



**Mental Skills and Stress Reaction:  
Comparison Between Icelandic Elite and  
Non-Elite Athletes in 2016**

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Foreword

Submitted in partial fulfillment 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

Sport psychology is a growing field. The literature indicates that elite athletes have better mental skills, more self-confidence, are more committed and can manage stress in a more positive way than non-elite athletes. In this study athletes' mental skills were measured with the OMSAT questionnaire and athletes stress was measured with the PSS questionnaire. All athletes were a part of a young and promising athlete program with ISI in 2012. Present data and data from 2012 were used for statistical analysis. Athletes that answered the questionnaire were split into two groups; elite athletes and non-elite athletes depending on where they stand in their sport today. Participants were 21, 15 elite and seven non-elite athletes' and the age range was 18-24 years old. The questionnaire was administered via Facebook. Results indicate significant difference between the groups in one sub-category in the OMSAT questionnaire from 2012, which was refocusing. Difference in scores from the PSS questionnaire from 2012 were not significant. Even though there was little significant difference there was a difference in average score between elite and non-elite athletes, the reason for so little significant difference could be few participants and uneven groups which can indicate a power issue.

Keywords: OMSAT, PSS, mental skills, stress, elite athletes, non-elite athletes

### Útdráttur

Íþróttasálfærði er vaxandi fræðigreinin. Fyrri rannsóknir sýna að afreks íþróttamenn hafa betri vitræna færni, betra sjálfstraust, meiri skuldbindingu og takast á við stress á jákvæðari hátt heldur en þeir íþróttamenn sem ekki stunda íþrótt sína á afreks stigi. Í þessar rannsókn voru sálrænar þættir íþróttamanna mældir með OMSAT spurningalistaum og streita íþróttamanna mæld með PSS spurningalistaum. Allir íþróttamenn voru í hópi ungra og efnilegra íþróttamanna hjá ÍSÍ árið 2012. Núverandi gögn sem og gögn frá árinu 2012 voru notuð við tölfræðilega úrvinnslu. Einstaklingum sem svöruðu var skipt upp í tvo hópa, með tilliti til hver staða þeirra í íþróttinni var árið 2016. Alls voru 21 einstaklingur sem svöruðu og af þeim voru 15 afreks íþróttamenn og sjö sem voru ekki afreks íþróttamenn og var aldur þátttakenda á bilinu 18-24 ára. Spurningalisti var sendur til þátttakenda í gegnum Facebook. Einungis var marktækur munur í einum undirþætti OMSAT listans frá árinu 2012 það var athyglisstjórnun þar sem íþróttamenn sem ekki voru í afreks hópi skoruðu hærra en afrekshópurinn. Ekki komu marktækar niðurstöður úr PSS spurningalistaum frá árinu 2012. Munur var þó á meðaltölum hópana í flestum þáttum beggja lista en ástæða þess að marktækur munur kom ekki fram í fleiri þáttum gæti verið fáir þátttakendur og ójafnir hópar sem getur valdið styrkleika vandamáli.

Lykilhugtök: OMSAT, PSS, hugræn færni, streita, afrek íþróttamenn, ekki afreks íþróttamenn

Mental Skills and Stress Reaction: Comparison Between Icelandic Elite and Non-Elite athletes in 2016

In sports, psychological factors such as stress, anxiety, imagery, commitment, goal setting, focus and self-confidence are just as important if not more important than physical factors. In this thesis, stress, anxiety, self-confidence and commitment will be discussed. When athletes compete, they do not compete with an empty mind, so it is essential for an athlete to know how to control their anxiety and nerves (Weinberg & Gould, 2011). Sports psychology aims to study how athletes behave under varying circumstances as well as apply knowledge in order to assist athletes in achieving peak performance (Horn, 2008). *Individual Zones of Optimal Zone* theory suggests that each athlete has his own comfort zone for anxiety and if the anxiety experienced falls within that zone their best performance occurs, but if it falls outside that zone they perform poorly (Weinberg & Gould, 2011). Strategies for coping with pre-competitive state anxiety's internal and external factors play a crucial role in achieving athlete's peak performance (Gould, Eklund, & Jackson, 1992; Gould, Finch, & Jackson, 1993; Harmison, 2011). In sports, stress and anxiety can have both negative and positive effects on an athlete's performance depending on how they perceive the stressor. For example, two equally skilled players in the same stressful situation will perform differently based on factors such as trait anxiety. The player with higher trait anxiety would become more anxious than the other player and may therefore perform worse than the other. However, when athletes find their optimal zone for stress it will most likely have good affect on performance (Weinberg & Gould, 2011). Salimen, Liukkonen, Haniu and Hyvönen (1995) measured anxiety in 80 Finnish athletes, 35 female and 45 male at the age 12 to 33 competing in four different sports. Two weeks, one week and one hour prior to a competition all participants took State Anxiety Inventory. Results indicate anxiety levels two and one week prior to the competition were highly correlated with the anxiety level one hour before the

competition started. Furthermore, when athletes that were preparing to compete in an important competition were compared, the results showed that individuals who were inside the optimal zone did significantly better than those who were outside the optimal individual zone.

Research shows that psychological factors differ in elite athletes compared to non-elite athletes. A study conducted in 2001 by Duran – Bush, Salmel and Green-Demeres showed that the results from the *Ottawa Mental Skills Assessment Tool – 3 (OMSAT)* discriminates significantly between elite and non-elite athletes where elite athletes had better mental skills than non-elite did. It was also found that most athletes rate self-confidence, commitment and goal setting as the three most important skills to achieve good performance. When the stress factor was looked at it showed that elite athletes handled stress in significantly more positive ways than non-elite athletes did (Duran-Bush, et al., 2001). When competitive state is looked at, elite athletes have a more positive perception of their feelings towards the competition because they tend to have higher positive expectations for the future than non-elite athletes. Non-elite athletes tend to expect the worst so they look at the future in a more negative way and therefore become more nervous prior to and during competition (Soltani et al., 2012)

Individuals such as coaches, parents and significant others should understand the importance of confidence as a key factor to success and help build the confidence in athletes. Self-confidence is one of the key factors that differentiates successful athletes from less successful ones (Subramanyam, 2013). Study done by Wolframm and Micklewright (2008) on 15 elite and 25 non-elite athletes showed that elite athletes had higher self confidence and lower somatic arousal prior to competition compared to non-elite.

Around adolescence the athlete will have to make a decision about the level of his commitment to develop their talent (Patrick et al., 1999). Halldorsson, Helgason and

Thorlindsson (2012) completed a study in Iceland of 50 elite athletes and compared them to a control group of 64 non-elite athletes. The goal was to determine if the non-elite athletes differed from elite athletes on socio psychological measures such as commitment and motivation related to success. Results showed that both groups have similar attitudes toward what is important to succeed in their sport. The only difference between the two groups was; that elite athletes rated commitment much higher in importance. All athletes agreed that socio psychological factors were more important than physical factors. In the same study, elite athletes scored higher than non-elite athletes on all commitment items. Those results indicate that elite athletes are more committed to their sport than non-elite. Results from the *Motive to Achieve Success Scale* (MASS) showed that elite athletes have a stronger desire to do well in their sport and second level athletes seemed to have more fun (Halldorsson et al., 2012). The questionnaire also showed that the elite athlete group is more motivated than the control group. The results of the socio-psychological variables suggest that the level of commitment is one of the most important of the variables for athletes to achieve success in their sport (Halldorsson et al., 2012).

Over the years youth sport culture has adopted harder training regiments, early specialization programs, and better oriented planning. This has put further demand on young athletes and their ability to cope with socio-psychological factors that come with higher expectations (Baker, 2003). The athletes' need to balance their sport career with other necessities such as school and work, puts pressure on them physically, psychologically and socially (Augustini & Trabal, 1999; Carvelló, Escartí, & Guzmán, 2007). For some young athletes these demands become too much and many promising boys and girls drop out (Horn, 2008). Orlick and Partington (1988) did a study on Canadian athletes that went to the 1984 Olympic games. Results show that athletes who have an

Olympic or World Championships medal are very committed individuals and have a total commitment to their sport and to pursuing excellence.

Dr. Enoksen did a long term study among promising Norwegian track and field athletes. The aim of this study was to measure the dropout rate of young athletes and evaluate the main reason for dropping out. All participants were potential elite athletes that all attended training programs that focused on developing athletes that were to perform on a national level. The participants were 202 male athletes and 98 female athletes ranging from 14 to 18 years-of-age. All participants answered questionnaires in 1975, 1983 and in 1989 and interviews took place in 1989 and 2000. Results indicate the most common age for athletes to drop out was around 17 years old, with females being more likely to drop out than males. Over the years the demands in track and field has grown to include more workouts, early specialization, careful planning, and the ability to handle more difficult competition. It can be concluded that athletes that fail to meet such demands might choose to dropout early. The most common reasons for dropping out as reported by athletes were lack of motivation, injury, and school demands. Other reasons included social factors, involvement in other sports, military service and family obligations (Enoksen, 2011)

The main aim for this study was to see if psychological factors could predict that young promising athletes become elite athletes. Based on the above literature three hypothesis were put forward 1) Overall mental skills predict that athletes who scored higher in overall mental skills in 2012 will be more likely to become elite athletes in 2016. 2) Elite athletes had better stress control, self-confidence and more commitment than non-elite did in 2012. 3) Elite athletes perceived stress better than non-elite did in 2012.

**Method**

**Participants**

The questionnaire was sent to 31 individuals that were all on a sponsorship for young and promising athletes at the national Olympic and sports association of Iceland (ISI) in the year 2012. The participants' age ranged from 18 to 27 and the average age was 21.7 years. Eight male participants and thirteen female completed the study.

Table 1.

*Descriptive statistic table of the study participants.*

	N	%	M	Range
<b>Gender</b>				
Male	8	38.0		
Female	13	61.9		
<b>Age</b>				
Male	8		22.12	21-22
Female	13		22.16	18-24
<b>Sport</b>				
Swimming	6	26.6		
Fencing	2	9.5		
Golf	2	9.5		
Skiing	3	14.3		
Badminton	1	4.8		
Track and field	2	9.5		
Power lifting	1	4.8		
Skating	2	9.5		
Gymnastics	2	9.5		
<b>Work/Job</b>				
Student	19	90.5		
Professional athlete	1	4.8		
Public job market	1	4.8		

**Measurements and Tests**

*The Ottawa Mental Skills Assessment Tool-3 (OMSAT)* (Durand-Bush et al., 2001)

(Appendix B) is a self-assessment scale for athletes and consists of 48 questions that are meant to measure mental skills. The Icelandic version of the scale, translated by Haukur Ingi Guðnason, was used in this research. OMSAT questionnaire is purposefully made for athletes and is split into three sections containing 12 subcategories that are criteria for mental skills.



First section is foundation skills and the subcategories are three: self-confidence, goal setting and commitment. Second section is psychosomatic skills, which combines four subcategories: stress reaction, relaxation, activation and fear control. The last section is mental skills and has five subcategories: mental practice, imagery, focusing, refocusing and competition planning. Responses are measured on a seven point Likert-scale, one being “strongly disagreed” and seven being “strongly agree” with the highest total score possible being 336. It has been shown that the OMSAT questionnaire can be in good use for coaches that have a big group of athletes and need help to meet the expectations from each person (Taylor & Wilson, 2005). It is possible to calculate a group’s scores from the OMSAT list and also individual scores. The results from the list can be used to work with mental skills, it can also be used to improve some psychological factors and the athlete would in this case take the questionnaire more than once with particular space between (Taylor & Wilson, 2005). Internal consistency of the English version of the OMSAT questioner ranges from  $\alpha = 0.68$  to  $\alpha = 0.88$  with mean value of  $\alpha = 0.78$ ; imagery being highest and fear control the lowest (Durand-Bush et al., 2001).

*Perceived Stress Scale (PSS)* (Cohen, Kamarck, & Mermelstein, 1983) (Appendix B) is a self-assessment questionnaire where participants are asked to evaluate their emotional reactions to stressful situations. In this research the Icelandic version translated by Daníel Þór Ólason was used. The original scale has 14 questions but in this research only four were used. The responses were on a five point Likert-scale, ranging from *never* to *very often*. Cronbach’s alpha reliability test was run to see the reliability for this four question Icelandic version and turned out to be high;  $\alpha = 0.78$ . Research on reliability and validity done in Brazil on the PSS questionnaire the English showed that Cronbach’s alpha reliability was strong  $\alpha = 0.87$  (Reis, Hino, & Añez, 2010).

*Background questions* were 15 and asked about athletes' background and their current standing in their sport (Appendix B). Three of the background questions asked about participants experience in sport psychology and six inquired where they stand today in their sport. Rest of the background questions were in regards to gender, sleep, sport and work status.

### **Research design**

The study was quantitative and in the form of a questionnaire. Independent variable was if athletes were elite or non-elite athletes in their sport in the year 2016. The study included two dependent variables; mental skills measured with results from the OMSAT questionnaire and stress as measured with the PSS questionnaire.

### **Procedure**

The questionnaire was sent out to participants via Facebook on March 3<sup>rd</sup> 2016, and a follow-up reminder was sent a week later on March 11<sup>th</sup> and again March 18<sup>th</sup>. It was explained to participants that this was a follow-up to the original study they were a part of in 2012 (Appendix A). It was not mandatory for participants to answer the questionnaire, but they were told that their participation was very important. Participants were asked for their name to compare each individual's result from 2012 to current day.

### **Analysis**

For statistical analysis the computer program SPSS was used. Data from 2012 and 2016 was used to analyze the results. Descriptive statistic was done to see gender, age, sport and work status for all athletes from the 2016 data. Descriptive statistics was also used to see the main drop out reason for participants in 2016. Independent samples t-test was used to see the difference between elite and non-elite athletes scores on all factors of the OMSAT questionnaire in the year 2012. Independent samples t-test was also used to see the difference between elite and non-elite athletes on the PSS questionnaire for that total score of the PSS

questions in 2012 was used. Cronbach’s alpha was calculated for the Icelandic version of the 2012 PSS questionnaire.

**Results**

Descriptive statistic was done on those who had dropped out of their sport to see the main reason for drop out. Table 2 shows athletes who dropped out from their sport since 2012. Only five athletes out of 21 had dropped out from their sport. Two out of five claimed the reason for their drop out was injuries.

Table 2

*Descriptive statistic of reason for drop out in the past four years among participants*

Reasons	N	%
Lost Interest	1	20
Injury	2	40
Cost	1	20
Other	1	20

Independent samples t-test was run to see if there was a difference between scores in all categories and the total score of the OMSAT questionnaire in 2012 for athletes that were elite versus those who were non-elite athletes in 2016. Table 3 shows number of participants, mean, standard deviation, t-score and p-value for each factor. Non-elite athletes average total test score ( $M = 249.60, SD = 37.04$ ) was higher than elite athletes total test score ( $M = 248.61, SD = 30.44$ ) however the difference was not significant  $t(16) = -0.058; p = 0.954$ . Although, non-elite athletes scored on average ( $M = 21.33, SD = 3.20$ ) higher than elite athletes ( $M = 19.57, SD = 4.59$ ) on measures of stress reaction, the difference between the groups was not significant  $t(18) = -0.85; p = 0.41$ . Marginally significant difference was found in self-confidence between elite and non-elite athletes  $t(18) = 2.05; p = 0.055$  which

indicates that elite athletes have higher self-confidence than non-elite athletes. There was a quite a lot of difference in average scores for commitment were elite athletes scored on average ( $M = 26.64, SD = 2.41$ ) and non-elite athletes scored ( $M = 18.33, SD = 8.02$ ) on measures of commitment. However, the difference between the groups did not reach significance  $t(5.39) = 1.89; p = 0.11$ .

Table 3

*Difference between elite and non-elite athletes in all categories for OMSAT questionnaire in 2012*

	Elite			Non-elite			T	Sig
	n	M	SD	n	M	SD		
Psychosomatic	13	78.69	13.16	5	80.50	8.02	-0.31	0.76
Stress reaction	14	19.57	4.59	6	21.33	3.20	-0.85	0.41
Relaxation	14	19.57	4.52	6	18.50	4.46	0.49	0.63
Activation	13	20.23	2.65	6	18.50	4.32	1.08	0.29
Fear control	14	20.21	5.34	6	22.17	2.14	-0.86	0.40
Foundation skills	14	69.43	5.92	6	61.83	14.61	1.74	0.09
Self confidence	14	22.79	2.49	6	20.50	1.64	2.05	0.06
Goal setting	14	22.21	3.36	6	23.00	2.37	-0.38	0.70
Commitment	14	26.64	2.41	6	18.33	8.02	1.89	0.11
Mental skills	14	98.93	15.49	6	109.40	15.08	-1.31	0.21
Mental practice	14	17.79	5.21	6	21.20	5.54	-1.24	0.23
Imagery	14	20.64	3.20	6	20.17	8.13	0.19	0.85
Focusing	14	20.93	3.99	6	23.67	1.63	-1.60	0.12
Refocusing	14	17.71	4.60	6	23.17	2.93	-2.66	0.02*
Competition planning	14	21.86	3.78	6	23.67	3.83	-0.98	0.34
Total score	13	248.61	30.44	5	249.60	37.04	-0.06	0.98

\*P < 0.05

The only category that showed significant difference between groups was in refocusing where non-elite athletes scored significantly higher than elite athletes did;  $t(18) = 2.66; p =$

0.02 indicating that non-elite athletes have more control over their focusing than elite athletes do.

Independent samples t-test was run to see if there were a significant difference between scores on the PSS questionnaire in 2012 for athletes that were elite versus those who were non-elite athletes in 2016. Results show that non-elite athletes score on average ( $M = 6.14$ ,  $SD = 3.72$ ) higher than elite athletes did ( $M = 4.71$ ,  $SD = 2.58$ ), however the difference was not significant  $t(19) = -1.03$ ;  $p = 0.32$ .

### Discussion

The main purpose of this study was to look at mental skills for young athletes, who were considered promising in their field in the year 2012 and how they stand currently in terms of mental skills and how they perceive stress. Participants were split into two groups; elite athletes and non-elite athletes, based on their position in their sport today. To see the difference in mental skills results from the OMSAT questionnaire since 2012 were used. Results from the OMSAT questionnaire did not support the first hypothesis and unexpectedly non-elite athletes scored on average higher in total score. Also non-elite scored higher than elite athletes on more categories in the questionnaire. Those results are in contrast with what was expected by researcher and previous literature. A study conducted in 2001 by Duran – Bush et al., showed that the results from the OMSAT questionnaire discriminates significantly between elite and non-elite athletes where elite athletes had better mental skills than non-elite did.

To answer hypothesis two, three sub-categories in the OMSAT questionnaire were looked at, self-confidence, commitment and stress reaction. The difference in self-confidence between groups was marginally significant  $p = 0.06$  where elite athletes scored higher than non-elite did. These results indicate the importance of self-confidence in athletes' success. According to Subramanyam (2003) self-confidence is one of the key factors that differentiate

successful athletes from less successful ones. Wolframm and Micklewright (2008) found that elite athlete had higher self-confidence and lower somatic arousal prior to a competition than non-elite athletes did. Commitment category was also specially evaluated and those results showed that on average elite athletes scored around eight points higher on commitment but the difference however was not significant difference so it cannot be predicted that elite athletes have stronger commitment than non-elite athletes have to their sport. Those results do in some way support findings by Halldorsson et al. (2012). Results from that study showed that elite athletes rate commitment a lot higher as a factor that is important to succeed in sport and on a CRS questionnaire the elite athletes scored higher than non-elite athletes on all commitment items. Stress reaction factor in the OMSAT questionnaire was also looked at and results showed that non-elite athletes scored on average higher than elite athletes did, which is the opposite of what was expected. Durand – Bush, et al. (2001) found significant difference between elite athletes and non-elite athletes and how they handled stress. Elite athletes handled stress in a more positive way then non-elite athletes did. Results from all three sub-categories reject the second hypothesis that elite athletes had better stress control, self-confidence and more commitment than non-elite athletes did in 2012.

Results from the PSS show that on average elite athletes score lower than non-elite athletes did in 2012. The difference between the groups however was not significant and therefore hypothesis three was rejected. The average score indicates that elite athletes perceive stress more positively than non-elite do which supports research by Soltani et al. (2012). The result from that research showed that elite athletes have a more positive perception of their feelings towards a competition because they had higher positive expectations to the future than non-elite athletes did. Non-elite athletes tend to expect the worst so they look at the future in a more negative way and therefor become more nervous before and during competition. The reason for no significant difference in present study could

be due to small number of participants and unequal groups, which compromises the power of the study.

The study also looked at reason for athletes drop out and athletic injuries were most common reason for drop out or in two out of five cases. Another reason given for drop out, was due to loss of interest and financial cost of the sport. One athlete did not identify his reason for drop out. This coincides with previous research done by Dr. Enoksen in (2011) on promising Norwegian track and field athletes. He found that the most common reasons for dropping out as reported by athletes were; lack of motivation, injury, and school demands. Other reasons included social factors, involvement in other sports, military service and family obligations.

The study had some limitations the most important one is that the sample was small. Therefore, there is a need to be careful in any interpretation of results and any generalizations. Small sample causes every answer for each individual to count a lot so it is hard to generalize to the overall population from the results. Also, small sample can prevent difference between groups to show. It can also be pointed out that the non-elite group was a lot smaller than the elite group was and that could have affected the results. Even if the sample was small, answers were resaved from almost everybody that was young and promising athletes with ISI in 2012 so larger sample from more years would be better. Even though results from the study did not show a lot significant difference between groups there was a clear difference in average scores of the groups. The strength of the present study is that previous data was available for comparison to present data, and questionnaire was administered online so there is no bias on participants from researcher. It might be have been good to have longer than four years between studies to assess if the athletes are actually elite athletes or on their way to becoming one.

In conclusion it was found that on average, elite athletes score higher in mental skills in some categories, for example on measures of commitment and self-confidence.

However, in future research it would be necessary to have larger sample and especially more even groups when comparing elite to non-elite athletes.

It would be interesting to look at the same groups of young and promising athletes in four years and see what athletes have qualified for the Olympics, who are still in the sport for fun and who have dropped out. And it would also be interesting to compare this group to athletes that are young and promising athletes after four years.

It would be interesting to use the OMSAT and PSS questionnaires in group sports to see if the teams that are Icelandic champions in their sport score higher on the OMSAT questionnaire than other teams. Also it would be interesting to compare individuals on the national teams, to individuals who are not in the national teams, to see if those who compete with the national team have better mental skills and handle stress better than those who don't compete with the national team.

Finally it would be interesting to do a follow up on some individuals or a team, where they take the OMSAT questionnaire at baseline and then work towards improving their mental skills with a professional and then obtain another measure of the OMSAT after few months, to assess for difference and to see if working with those factors can help athletes grow to become better athletes.



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## Appendix A

### Constant form

Sæl/Sæll

Fyrir fjórum árum þegar þú varst styrkþegi á vegum Ungra og efnilegra hjá ÍSÍ tókst þú þátt í rannsókn á vegum Rósu Bjarkar Sigurgeirsdóttur og Hafrúnar Kristjánsdóttur. Nú er ég, Ásgerður Ragnarsdóttir, að gera BSc rannsókn í sálfræði við Háskólann í Reykjavík. Hafrún Kristjánsdóttir er leiðbeinandinn minn. Í rannsókninni sem þú tókst þátt í fyrir fjórum árum var hugræn færni í íþróttum könnuð (sem er færni í markmiðasetningu, einbeitingarhæfni o.s.frv.), streita, svefn og fleiri þættir. Sú rannsókn sem er að fara í gang núna snýst um að skoða hvort að hugræn færni hjá ungum og efnilegum íþróttamönnum spái fyrir um árangur og brotfall fjórum árum síðar.

Ég væri afskaplega þakklát ef þú myndir gefa þér tíma til þess að taka þátt í þessari könnun. Það tekur þig u.þ.b. 15-20 mín. að svara öllum spurningalistum. Þátttaka þín hefur mikið að segja. Það sem verður spurt um er eftirfarandi: Nafn, bakgrunnsspurningar, spurningar um stöðu núna í þinni íþrótt, OMSAT spurningalistinn um hugræna færni í íþróttum verður lagður fyrir sem og PSS streitukvarðinn og spurningar um ánægju með þinn íþróttuferil. Nauðsynlegt er að spyrja um nafn svo við getum borið niðurstöðunar sama við svör þín fyrir fjórum árum. Einungis Hafrún og ég höfum aðgang að gögnunum og engir aðrir hafa aðgang af þeim nema þú óskir þess sérstaklega. Ef þú óskar þess getur þú fengið skýrslu senda til þín með niðurstöðum þínum.

Með fyrirfram þökk fyrir þátttökuna

## Appendix B

### Questionnaires

#### Bakgrunnsspurningar

1. Nafn:

2. Kyn

- Karl
- Kona

3. Starf

- Námsmaður
- Atvinnumaður í íþróttum
- Starfa á hinum almenna vinnumarkaði
- Aannað

4. Hversu góður er svefn þinn

- Mjög slæmur
- Nokkuð slæmur
- Hvorki né
- Nokkuð góður
- Mjög góður

7. Hefur þú leiðta til sálfræðings til þess að auka frammistöðu í þinni íþróttagrein

- Já
- Nei

8. Ef já, hversu hjálplegt var að vinna með sálfræðing

- Á ekki við
- Alls ekki hjálplegt
- Ekki mjög hjálplegt
- Hvorki né
- Svolítið hjálplegt
- Mjög hjálplegt

9. Hversu miklu máli telur þú að sálfræðilegir þættir skipti í þinni íþróttagrein

- Alls engu
- Litlu
- Hvorki né
- Svolitlu
- Miklu

10. Stundar þú enn sömu íþrótt og þú stundaðir árið 22012

- Já, stunda hana á afreksstigi
- Já, en stunda hana ekki á afreksstigi
- Nei, en ég stunda aðra íþrótt
- Nei, ég er hætt(ur) að stunda íþróttir

11. Ef þú ert hættur í þeirri íþrótt sem þú stundaðir árið 2012 hver var aðalástæðan þess að þú hættir (vinsamlegast merktu við það sem var aðalástæðan þess að þú hættir)

- Ég missti áhugann á íþróttinni
- Meiðsli
- Kostnaður
- Fjölskylduhagir
- Búseta
- Nám
- Annað:

12. Ef þú stundar ennþá íþrótt sem þú stundaðir árið 2012 hvað af eftirfarandi lýsir stöðu þinni innan þinnar íþróttgreinar? (má merkja við fleiri en einn valmöguleika)

- Ég keppi á alþjóðlegum stórmótum ( EM, HM og sambærilegum mótum)
- Ég er í top fimm í minni íþróttgrein á landinu
- Ég er í top fimmtán í minni íþróttgrein á landinu
- Ég er í meðallagi góðu í minni íþróttgrein hérlendis
- Ég er ekki afreksmaður/kona í minni íþróttgrein

**Hversu sammála eða ósammála ertu eftirfarandi fullyrðingum**

	Mjög sammála	Sammála	Hvorki ósammála né sammála	Ósammála	Mjög ósammála
"Ég hef náð að vinna vel úr íþróttatengdum hæfileikum mínum"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
"Ég er að færast nær þeim markmiðum sem ég hef sett mér í tengslum við íþrótt mína"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
"Á heildina litið er ég ánægð (ur) með þann árangur sem ég hef náð á síðastliðnum fjórum árum"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>





45. Eg þjálfá mig hugrænt fyrir þýðingarmiklar aðstæður í mínum leikjum.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
46. Ef ég er illa upplagður fyrir keppni get ég samt auðveldlega komið mér í gang.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
47. Á meðan keppni stendur hef ég áætlun sem inniheldur ákveðin stikkorð sem ég segi við sjálfan mig.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
48. Ég er fullur sjálfstrausts hvað varðar flesta þætti í frammistöðu minnar.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**PSS (Stytt útgáfa) - Streitukvarði (Perceived Stress Scale, Cohen, Karmarck og Mermestein, 1983). Þýðing: Daniel Þór Ólason**

Eftirfarandi spurningar fjalla almennt um hugsanir þínar og tilfinningar þínar. Vinsamlegast merktu við það svara sem best lýsir tilfinningum þínum og hugsunum síðastiðin mánuð

	Aldrei	Næstum Aldrei	Stundum	Nokkuð oft	Mjög oft
Hversu oft undanfarin mánuð fannst þér að þú værir að missa stjórn á mikilvægum hlutum í lífi þínu?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hversu oft á undanförmum mánuði varstu þú örugg(ur) með þær ákvarðanir sem þú þurftir að taka til að leysa úr persónulegum vandamálum?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hversu oft sl. mánuð fann þér að hlutirnir gengur þér í hag?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hversu oft á undanförmum mánuði hefur þú upplifað að vandamálin hrönnuðust upp án þess að þú réðir við þau?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>