BSc in Psychology

PTSD Symptoms Amongst Icelandic Police Officers: The Effect of Social Support and Resilience

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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
This study was conducted to examine PTSD rates among Icelandic police officers. All police officers in Iceland were offered to participate through an online questionnaire. The final sample consisted of 93 participants, and the response rate was about 15% of participants within the population. There were 76 male participants and 17 female participants. The aim of the study was threefold. First, to examine PTSD symptoms among Icelandic police officers. Results showed that 15% of participants met diagnosis criteria for having PTSD symptoms. Secondly, to examine the protective role of social support and resilience in PTSD among Icelandic police officers. According to the results, there was a significant negative correlation between social support and PTSD symptoms and between resilience and PTSD. Results also showed that those above the median on social support reported fewer PTSD symptoms and those above the median on resilience reported fewer PTSD symptoms. The third purpose of the study was to examine the combined effects of social support and resilience on PTSD. The results showed that the interaction effect between social support and resilience on PTSD symptoms was not significant.

Keywords: police officers, first responders, PTSD, post-traumatic stress disorder, social support, resilience

Útdráttur
PTSD Symptoms Amongst Icelandic Police Officers: The Effect of Social Support and Resilience

Some occupations involve higher exposure to stress compared to others (Russell, 2014). First responders, such as police officers, have high levels of work demands and are frequently exposed to physical and psychological stressors (Flannery, 2015; Haugen et al., 2012). Police officers are likely to come up against various traumatic incidents in their working field, such as motor vehicle accidents, physical assault, serious injuries and even death. This frequent exposure to stress and trauma can have a negative effect on mental health, even resulting in post-traumatic stress disorder (Najar, Dar, Bhat & Saini, 2013; Cook & Cook, 2008).

Post-traumatic stress disorder, or PTSD, is a kind of anxiety that some people develop after experiencing a traumatic event (American Psychological Association, 2013). Most individuals that have experienced traumatic events have reactions including shock, anger, nervousness, fear or even guilt, all being common reactions that fade away as time passes. However, for individuals that suffer from PTSD, these feelings continue or increase, even leading to an impairment where the person cannot function as before or live a normal life (American Psychological Association, 2013). Prevalence rates for PTSD in the community vary, being about 2-4% in the general population (Davidson, Tharwani & Connor, 2002) and it has been estimated that about 3.6% of US adults aged 18 to 59 have PTSD during the course of a given year (Kessler et al., 2005).

There have been several studies on PTSD amongst police officers, most being correlational (Najar, Dar, Bhat & Saini, 2013; Cook & Cook, 2008; Violanti et al., 2006; Robinson, Sigman & Wilson, 1997; Skogstad et al., 2003). The results vary, but available studies present the range of PTSD amongst active duty police officers to be...
about 7-19%, or even up to 36% according to some studies (Carlier, Lamberts & Gersons, 1997; Maia et al., 2007; Haugen et al., 2012; Violanti et al., 2006). The rates of PTSD among police officers are therefore likely to be two to six times higher than in the general population (Violanti et al., 2006; Berger et al., 2012; Neria, 2011; Haugen et al., 2012). One of the limitations with the studies mentioned above, is that it is difficult to evaluate why rates of PTSD differs between studies. Different investigators use different instruments to assess PTSD, and while some use the same instruments; different cut-off scores are used to classify individuals as having PTSD. Some studies do not even specify what cut-off score was used (Steel et al., 2011; Robinson et al., 1997; Skogstad et al., 2003; Del Ben, Scotti, Chen & Fortson 2006; Weiss & Marmar, 1997).

For example, a sample of 100 police officers in the US was used to measure stress, disease and mental dysfunction, using the Impact of Events Scale (Violanti et al., 2006). Results found that 36% of the police officers reported having moderate to high PTSD symptoms, but not necessarily meeting diagnostic criteria for current PTSD (Violanti et al., 2006). These results indicate a higher prevalence of PTSD compared to other studies. Another study, from Robinson and colleges (1997), assessed duty related stress amongst 100 police officers in the UK. PTSD symptoms were measured using a newer version of IES, the Impact of Events Scale-Revised. According to the results, the prevalence rate of PTSD amongst suburban police officers in the UK was 13% (Robinson et al., 1997). However, no information was provided about what cut-off criterion was used to classify individuals as having or not having PTSD, and the PTSD prevalence rates from the two studies are largely different.
Although PTSD is higher amongst police officers than in the general population only a small part of the police officers that experience trauma, develop PTSD in the aftermath. Several researchers have thus focused on identifying modifiable predictors or protective factors of PTSD, which can be used in developing interventions aimed at preventing PTSD from developing (Schütte, Bär, Weiss & Heuft, 2012). Studies show that two of the most important modifiable protective factors relating to PTSD are social support and resilience (Ozer et al., 2003; Del Ben et al., 2006; Brooks et al., 2016; Wild et al., 2016; Skogstad et al., 2003).

Social support has been shown to be a strong modifiable protective factor for PTSD, as it can reduce PTSD symptoms and prevent symptoms from developing (Ozer et al., 2003; Wild et al., 2016; Charuvastra & Cloitre, 2008). Brewin and colleges (2000) conducted a meta-analysis of studies regarding PTSD. The results found that social support was the strongest predictor of PTSD. Similar results have been observed from studies on PTSD amongst police officers (Stephens & Long, 1997; Stephens & Long, 1998). A study conducted amongst 27 police officers in New Zealand found that lower social support from peers, supervisors and outside work was related to higher PTSD scores (Stephens & Long, 1997). A year later, a larger study was conducted amongst 527 police officers in New Zealand (Stephens & Long, 1998). The results were similar, indicating that various forms of social support, e.g. from friends and co-workers, was associated with lower levels of PTSD symptoms (Stephens & Long, 1998). It seems to be important to obtain positive social relations, and that the behavior of others can regulate emotions and soothe fear following a traumatic incident (Charuvastra & Cloitre, 2008). Positive social support can also provide feelings of safety and lower feelings of anxiety and mistrust (Charuvastra & Cloitre, 2008).
Another modifiable protective factor is resilience. Resilience can be defined as the ability to adapt successfully, for example in the face of critical events such as a trauma (Horn, Charney & Feder, 2016). Researches show that personal differences in resilience can explain some of the variance in PTSD symptoms following a critical event (Horn et al., 2016; Skogstad et al., 2003; Agaibi & Wilson, 2005). A recent study including 112 male police officers in South Korea evaluated PTSD and self-resilience, using the Connor-Davidson Resilience Scale (CD-RISC) (Lee et al., 2016). The results showed that police officers with low self-resilience reported significantly higher rates of PTSD symptoms compared to those with high self-resilience, after correcting for general, occupational and psychological characteristics. These results indicate that high self-resilience may protect police officers from developing PTSD symptoms (Lee et al., 2016).

The above review shows that PTSD symptoms are higher amongst police officers than amongst the general population and that lack of social support and low levels of resilience are associated with higher levels of PTSD symptoms. One of the limitations of the above studies is that the majority of the studies that focused on PTSD used the Impact of Events Scale-Revised. The IES-R instrument is not developed to assess PTSD and therefore is not a diagnostic tool for PTSD. Another limitation is that none of the above studies measured both resilience and social support. Therefore it is not known how these two protective factors affect PTSD together. For example, it could be that those who have high levels of both social support and resilience report lower levels of PTSD symptoms than those that have high levels of one and not the other. To address these limitations, the present study assessed both social support and resilience. Furthermore, PTSD symptomatology was assessed with PCL-5 amongst Icelandic police. The PCL-5 is a self-report
measurement for PTSD according to the newest version of DSM, and is useful for identifying provisional PTSD diagnostic status (Sveen, Bondjers & Willebrand, 2016; Armour et al., 2015; Keane et al., 2014; Wortmann, 2016). Only anxiety, depression and social support have been examined amongst Icelandic police officers (Ríkislögreglustjórinn, 2008; Ríkislögreglustjórinn, 2011), but PTSD symptoms have yet to be examined.

The aims of the present study were threefold. First, to examine levels of PTSD symptoms amongst Icelandic police officers, as no to-date study has examined PTSD symptoms amongst Icelandic police officers. Secondly, to examine the protective role of social support and resilience in PTSD. We hypothesize that social support and resilience will be associated with lower levels of PTSD symptoms amongst Icelandic police officers. Lastly, to examine the combined effects of social support and resilience on PTSD symptoms. As this has not been examined before, no specific hypotheses were proposed.

Method

Participants

All police officers in Iceland were offered to participate in the study. The final sample consisted of 93 participants, and the response rate was about 15% of participants within the population. There were significantly more male participants (n = 76) than female participants (n = 17). Participants ranged in age, as 7 participants were 20-29 years old, 22 were 30-39 years old and 36 participants were 40-49 years old. There were 20 participants aged 50-59 years old and 7 aged 60 years of age or older. One individual chose not to state their age.

In this study, 5 participants were students of the police academy and 21 were operating as general law enforcement officers. Furthermore, 54 participants operated
as sergeants, detectives or chief inspectors and 5 participants served as chief constables or detective superintendents. There was one participant operating as a district police officer, and 7 participants that chose not to identify their position within the police.

In total, 32 participants had finished college, 15 had finished an undergraduate degree, such as B.A., B.Sc. or B.Ed., and 5 participants had finished a master’s degree. Most participants, or 41 in total, had finished another type of education post elementary school.

Participants in the study reported how long they had served as police officers. In total, 10 participants had worked 4 years or less and 12 participants had worked 5-9 years. There were 20 participants that had worked in the police force for 10-14 years, and 15 that had worked for 15-19 years. Most participants, or 35 in total, had worked for 20 years or longer, but only one participant chose not to report their period of employment. All participants of the study were volunteers.

**Measures**

A detailed questionnaire was sent to all Icelandic police officers via email. In total, the instrument included 114 questions. The questionnaire included demographic questions, for example regarding gender, age, length of duty and educational level (Appendix B). In addition, participants were for example asked about their post-traumatic stress symptoms, perceived social support and resilience. All questionnaires were administered in Icelandic translation.

*PTSD symptoms* were measured using an Icelandic version of the Posttraumatic Stress Disorder Checklist for DSM-5 (PCL-5) (Appendix C). The PCL-5 self-report measures PTSD according to DSM-5 symptoms. The instrument consists of 20 items on a 5-point Likert scale. The items refer to experiences in the past month
in connection to a specific traumatic event, with options ranging from "not at all" to "very much". Scores can range from 0 to 80, whereas a higher score indicates more PTSD symptoms. Participants with a score of 33 or higher on the scale were considered to meet PTSD criteria, based on previous studies (Weathers et al., 2014). The PCL-5 measurement is reported to have satisfactory psychometric properties, with Cronbach alpha ranging from 0.76-0.97 (Sveen, Bondjers & Willebrand, 2016; Armour et al., 2015; Keane et al., 2014). In the present study, the reliability of the scale was reported to be good ($\alpha = .95$).

Perceived social support was evaluated using the Multidimensional Scale of Perceived Social Support (MSPSS) (Appendix D). The MSPSS consists of 12 items on a 7-point scale, ranging from 1 "very strongly disagree" to 7 "very strongly agree". Items measure perceived social support from friends, family and a significant other. For instance, participants were asked to evaluate if their friends and family are helpful and if they have anyone to depend on. Scores can range from 0-77, where higher scores suggest more perceived social support. Research has demonstrated that the MSPSS has good internal consistency ($\alpha = .88$) and test-retest reliability ($\alpha = .85$) (Zimet, Dahlem, Zimet & Farley, 1988). Other researches have shown similar results in psychometric properties (Canty-Mitchell & Zimet, 2000; Zimet, Powell, Farley, Werkman & Berkoff, 1990) and Cronbach alpha in the present study indicated good internal reliability of the scale ($\alpha = .97$).

Resilience among participants was assessed with a shorter version of the Connor-Davidson Resilience Scale (CD-RISC 10) (Appendix E). The scale consists of 10 items on a 5-point scale. For example, participants were asked how well they adapt to changes and stress and overcome obstacles, with options ranging from "never" to "almost always". Participants can score from 0 to 40 on the scale, whereas
higher scores reflect more resilience. The instrument has shown good psychometric properties, such as good internal consistency ($\alpha = .91$) (Wang, Shi, Zhang & Zhang, 2010). The scale also showed good internal consistency in the present study ($\alpha = .94$).

**Procedure**

The data was collected in April 2017, after the National Bioethics Committee had granted permission for the study. All police officers in Iceland received an e-mail that offered them to participate. The e-mail included the informed consent, granting information on the purpose of the study and the terms of confidentiality (Appendix A). For example, letting participants know that the data would not be traceable to individuals and that participants could discontinue the survey at any point. The e-mail also provided contact information if the participants had any questions and a link to the online survey. By clicking the link of the survey, individuals were consenting to participate in the study.

**Research design**

All data was analyzed using SPSS from IBM. QuestionPro was used to collect the online questionnaire. The responses from QuestionPro were then transformed into an SPSS dataset. The independent variables of the study were perceived social support and resilience. The dependent variable was post-traumatic stress disorder symptoms. A median split on the independent variables was used to create high and low social support and resilience groups. A Pearson’s correlation and factorial Analyses of Variance (ANOVA) were used to examine the relationship between the independent variables and the dependent variable. FANOVA was also used to test the interaction effect between social support and resilience on PTSD symptoms.
Results

Descriptive statistics

Post-traumatic stress disorder symptoms were assessed on a scale from 0-80, whereas higher scores indicated more PTSD symptoms. Figure 1 below illustrates the distribution of PTSD symptoms among the sample. The minimum value in the current study was zero and the maximum value was 56. The average PTSD symptoms among Icelandic police officers in the study was 17.3 (SD = 14.7). According to a cut-off score of 33 points, 14 participants, or 15%, met criteria for having provisional PTSD diagnostic. Distribution of symptoms was positively skewed, and the value of the skewness was 0.9 (SE = 0.25).

Figure 1. Distribution of number of PTSD symptoms among Icelandic police officers

Demographic characteristics were examined in relation to PTSD symptoms. On average, male participants had slightly more PTSD symptoms (M = 18.3, SD = 15.0) compared to female participants (M = 12.4, SD = 12.1). An independent-samples t-test indicated that the gender difference was not significant, t(91)=1.53, p = .13. Participants aged 40-49 years old had the least PTSD symptoms (M = 15.1, SD =
12.4), followed by participants aged 20-39 years old ($M = 17.2$, $SD = 14.7$) and participants aged 50 years and older had the highest PTSD scores ($M = 20.4$, $SD = 17.3$). However, the difference between age groups was not significant, $F(2, 89) = 1.023$, $p = .364$.

Participants that had worked in the police force for 0-9 years had the least PTSD symptoms ($M = 14.6$, $SE = 3.2$), followed by participants that had worked 10-19 years ($M = 17.7$, $SE = 2.5$) and participants that had worked 20 years or longer had the most PTSD symptoms ($M = 18.6$, $SE = 2.5$). Even though average PTSD symptoms seem to increase with longer period of employment, the difference was not significant, $F(2, 89) = 0.506$, $p = .605$

**Relation between social support, resilience and PTSD**

Perceived social support was evaluated on a scale from 0-77, as higher scores indicated more perceived social support. Scores in the present study ranged from 0-72. The average perceived social support for Icelandic police officers was 52.3 points ($SD = 16.7$). A Pearson correlation was run to determine the relationship between PTSD and social support. As seen in Table 1 below, there was a significant negative correlation between social support and PTSD symptoms.

Participants were split into two groups based on the median, 47 subjects with low perceived social support and 46 subjects with high social support. The group with low social support had higher levels of PTSD symptoms ($M = 19.9$, $SE = 2.0$) than the group that had high social support ($M = 14.0$, $SE = 2.0$). The difference between the groups was significant according to Bonferroni testing, $F(1, 89) = 4.152$, $p = .045$

Resilience was assessed, and scores ranged from 0 to 40 points in the study. As seen in Table 1 below, the average resilience among Icelandic police officers was reported to be 30.2 ($SD = 7.2$). There was a significant negative correlation between
resilience and PTSD. Participants were also split into two groups according to their resilience score, 47 subjects with low resilience and 46 subjects with high resilience. The participants with low resilience reported higher levels of PTSD symptoms ($M = 22.0, SE = 2.0$) compared to the group with high resilience ($M = 11.9, SE = 2.0$). The difference between the groups with low and high resilience was significant, $F(1, 89) = 12.499, p < .001$.

Table 1. *Correlations, means and standard deviations of the variables*

<table>
<thead>
<tr>
<th>Measure</th>
<th>mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. PTSD</td>
<td>17.3</td>
<td>14.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Social support</td>
<td>52.3</td>
<td>16.7</td>
<td>-0.310*</td>
<td></td>
</tr>
<tr>
<td>3. Resilience</td>
<td>30.2</td>
<td>7.2</td>
<td>-0.390**</td>
<td>0.641**</td>
</tr>
</tbody>
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*Note *$p$<.01, **$p$<.001

Based on the cut-off score of 33 points, we next examined social support and resilience among those that had provisional PTSD diagnostic and those that did not. Comparison of means showed that participants without provisional PTSD diagnosis reported more social support ($M = 53.7, SE = 1.8$) compared to the group that did have provisional PTSD diagnosis ($M = 44.3, SE = 4.4$). The difference was marginally significant, $F(1, 91)= 3.896, p = 0.051$. Furthermore, the comparison also showed that those participants that had provisional PTSD diagnosis had significantly less resilience ($M = 24.1, SE = 1.8$) compared to participants did not have provisional PTSD diagnosis ($M = 31.3, SE = 0.8$) ($F(1, 91)= 13.602, p < .001$).

A factorial ANOVA was conducted to compare the main effects of social support and resilience and the interaction effect between social support and resilience on PTSD symptoms. The results revealed that the main effects for social support ($F(1,
Although those with high levels of both social support and resilience reported lowest levels PTSD symptoms and those with low levels on both scales reported highest levels of PTSD symptoms (see Table 2), the interaction between social support and resilience on PTSD symptoms was not significant, $F(1, 89) = 0.201, p = 0.655$.

**Figure 2.** Average PTSD symptoms in all four conditions of the study, based on social support and resilience

**Discussion**

The aim of the current study was to examine PTSD levels amongst Icelandic police officers and to determine the potential protective role of social support and resilience in PTSD symptomatology. The results revealed that 15% of the participants met diagnostic criteria for having PTSD symptoms. Both social support and resilience were associated with PTSD symptoms and PTSD diagnostic groups. Having high levels of both social support and resilience was not more protective than having high levels of either social support or resilience.
The finding that 15% of the police officers reported diagnostic PTSD levels of symptoms is consistent with some (Robinson, Sigman & Wilson, 1997) but not all (Violanti et al., 2006) previously published studies. The results from other studies vary, but available studies present the range of PTSD amongst active duty police officers to be about 7-19%, or even higher in some studies (Carlier, Lamberts & Gersons, 1997; Maia et al., 2007; Haugen et al., 2012; Violanti et al., 2006). One of the reasons for these discrepant findings may be that different studies use different measures to assess PTSD. The present study seems to be the first study on police officers to use the PCL-5. An American study found that in a sample of 1049 undergraduate students, 4% of the students met criteria for PTSD using PCL-5 (Wortmann, 2016). In comparison to this study, police officers in Iceland seem to have up to three times higher rates of PTSD compared to a student sample.

The hypothesizes that social support and resilience would be associated with lower levels of PTSD symptoms were supported in this study. The results showed that there was a significant negative correlation between both social support and PTSD symptoms and between resilience and PTSD. The results also found that those participants that met PTSD diagnostic criteria reported significantly less resilience compared to those who did not have PTSD symptoms. The group that met PTSD diagnostic criteria also reported less social support, even though the difference was only marginally significant, probably due to the small sample size. The results support previous research which has found that two of the most important modifiable protective factors relating to PTSD among police officers are social support and resilience (Ozer et al., 2003; Del Ben et al., 2006; Brooks et al., 2016; Wild et al., 2016; Skogstad et al., 2003).
We also examined the synergetic and interaction effects of social support and resilience on PTSD. Although those with both high social support and resilience had the lowest levels of PTSD symptoms and those with low levels of social support and resilience had the highest levels of PTSD symptoms, the interaction was not significant. One of the reasons for this finding is that we might not have had enough power to detect significant interaction.

Our findings indicate that police officers should be encouraged to seek social support from family and friends. In addition, intervention aimed at increasing social network for police officers might reduce the PTSD symptoms and/or prevent them from developing. Also, interventions should focus on empowering resilience among police officers, for example by providing courses that teach individuals stress management and how to become a more resilient person.

There were a few limitations in this study. The response rate was low or only 15%. The reason for this low response rate is that, given the time frame and the deadline for this BS thesis, it was not possible to wait more than one week for the potential participants to respond. Over time we expect more police officers to respond and the data will be reanalyzed when the survey is closed. Until then these findings need to be interpreted with caution. Furthermore, it should be noted that the study was conducted using self-report questionnaires only. Although PCL-5 was designed to meet DSM-5 criteria for PTSD, the best approach is to use diagnostic interviews to assess PTSD. Future research is also needed to clarify the direction of the relationship between social support, resilience and PTSD. Additionally, it is necessary to assess other possible psychological and social factors that influence PTSD symptoms. Using longitudinal designs we would provide a more precise view on the subject, taking
other factors into consideration. Therefore, the results of the current study should be interpreted cautiously.

Despite these limitations, there were many advantages in this study. For example, the instruments of the research are known to have good psychometric properties. The current study also indicated that the instruments had good internal reliability. Hence, it can be assumed that the results from the questionnaire were rather secure. It was also an advantage to use PCL-5 to measure PTSD, as it is up to date regarding PTSD symptoms according to DSM-5. Furthermore, there are no published studies on PTSD among police officers in Iceland. Icelandic studies have only highlighted stress, anxiety, depression and social support amongst police officers (Ríkislögreglustjórin, 2008; Ríkislögreglustjórinn, 2011). Therefore, this study increases our knowledge on the wellbeing of Icelandic police officers; especially seeing that pressure on the police has increased over the last few years. With these results, further action should be taken to research the matter even more precisely, and find an appropriate intervention for PTSD among Icelandic police officers.
References


KÖNNUN Á LÍÐAN LÖGREGLUMANNA Á ÍSLANDI

Upplýsingar til þátttakenda

Kæri viðtakandi.

Vinsamlega íhugaðu neðangreindar upplýsingar vandlega áður en þú ákveður hvert þú viljir taka þátt í þessari rannsókn.

Tilgangur og markmið: Litið er vitað um langtíma líðan og áfallastreitu meðal lögreglumann í Íslandi. Erlendar rannsóknir hafa sýnt að um 12% lögregreglu greinast með áfallastreitu sem getur haft alvarlegar afleiðingar, svo sem auknar líkur á líkamlegum og andlegum sjúkdómmum ásamt röskun á almennri velliðan. Þessi rannsókn, sem verður hluti af lokaritgerðum Stefaníu og Röskvu sálfræðinum við Háskólan í Reykjavík, er partur af stærri verkefni sem verið er að próa í samvinnu við önnur Evrópuþjóð. Markmiðið er að stofna þekkingarsettur áfalla á Íslandi en eitt af hlutverkum þess verður að kanna langtíma líðan og áfallastreitu hjá viðbragðaðilum í nýjarþjónustu og próa úræði sem draga úr vanlíðan og bæta vinnuþverfið.

Rannsakendur:

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Hægt er að hafa samband við rannsakendur ef það vakna spurningar varðandi rannsóknina.
Þátta í rannsókninni felur í sér að: svara spurningalista, á rafrænu formi, sem tekur um það bil 20 mínútur að svara.


Ávinningur og áhætta/ópægindi fyrir þátttakendur: Ekki er um beinan ávinning af þátttöku að ræða fyrir einstaka þátttakendur rannsóknarinnar en með því að taka þátt leggja þátttakendur sitt af mórkum til að auka þekkingu á líðan lögreglufólks á Íslandi. Jafnframt aukast likur á umbótum og úræðum sem til lengri tíma má telja til ávinnings fyrir allt lögreglufólk. Ef þátttaka í rannsókninni vekur upp vanlíðan geta þátttakendur haft samband við Brynju Björk Magnúsdóttir (s:543-4068) brynjabm@ru.is en hún getur veitt þátttakendum eitt viðtal þeim að kostnaðarlausu.

Tryggingar í rannsókninni: Þátta í rannsókninni verða ekki sérstaklega tryggðir í þessari rannsókn.

Greiðslur eða önnur umbun til þátttakenda: Ekki verður um neinar greiðslur né umbun að ræða fyrir þátttöku í rannsókninni.


Um rétt þátttakenda í spurningakönnun: Spurningalistarnir verða auðkenndir með þátttakandunúmeri sem verður ekki hægt að rekja til þátttakanda.

Þú getur hætt við þátttöku hvenær sem er án allra útskýringa og ber þér því engin skylda til að taka þátt í þessari rannsókn. Til þess að taka þátt ferðu inn slóðina sem er meðfylgjandi hér aftast í þessum.

Për er auðvitað frjálst að sleppa því að svara einstaka spurningum á listanum ef þær valda vanlíðan eða ef svar er óvíst. En mikilvægt er fyrir gæði rannsóknarinnar að sem flestum spurningum sé svarað eins nákvæmlega og unnt er.

Ef þú hefur einhverjar frekari spurningar tengdar rannsókninni þá er þér velkomni að hafa samband við ábyrgðarmenn eða meðrannsakanda rannsóknarinnar. Ef þátttaka í rannsókninni vekur upp vanlíðan geta þátttakendur haft samband við Brynju Björk.
PTSD AMONGST ICELANDIC POLICE OFFICERS

Magnúsdóttir (s:543-4068) brynjabm@ru.is en hún getur veitt þátttakendum eitt viðtal þeim að kostnaðarlausu. Ef þú hefur spurningar um rétt þinn sem þátttakandi í vísindarannsókn eða vilt hætta þátttöku í rannsókninni getur þú snúið þér til Vísendasiðanefndar, Borgartúni 21, 4.hæð, 105 Reykjavík. Sími: 551-7100, fax: 551-1444, tölvupóstfang:vsn@vsn.is

Hverjir hafa samþykkt rannsóknina: Rannsóknin er unnin með samþykki Vísendasiðanefndar og hefur verið tilkynnt Persónuvernd.

Spurningakönnunina má nál gast hér:

-----------------------------------------
Vinsamlega smelltu á slóðina til að taka þátt í rannsókninni.

Með von um góðar undirtektir,
fyrrir hönd rannsóknarhópsins,

Heiðdís B. Valdimarsdóttir, s: 690930

Sigrún Þóra Sveinsdóttir, s: 6615411
Sigríður Björk Pormar, s: 616 6437
Röskva Vigfúsdóttir, s: 6953102
Stefanía Hildur Ásmundsdóttir, s: 8230797
Appendix B

Questions on Background Information

1. Hvert er kyn þitt
   ☐ Karl  ☐ Kona

2. Aldur
   ☐ 20-29 ára  ☐ 30-39 ára  ☐ 40-49 ára  ☐ 50-59 ára  ☐ 60 ára eða eldri

3. Menntun. Merktu við það sem á við:
   ☐ Stúdentspróf  ☐ Annað framhaldsnám eftir grunnskóla (þó ekki stúdentspróf)
   ☐ Grunnám í Háskóla (BA/bS eða B.ed. gráðu)  ☐ Framhaldsnám úr háskóla (MA/MS/M.ed. eða P.hd.gráðu)

4. Hvaða stöðu gegn þú?
   ☐ Lögreglunemi  ☐ Lögreglumaður  ☐ Aðstoðarvarðstjóri, varðstjóri/rannsóknarlögreglumaður, aðalvarðstjóri/lögreglufulltrúi
   ☐ Aðstoðaryfirlögregluþjónn, yfirlögregluþjónn

5. Hvert er meginstarfssvið þitt? Merktu við allt sem við á:
   ☐ Almenn löggæsla  ☐ Rannsóknir brota  ☐ Stjórnun  ☐ Annað

6. Vinnufyrirkomulag. Merkið við allt sem við á:
   ☐ Dagvinna  ☐ Vaktavinna  ☐ Bakvaktir

7. Hversu lengi hefur þú starfað í lögreglunni?
   ☐ 0–4 ár  ☐ 5–9 ár  ☐ 10–14 ár  ☐ 15–19 ár  ☐ 20 ár eða meira

8. Hversu marga veikindadaga hefur þú tekið síðustu 2 mánuði?
   ☐ Engan  ☐ 1 dag  ☐ 2 daga  ☐ 3 daga  ☐ 4 daga eða fleiri

9. Hversu oft telur þú þig upplifa streitu í lögreglusterfinu?
   ☐ Oft  ☐ Stundum  ☐ Sjaldan  ☐ Aldrei
Posttraumatic Stress Disorder Checklist for DSM-5 (PCL-5)

Hér að neðan er listi yfir vandamál sem fólk upplifir stundum eftir mjög streituvaldandi reynslu. Vinsamlega lestu vandlega yfir hvert vandamál og dragðu hring utan um tölu til hægri til að gefa til kynna hversu mikið hvert vandamál hefur truflað þig síðastliðinn mánuð.

<table>
<thead>
<tr>
<th>Síðastliðinn mánuð, hversu mikið truflaði eftirfarandi þig:</th>
<th>Ekki nétt</th>
<th>Lítið</th>
<th>Miðlungr</th>
<th>Töluvert</th>
<th>Mjög mikið</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Endurteknar, truflandi og óvelkomnar minningar um hina streituvaldandi reynslu?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. Endurteknir truflandi draumar um hina streituvaldandi reynslu?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. Skyndilega liðið eða hegðað þér eins og streituvaldandi reysslan sé raunverulega að gerast aftur (eins og þú sérst að endurupplifá hana)?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. Komast í mikið uppnám þegar eiththvað minnti þig á hina streituvaldandi reynslu?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. Fá sterk líkamleg viðbrögð þegar eiththvað minnti þig á streituvaldandi reynsluna (t.d. hraður hjartsláttur, öndunarerfiðleikar, svitna)?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. Forðast minningar, hugsanir og tilfinningar tengdar streituvaldandi reynslunni?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. Forðast ytri áminningar um hina streituvaldandi reynslu (t.d. fólk, staði, samtöl, athafnir, hluti eða aðstæður)?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. Eiga í erfiðleikum með að muna mikilvæga hluta streituvaldandi reynslunnar?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. Hafa sterk neikvæð viðhorf um sjálfa/n þig, annað fólk eða heiminn (t.d. hugsanir eins og: Ég er slæm/ur, það er eiththvað alvarlegt að mér, engum er treystandi, heimurinn er hættulegur)?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10. Ásaka sjálfa/n þig eða einhvern annan um hina streituvaldandi reynslu eða það sem gerðist í kjölfar hennar?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11. Hafa sterkar neikvæðar tilfinningar eins og ótta, hrylling, reiði, sektarkennd eða skömm?</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<td>4</td>
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<tr>
<td>Question</td>
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<td>3</td>
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<tr>
<td>-------------------------------------------------------------------------</td>
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<tr>
<td>12. Missa áhuga á athöfnum sem þú áður hafðir gaman af?</td>
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<tr>
<td>13. Finnast þú vera fjarlæg/ur eða úr tengslum við annað fólk?</td>
<td></td>
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<tr>
<td>14. Eiga í erfióleikum með að upplífa jákvæðar tilfinningar (t.d. að vera ófær um að finna hamingju eða væntumþykju gagnvart fólk sem er þér nákomíð)?</td>
<td></td>
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<tr>
<td>15. Pirringur, reiðið kóst og árásargjörn hæðun.</td>
<td></td>
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<tr>
<td>16. Taka of oft áhættu eða gera hluti sem gætu valdið þér skaða?</td>
<td></td>
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<tr>
<td>17. Vera ofáravökul/l eða vakandi fyrir umhverfinu eða á verði?</td>
<td></td>
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<tr>
<td>18. Vera viðbrigðin/n eða bregða auðveldlega?</td>
<td></td>
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<tr>
<td>19. Eiga erfitt með einbeitingu?</td>
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<tr>
<td>20. Vandi við að sofna eða sofá?</td>
<td></td>
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</tr>
</tbody>
</table>
Appendix D

Multidimensional Scale of Perceived Social Support (MSPSS)

Stigagjöf
1 = algjörlega ósammála 2 = mjög ósammála 3 = frekar ósammála 4 = hlutlaus 5 = frekar samamála 6 = mjög samamála 7 = algjörlega samamála

1. Það er viss einstaklingur til staðar fyrir mig þegar ég þarfna.
   1 2 3 4 5 6 7
2. Það er viss einstaklingur sem ég get deilt með gleði minni og sorg.
   1 2 3 4 5 6 7
3. Fjölskyldan mín reynir virkilega að hjálpa mér.
   1 2 3 4 5 6 7
4. Frá fjölskyldu minni fæ ég þá tilfinningalegu aðstoð og þann stuðning sem ég þarfna.
   1 2 3 4 5 6 7
5. Ég get leitað huggunar hjá vissum einstaklindi þegar þörf er á.
   1 2 3 4 5 6 7
   1 2 3 4 5 6 7
7. Ég get treyst á vini mína þegar illa gengur.
   1 2 3 4 5 6 7
8. Ég get talað um vandamál mínum við fjölskyldu mína.
   1 2 3 4 5 6 7
9. Ég á vini sem ég get deilt með gleði minni og sorg.
   1 2 3 4 5 6 7
10. Það er viss einstaklingur í lífi mín sem er umhugað um tilfinningar mínar.
    1 2 3 4 5 6 7
11. Fjölskylda mín er tilbúin til að aðstoða mig við ákvarðanatöku.
    1 2 3 4 5 6 7
12. Ég get talað um vandamál mínum við vini mína.
    1 2 3 4 5 6 7
Appendix E

The Connor-Davidson Resilience Scale (CD-RISC 10)

Vinsamlegast merktu við þann svarreit sem á almennt best við um hverja staðhæfingu.

1. Ég er fær um að aðlagast breytingum
   - Á aldrei við
   - Á sjáldan við
   - Á stundum við
   - Á oftast við
   - Á nærri alltaf við

2. Ég get tekist á við hvað svo sem kemur upp
   - Á aldrei við
   - Á sjáldan við
   - Á stundum við
   - Á oftast við
   - Á nærri alltaf við

3. Ég reyni að sjá spaugilega hlið á vandamálum
   - Á aldrei við
   - Á sjáldan við
   - Á stundum við
   - Á oftast við
   - Á nærri alltaf við

4. Það getur styrkt mig að takast á við streitu
   - Á aldrei við
   - Á sjáldan við
   - Á stundum við
   - Á oftast við
   - Á nærri alltaf við

5. Ég er fljótur að ná mér á strik eftir veikindi eða erfiðleika
   - Á aldrei við
   - Á sjáldan við
   - Á stundum við
   - Á oftast við
   - Á nærri alltaf við

6. Ég get náð markmiðum þrátt fyrir hindranir
   - Á aldrei við
PTSD AMONGST ICELANDIC POLICE OFFICERS

- Á sjaldan við
- Á stundum við
- Á oftast við
- Á nærri alltaf við

7. Ég get haldið einbeitingu þegar ég er undir pressu

- Á aldrei við
- Á sjaldan við
- Á stundum við
- Á oftast við
- Á nærri alltaf við

8. Ég gefst ekki auðveldlega upp þótt mér verði á

- Á aldrei við
- Á sjaldan við
- Á stundum við
- Á oftast við
- Á nærri alltaf við

9. Ég hugas um sjálfan mig sem sterka persónu

- Á aldrei við
- Á sjaldan við
- Á stundum við
- Á oftast við
- Á nærri alltaf við

10. Ég get tekist á við ópægilegar tilfinningar

- Á aldrei við
- Á sjaldan við
- Á stundum við
- Á oftast við
- Á nærri alltaf við