samþykkt</th>
<th>Mjög samþykkt</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. Flestir halda að fólk með þunglyndi gæti rifid sig upp úr því ef það vildi</td>
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<tr>
<td>11. Flestir halda að þunglyndi sé merki um veikleika</td>
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<tr>
<td>12. Flestir halda að þunglyndi sé ekki</td>
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<tr>
<td>Spurningar 1 til 18 innihalda fullyrðingar um kvíðaröskun. Vinsamlegast tilgreindu hversu sterklega þú persónulega ert sammála eða ósammála hverri fullyrðingu.</td>
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<tr>
<td><strong>Mjög osammála</strong></td>
<td><strong>Frekar osammála</strong></td>
<td><strong>Hvorki sammála nél í osammála</strong></td>
<td><strong>Frekar sammála</strong></td>
<td><strong>Mjög sammála</strong></td>
<td></td>
</tr>
<tr>
<td>1. Fólk með kvíðaröskun gæti losað sig við hana ef það vildi</td>
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<td>2. Kvíðaröskun er merki um veikleika</td>
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<tr>
<td>3. Kvíðaröskun er ekki raunverulegur sjúkdómur</td>
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<td>4. Fólk með kvíðaröskun getur verið hættulegt</td>
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<tr>
<td>5. Það er best að forðast fólk með kvíðaröskun til að verða ekki sjálf(ur) kvöðin(n)</td>
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<tr>
<td>6. Fólk með kvíðaröskun er óútreiknanlegt</td>
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<tr>
<td>7. Ef ég væri með kvíðaröskun myndi ég ekki segja nokkrum manni frá því</td>
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</tbody>
</table>
8. Ég myndi ekki vilja spila með einhverjum sem ég vissi að hefði kvíðaróskun

9. Ég myndi ekki vilja hafa þjálfara sem ég vissi að hefði kvíðaróskun

Nú viljum við fá að vita hvernig þú heldur að viðhorf flestra annarra til kvíðaróskunar sé. Vinsamlegast tilgreindu hversu sammála eða ósammála þú eftirfarandi fullyrðingum

<table>
<thead>
<tr>
<th></th>
<th>Mjög ósammála</th>
<th>Frekar ósammála</th>
<th>Hvorki sammála né ósammála</th>
<th>Frekar sammála</th>
<th>Mjög sammála</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. Flestir halda að fólk með kvíðaróskun gæti losað sig við hana ef það vildi</td>
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<tr>
<td>11. Flestir halda að kvíðaróskun sé merki um veikleika</td>
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<tr>
<td>12. Flestir halda að kvíðaróskun sé ekki raunverulegur sjúkdómur</td>
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<tr>
<td>13. Flestir halda að fólk með kvíðaróskun geti verið hættulegt</td>
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<tr>
<td>14. Flestir halda að það sé best að forðast fólk með kvíðaróskun til að verða ekki sjálf(ur) kvíðin(n)</td>
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<tr>
<td>15. Flestir halda að fólk með kvíðaróskun sé óútreiknanlegt</td>
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<tr>
<td>16. Flestir myndur ekki segja frá ef þeir væru með kvíðaróskun</td>
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<tr>
<td>17. Flestir myndu ekki vilja hafa einhvern sem þeir vissu að hefði kvíðaróskun í sínu liði</td>
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<tr>
<td>18. Flestir myndu ekki vilja hafa þjálfara sem þeir vissu að hefði kvíðaróskun</td>
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</tbody>
</table>

Þýðing: Hallur Hallsson og Ragnar P. Ólafsson