



Social Support as a Buffer Against Depression and Anxiety After Exposure to Negative Life Events

Linda Dögg Þrastardóttir

2014

BSc in Psychology

Department of Psychology
School of Business

Foreword

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

Abstracts

After exposure to negative life events, people often suffer from mental health problems as a consequence. Social support is a protective factor that has shown to buffer against depression after exposure to negative life events. The aim of the current study was to investigate the moderating effects of social support on depression and anxiety in individuals who have been exposed to negative life events. This was studied in a large sample of Icelandic adolescents using data from the Icelandic Centre for Social Research and Analysis (ICSRA). The buffering hypothesis was not supported in the data, however, the findings suggested that social support is beneficial irrespective of the amount of experienced negative life events.

Eftir að fólk lendir í neikvæðum lífsatburðum þá þróast oft með því þunglyndi og kvíði sem afleiðing þess. Sýnt hefur verið fram á það að félagslegur stuðningur getur virkað sem verndandi þáttur gegn geðrænum vandamálum eftir að hafa lent í neikvæðum lífsviðburðum. Þetta er kallað „buffering hypothesis“. Markmið rannsóknarinnar var að rannsaka áhrif félagslegans stuðnings á þunglyndi og kvíða eftir upplifun neikvæðra atburða. Þetta var rannsakað í stóru úrtaki Íslenskra ungmenna með því að nota gögn frá Rannsóknum og greiningu. Svokallaða „buffering hypothesis“ var ekki studd í gögnunum en niðurstöður gáfu til kynna að félagslegur stuðningur væri gagnlegur óháð fjölda neikvæðra lífsatburða og því ætti að efla félagslegan stuðning fyrir alla.

Introduction

Depression and anxiety are the most common mental disorders in Europe, with depression having a 12-month prevalence range of 3.1-10.1% (Wittchen & Jacobi, 2005). The prevalence of mood disorders, such as dysthymia and major depressive disorder, is high among adolescents and uniformly increases with age, with an almost two-fold increase from ages 13-14 years to 17-18 years (Merikangas et al., 2010). An Icelandic study found that prevalence rates of phobias were lower in individuals of 45 years and older, meaning that phobias are more common earlier in life (Arnarson, Gudmundsdóttir, & Boyle, 1998).

Exposure to trauma has been linked with various mental disorders (Tyrka, Wyche, Kelly, Price, & Carpenter, 2009), such as depression (Heim, Newport, Mletzko, Miller, & Nemeroff, 2008a) and anxiety (Cogle, Timpano, Sachs-Ericsson, Keough, & Riccardi, 2010; Kuo, Goldin, Werner, Heimberg, & Gross, 2011). When it comes to anxiety, trauma and negative life events have been linked to different types of anxiety, such as posttraumatic stress disorder (PTSD) (Bensimon, 2012), social anxiety disorder (SAD) (Elzinga, Spinhoven, Berretty, de Jong, & Roelofs, 2010; Kuo et al., 2011), panic disorder (PD) and generalized anxiety disorder (GAD) (Cogle et al., 2010) and obsessive compulsive disorder (Lafleur et al., 2011). Cogle et al. (2010) found a unique relationship between childhood sexual abuse and most of the previously listed anxiety disorders.

The prevalence of trauma in people with severe mental illness is 47% for physical abuse and 37% for sexual abuse, with 30% suffering from posttraumatic stress disorder (Mauritz, Goossens, Draijer, & van Achterberg, 2013). Sudden unexpected death of a loved one is the best predictor of PTSD (Breslau N et al., 1998). The relationship between negative life events and psychological disorders has

been found in both nonclinical (Celikel & Besiroglu, 2008; Chu, Williams, Harris, Bryant, & Gatt, 2013) and clinical samples (Kuo et al., 2011)

Protective factors that buffer against mental disorders have been reported. Some suggested protective factors include mastery, physical activity, social support and resilience (Colman et al., 2014; Pietrzak et al., 2010). These factors have shown to buffer against depression during the transition from adolescence to adulthood (Colman et al., 2014).

Social support can be defined as the information given from others that makes a person believe that he is cared for and loved, esteemed and valued, and that he shares both a mutual obligation and a bond of communication with the other person (Cobb, 1976). The buffering hypothesis states that psychosocial stress will have harmful effects on those with little or no social support and that the effect will be smaller for those with good social support (Cohen & McKay, 1983). The effect might be mediated by more oxytocin release when experiencing closeness (Smith & Wang, 2013). In the literature, this effect has been demonstrated often and has become of more interest in recent years. After exposure to negative life events, social support can buffer against anxiety, such as PTSD (Dirkzwager, Bramsen, & Vanderploeg, 2003), and depression (Krishnan et al., 1998). Social support also plays a moderating and mediating role in long-term consequences of childhood maltreatment (Sperry & Widom, 2013) and has shown good outcomes when used as an intervention for treating depression (Cruwys et al., 2014). This might partly be because social support is positively correlated with posttraumatic growth (PTG) (Yu et al., 2014). Further examination of the buffering role of social support is essential because it can become of great value to people suffering from negative life events, and to the community.

The aim of the current study was to examine whether social support from parents and friends buffer against depression and anxiety in Icelandic adolescents after exposure to negative life events. With previous literature in mind, and drawing from the buffering hypothesis, it is hypothesized that a) negative life events are positively correlated with depression and anxiety, and b) social support from parents and friends buffer against depression and anxiety after exposure to negative life events.

Method

Participants

Participants were 10,992 students from all 8th to 10th grades in Iceland. The gender ratio was equal, 49.9% were boys (N=5394) and 50.1% were girls (N=5426). The vast majority of the participants, or 99.6%, were born between the years 1996-1998. The rest was born in 1994, 1999, 1995 and 2000. This means that the participants were born in between the years 1994-2000. 3621 participant (33.3%) were in 8th grade, 3597 (33%) were in 9th grade, and 3670 (33.7%) in 10th grade. Inclusion criteria for participation was every student attending the class on the day the survey was administered. Similarly, absent students were excluded.

Measurements

Assessment of negative life events. The participants were asked “Has any of the following happened to you?” and they were able to respond with “yes, in the past 30 days”, “yes, in the past 12 months”, “yes, over 12 months ago” and “no” (I.-D. Sigfusdottir & Silver, 2009).

Some of the items asked included serious illness, death of a parent/sibling, death of a friend, divorce and separation of parents, serious argument with parents, and physical violence at home. The items were coded as dichotomous variables (0 = no and 1 =

yes).

Assessment of depression and anxiety. Depression and anxiety was assessed using Derogatis SCL 90 (Inga-Dora Sigfusdottir, Farkas, & Silver, 2004). Participants were asked how many times they had been aware of the following distress and discomfort in the past week: little appetite, little interest in doing things, loneliness, crying easily, sleeping problems, feeling sad or blue, feeling slow or having little energy, feeling of a hopeless future, and thought of suicide. They were able to respond with “(almost) never”, “rarely”, “sometimes” and “often” which was scored 1, 2, 3 or 4 (higher score indicated greater depression or anxiety).

Assessment of social support from parents and peers. The Perceived Parental Support (PPS) Scale (Kristjansson, Sigfusdottir, Karlsson, & Allegrante, 2011) was used for assessment of social support from both parents and peers. The participants were asked “How easy or hard is it for you to receive the following from your parents?” with the following items: caring and warmth, discussion about personal matters, advice about the studies, advice about other issues, and assistance with other things. The response categories were “very difficult”, “rather difficult”, “rather easy”, “very easy” and were scored 1, 2, 3 or 4 (higher scores indicated better support). The same was asked for peers.

Procedure

In 2012, the Icelandic Centre for Social Research and Analysis (ICSRA) conducted a youth national survey covering all 8th-10th graders in all secondary schools in the country (Kristjánsson, Sigfússon, Sigfúsdóttir, & Pálsdóttir, 2012). The surveys were sent to the schools, where the teachers saw to distribute them and to tell the participants to be careful to turn it in anonymously. After completing the survey, the participants put it in an unlabelled envelope. The survey covered a wide array of

variables, such as social support, general welfare, health and risky behaviour. In the current study, this survey was used after applying for access to the data and given consent of ICSRA.

Results

Figure 1 shows the average amount of negative life events reported between intervals. Note that the range was 0-17. As would be expected, with more time, participants experienced more negative life events. Table 1 shows the average amount of depression, anxiety and social support experienced.

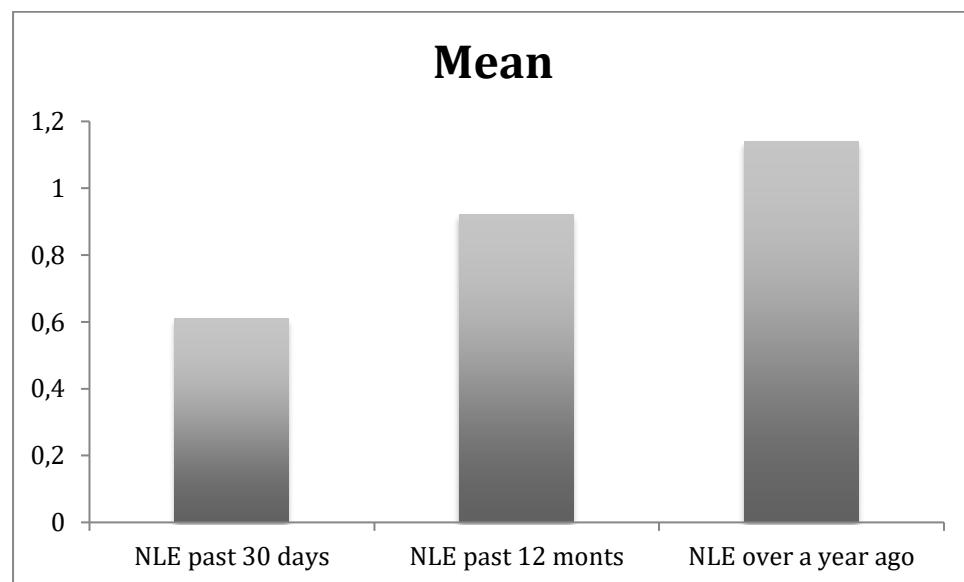


Figure 1. Average amount of NLEs experienced

Table 1

Average amount of depression, anxiety and social support

	N	Minimum	Maximum	Mean	Std. Deviation
Depression	10372	10	40	16.26	6.85
Anxiety	10582	3	12	4.89	2.19
Social Support	10442	10	40	33.98	5.1

A Pearson correlation analysis was conducted to examine the relationship between

depression and negative life events on one hand, and anxiety and negative life events on the other hand. As shown in table 2, the correlation indicated a significant, positive association between both negative life events and depression and negative life events and anxiety. The relationship was slightly stronger between negative life events and depression.

Table 2
Correlations between depression and negative life events, and negative life events and anxiety

	NLE Past 30 Days	NLE Past 30 Months	NLE Over a Year Ago
Depression	.343**	.346**	.270**
N	10269	10372	10369
Anxiety	.242**	.279**	.216**
N	10582	10577	10578

Note: ** $p < 0.01$

Negative life events in the past 30 days

Multiple regression analysis was conducted to learn more about the relationship between the variables. As seen in table 3, the first model, containing negative life events in the past 30 days as the only variable, showed that negative life events alone explained 12.4% of the variance in depression. Negative life events in the past 30 days was a significant unique contributor ($\beta = .353$, $p < .0001$). This was significant [$F(1, 10025) = 1423.59$, $p < .0001$]. After social support had been included in the model, the model as a whole explained an additional 5.7% of the variance (18.1% of the total variance in depression). Negative life events in the past 30 days was the strongest unique contributor ($\beta = .298$, $p < .0001$) and social support was the weakest ($\beta = -.244$). This was significant [$F(2, 10024) = 1107.192$, $p < .0001$]. After an interaction between negative life events in the past 30 days and social support had been added to the model, it explained an additional 0.2% of the variance. This model explained 18.3%

of the total variance in depression. Social support was the strongest unique contributor ($\beta = -.264$, $p < .0001$), following the interaction ($\beta = .174$, $p < .0001$) and negative life events ($\beta = .13$, $p < .0001$). This was significant [$F(3, 10023) = 748.89$, $p < .0001$]. Model 3 explained nothing more in the variance and therefore, model 2 (containing negative life events and social support independently) is the most informative.

Table 3
Summary of coefficients

	Model			Model			Model		
	1			2			3		
Variable	B	SE B	β	B	SE B	β	B	SE B	β
NLE	2.108	.056	.353*	1.784	.055	.298*	.762	.762	.127*
Social				-.331	.013	-.24*	-.36	.014	-.26*
Support									
Interaction							-.03	.007	.174*
R^2	.124*			.181*			.183*		

Note: * $p < 0.01$

As seen in table 4, when it comes to anxiety, negative life events in the past 30 days explained 6.3% of the variance. Negative life events in the past 30 days was a significant unique contributor ($\beta = .252$, $p < .0001$). This was significant [$F(1, 10207) = 691.164$, $p < .0001$]. With social support included in the model, it explained an additional 1.7% of the variance in anxiety (8% of the total variance in anxiety). Negative life events was the strongest unique contributor ($\beta = .222$, $p < .0001$) and social support the weakest ($\beta = -.133$, $p < .0001$). This was significant [$F(2, 10206) = 445.272$, $p < .0001$]. When an interaction between social support and negative life events had been included in the model, it explained an additional 0.1% of the

variance. The model explained 8.1% of the total variance. Social support was the strongest unique contributor ($\beta = -.146$, $p < .0001$), the interaction between the negative life events and social support was the second strongest ($\beta = .114$, $p = .001$) and negative life events past 30 days the weakest ($\beta = .110$, $p = .003$). This was significant [F (3, 10205) = 300.516, $p < .0001$].

Table 4
Summary of coefficients

	Model			Model			Model		
	1			2			3		
Variable	B	SE B	β	B	SE B	β	B	SE B	β
NLE	.479	.018	.252*	.423	.018	.222*	.209	.069	.110*
Social				-.058	.004	-.13*	-.06	.005	-.15*
Support									
Interaction							.06	.002	.114*
R^2	.063*			.080*			.081*		

Note: * $p < 0.01$

Negative life events in the past 12 months

As seen in table 5, the first model, containing negative life events in the past 12 months, showed that negative life events alone explained 12.2% of the variance in depression. Negative life events in the past 30 days was a significant unique contributor in model 1 ($\beta = .350$, $p < .0001$). This was significant [F (1, 10021) = 1397.203, $p < .0001$]. After social support had been added to the model, the model as a whole explained an additional 6.6% of the variance (18.8% of the total variance in depression). In this model, negative life events in the past 12 months was the strongest unique contributor ($\beta = .307$, $p < .0001$) and social support the weakest

($\beta = -.260$, $p < .0001$). This was significant [$F(2, 10020) = 1160.453$, $p < .0001$]. After an interaction between negative life events in the past 12 months and social support had been added to the model, it explained an additional 0.1% of the variance. This model explained 18.9% of the total variance in depression. Social support was the strongest unique contributor ($\beta = -.276$, $p < .0001$), following negative life events ($\beta = .171$, $p < .0001$) and the interaction between the two ($\beta = .136$, $p = .005$). This was significant [$F(3, 10019) = 776.833$, $p < .0001$]. Since model 3 explained nothing more in the variance, model 2 is the most informative.

Table 5
Summary of coefficients

	Model 1			Model 2			Model 3		
Variable	B	SE B	β	B	SE B	β	B	SE B	β
NLE	1.762	.047	.350*	1.547	.046	.307*	.864	.246	.171*
Social Support				-.352	.012	-.26*	-.37	.015	-.28*
Interaction							.021	.008	.136*
R^2	.122*			.188*			.189*		

Note: * $p < 0.01$

As seen in table 6, when it comes to anxiety, negative life events in the past 12 months alone explained 8% of the variance in anxiety. Negative life events in the past 12 months was a significant unique contributor ($\beta = .283$, $p < .0001$). This was significant [$F(1, 10203) = 886.679$, $p < .0001$]. When social support had been included in the model it explained an additional 1.9% of the variance (9.9% of the total variance in anxiety). Negative life events was the strongest unique contributor

($\beta=.260$, $p<.0001$) and social support the weakest ($\beta=-.141$, $p<.0001$). This was significant [$F(2, 10202)=561.686$, $p<.0001$]. When an interaction between social support and negative life events had been included in the model, it explained an additional 0.2% of the variance (10.1% of the total variance). The interaction between negative life events and social support was the strongest unique contributor ($\beta=.234$, $p<.0001$), social support was the second strongest unique contributor ($\beta=-.168$, $p<.0001$). This was significant [$F(3, 10201)=382.254$, $p<.0001$]. In this model, negative life events past 12 months did not reach a statistical significance as a unique contributor ($p>.05$).

Table 6
Summary of coefficients

	Model			Model			Model		
	1			2			3		
Variable	B	SE B	β	B	SE B	β	B	SE B	β
NLE	.454	.015	.283*	.418	.015	.260*	.045	.082	.028
Social				-.064	.004	-.14*	-.07	.005	-.17*
Support									
Interaction							.012	.003	.234*
R^2	.080*			.099*			.101*		

Note: * $p<0.01$

Negative life events over a year ago

As seen in table 7, The first model, containing negative life events over a year ago, showed that negative life events alone explained 7.2% of the variance in depression. Negative life events in the past 30 days was a significant unique contributor in model 1 ($\beta=.269$, $p<.0001$). This was significant [$F(1, 10022)=782.936$, $p<.0001$]. After

social support had been entered in the model, the model as a whole explained an additional 7.7% of the variance (14.9% of the total variance in depression). Social support was the strongest unique contributor ($\beta = -.280$, $p < .0001$) and negative life events the weakest ($\beta = -.232$, $p < .0001$). This was significant [$F(2, 10021) = 879.427$, $p < .0001$]. After an interaction between negative life events over a year ago and social support had been added to the model, it explained an additional 0.2% of the variance. This model explained 15.1% of the total variance. Negative life events was the strongest unique contributor ($\beta = .500$, $p < .0001$), the interaction between the negative life events and social support was the second strongest contributor ($\beta = .269$, $p < .0001$) and social support was the weakest ($\beta = .248$, $p < .0001$). This was significant [$F(3, 10020) = 594.609$, $p < .0001$]. Again, model 2 was the most informative.

Table 7
Summary of coefficients

	Model 1			Model 2			Model 3		
Variable	B	SE B	β	B	SE B	β	B	SE B	β
NLE	1.184	.042	.269*	1.019	.041	.232*	2.197	.258	.500*
Social Support				-.379	.013	-.28*	-.34	.016	-.25*
Interaction							-.036	.008	-.27*
R^2	.072*			.149*			.151*		

Note: * $p < 0.01$

As seen in table 8, when it comes to anxiety, negative life events over a year ago explained 4.8% of the variance. Negative life events over a year ago was a significant unique contributor ($\beta = .218$, $p < .0001$). This is significant [$F(1, 10204) = 510.674$, $p < .0001$]. When social support had been included in the model it

explained an additional 2.4% of the variance (7.2% of the total variance in anxiety). Negative life events over a year ago was the strongest unique contributor ($\beta=.197$, $p<.0001$) and social support the weakest ($\beta=-.156$, $p<.0001$). This was significant [$F(2, 10203)=393.115$, $p<.0001$]. When an interaction between social support and negative life events had been included, the model did not reach statistical significance ($p>.05$). The strongest unique contributor was negative life events over a year ago ($\beta=.276$, $p<.0001$) following social support ($\beta=-.147$, $p<.0001$). The interaction between negative life events and social support did not reach statistical significance as a unique contributor ($p>.05$).

Table 8
Summary of coefficients

	Model			Model			Model		
	1			2			3		
Variable	B	SE B	β	B	SE B	β	B	SE B	β
NLE	.309	.014	.218*	.279	.014	.197*	.391	.086	.276*
Social				-.068	.004	-.16*	-.06	.005	-.15*
Support									
Interaction							-.003	.003	-.08
R^2	.048*			.071*			.071		

Note: * $p<0.01$

Since model 3 never added to the variance of depression and anxiety, a bivariate correlation was conducted between the 3 variables entered into the model. As shown in table 10, there was a strong correlation between the interaction and negative life events. This is indicative of collinearity.

Table 9
Bivariate correlation between the test variables

	NLE Past 30 days	Social support	Interaction
NLE Past 30 Days	-	-.222**	.954**
Social Support		-	-.101**
Interaction			-

	NLE past 12 Months	Social Support	Interaction
NLE past 12 Months	-	-.155**	.976**
Social Support		-	-.039**
Interaction			-

	NLE Over a Year Ago	Social Support	Interaction
NLE Over a Year Ago	-	-.128**	.981**
Social Support		-	-.010
Interaction			-

Note: ** p<0.01

Discussion

To begin with, it was hypothesized that depression and anxiety would be positively correlated with negative life events and the findings of the current study were consistent with that hypothesis. The results are consistent with previous findings that have linked negative life events with depression and anxiety (Cougle et al., 2010; Heim, Newport, Mletzko, Miller, & Nemeroff, 2008; Kuo et al., 2011). Drawing from the buffering hypothesis, it was also hypothesized that social support would buffer against depression and anxiety after exposure to negative life events. Since the interaction between negative life events and social support explained nothing in the variance of depression and anxiety, the study did not support the buffering hypothesis. However, model 2 (containing negative life events and social support independently) was always the most informative. Therefore we can conclude that social support is

beneficial irrespective of the amount of NLEs experienced and should be promoted for everyone.

The findings are inconsistent with previous studies that have been supportive of the buffering hypothesis (Dirkzwager et al., 2003; Krishnan et al., 1998). The current study also found that (when looking at model 2) current social support explained the most of the variance in depression and anxiety when negative life events had been experienced in the past 12 months (18.8%). Since the questionnaire used to collect information about social support only assessed current social support, the study is limited. Therefore, it would be informative if future studies would assess social support within different timeframes.

Another limitation of the study is that it relied on self-reported data. Self-reported data has some limitations since participants might not give accurate responses due to different reasons, such as cognitive biases, and not being truthful. Another limitation is the generalizability of the findings. Because the study only included adolescents in Iceland, the findings may not be generalizable to other populations and/or other age groups. Strength of the study includes the large sample size. Future studies might want to examine whether any particular NLE contributes to more depression and anxiety than other NLEs, or which NLE contributes more to depression and which to more anxiety. To sum, the data in this study was not supportive of the buffering hypothesis, however, the findings suggested that social support is beneficial irrespective of the amount of experienced negative life events. This might indicate that social support is good not only for people who have experienced negative life events, but everyone.

References

- Arnarson, E. Ö., Gudmundsdóttir, Á., & Boyle, G. J. (1998). Six-month prevalence of phobic symptoms in Iceland: An epidemiological postal survey. *Journal of Clinical Psychology*, 52(2), 257–265.
- Bensimon, M. (2012). Elaboration on the association between trauma, PTSD and posttraumatic growth: The role of trait resilience. *Personality and Individual Differences*, 52(7), 782–787. doi:10.1016/j.paid.2012.01.011
- Breslau N, Kessler RC, Chilcoat HD, Schultz LR, Davis GC, & Andreski P. (1998). Trauma and posttraumatic stress disorder in the community: The 1996 detroit area survey of trauma. *Archives of General Psychiatry*, 55(7), 626–632. doi:10.1001/archpsyc.55.7.626
- Celikel, H., & Besiroglu, L. (2008). Childhood traumatic experiences, dissociation and obsessive-compulsive symptoms in non-clinical samples. *Anadolu Psikiyatri Dergisi-Anatolian Journal of Psychiatry*, 9(2), 75–83.
- Chu, D. A., Williams, L. M., Harris, A. W. F., Bryant, R. A., & Gatt, J. M. (2013). Early life trauma predicts self-reported levels of depressive and anxiety symptoms in nonclinical community adults: Relative contributions of early life stressor types and adult trauma exposure. *Journal of Psychiatric Research*, 47(1), 23–32. doi:10.1016/j.jpsychires.2012.08.006
- Cobb, S. (1976). Social support as a moderator of life stress. *Psychosomatic Medicine*, 38(5), 300–314.
- Cohen, S., & McKay, G. (1983). Social support, stress, and the buffering hypothesis: A theoretical analysis. In A. Baum, S. E. Taylor, & J. Singer (Eds.). *Handbook of Psychology and Health*, 4, 253–267.

Colman, I., Zeng, Y., McMartin, S. E., Naicker, K., Ataullahjan, A., Weeks, M., ...

Galambos, N. L. (2014). Protective factors against depression during the transition from adolescence to adulthood: Findings from a national Canadian cohort. *Preventive Medicine*. doi:10.1016/j.ypmed.2014.04.008

Cougle, J. R., Timpano, K. R., Sachs-Ericsson, N., Keough, M. E., & Riccardi, C. J.

(2010). Examining the unique relationships between anxiety disorders and childhood physical and sexual abuse in the National Comorbidity Survey-Replication. *Psychiatry Research*, 177(1–2), 150–155.
doi:10.1016/j.psychres.2009.03.008

Cruwys, T., Alexander Haslam, S., Dingle, G. A., Jetten, J., Hornsey, M. J.,

Desdemona Chong, E. M., & Oei, T. P. S. (2014). Feeling connected again: Interventions that increase social identification reduce depression symptoms in community and clinical settings. *Journal of Affective Disorders*, 159, 139–146. doi:10.1016/j.jad.2014.02.019

Dirkzwager, A., Bramsen, I., & Vanderploeg, H. (2003). Social support, coping, life

events, and posttraumatic stress symptoms among former peacekeepers: a prospective study. *Personality and Individual Differences*, 34(8), 1545–1559.
doi:10.1016/S0191-8869(02)00198-8

Elzinga, B. M., Spinhoven, P., Berretty, E., de Jong, P., & Roelofs, K. (2010). The

role of childhood abuse in HPA-axis reactivity in Social Anxiety Disorder: A pilot study. *Biological Psychology*, 83(1), 1–6.
doi:10.1016/j.biopsycho.2009.09.006

Heim, C., Newport, D. J., Mletzko, T., Miller, A. H., & Nemeroff, C. B. (2008a). The

link between childhood trauma and depression: Insights from HPA axis

studies in humans. *Psychoneuroendocrinology*, 33(6), 693–710.

doi:10.1016/j.psyneuen.2008.03.008

Heim, C., Newport, D. J., Mletzko, T., Miller, A. H., & Nemeroff, C. B. (2008b). The link between childhood trauma and depression: Insights from HPA axis studies in humans. *Psychoneuroendocrinology*, 33(6), 693–710.

doi:10.1016/j.psyneuen.2008.03.008

Krishnan, K. R. R., George, L. K., Pieper, C. F., Jiang, W., Arias, R., Look, A., & O'Connor, C. (1998). Depression and social support in elderly patients with cardiac disease. *American Heart Journal*, 136(3), 491–495.

doi:10.1016/S0002-8703(98)70225-X

Kristjánsson, A. L., Sigfusdóttir, I. D., Karlsson, T., & Allegrante, J. P. (2011). The Perceived Parental Support (PPS) Scale: Validity and reliability in the 2006 youth in Europe substance use prevention survey. *Child Indicators Research*, 4(3), 515–528. doi:10.1007/s12187-010-9095-x

Kristjánsson, Á. L., Sigfússon, J., Sigfúsdóttir, I. D., & Pálsdóttir, H. (2012). Ungt fólk 2012. Retrieved May 1, 2014, from

<http://www.rannsoknir.is/media/rg/skjol/Ungt-folk-2012.pdf>

Kuo, J. R., Goldin, P. R., Werner, K., Heimberg, R. G., & Gross, J. J. (2011).

Childhood trauma and current psychological functioning in adults with social anxiety disorder. *Journal of Anxiety Disorders*, 25(4), 467–473.

doi:10.1016/j.janxdis.2010.11.011

Lafleur, D. L., Petty, C., Mancuso, E., McCarthy, K., Biederman, J., Faro, A., ...

Geller, D. A. (2011). Traumatic events and obsessive compulsive disorder in children and adolescents: Is there a link? *Journal of Anxiety Disorders*, 25(4),

513–519. doi:10.1016/j.janxdis.2010.12.005

Mauritz, M. W., Goossens, P. J. J., Draijer, N., & van Achterberg, T. (2013).

Prevalence of interpersonal trauma exposure and trauma-related disorders in severe mental illness. *European Journal of Psychotraumatology*, 4(0).

doi:10.3402/ejpt.v4i0.19985

Merikangas, K. R., He, J., Burstein, M., Swanson, S. A., Avenevoli, S., Cui, L., ...

Swendsen, J. (2010). Lifetime prevalence of mental disorders in US adolescents: Results from the national comorbidity study-adolescent supplement (NCS-A). *Journal of the American Academy of Child and Adolescent Psychiatry*, 49(10), 980–989. doi:10.1016/j.jaac.2010.05.017

Pietrzak, R. H., Johnson, D. C., Goldstein, M. B., Malley, J. C., Rivers, A. J., Morgan,

C. A., & Southwick, S. M. (2010). Psychosocial buffers of traumatic stress, depressive symptoms, and psychosocial difficulties in veterans of Operations Enduring Freedom and Iraqi Freedom: The role of resilience, unit support, and postdeployment social support. *Journal of Affective Disorders*, 120(1-3), 188–192. doi:10.1016/j.jad.2009.04.015

Sigfusdottir, I.-D., Farkas, G., & Silver, E. (2004). The role of depressed mood and anger in the relationship between family conflict and delinquent behavior.

Journal of Youth and Adolescence, 33(6), 509–522.

doi:10.1023/B:JOYO.0000048065.17118.63

Sigfusdottir, I.-D., & Silver, E. (2009). Emotional reactions to stress among

adolescent boys and girls: An examination of the mediating mechanisms proposed by general strain theory. *Youth & Society*, 40(4), 571–590.

doi:10.1177/0044118X08327583

Smith, A. S., & Wang, Z. (2013). Hypothalamic oxytocin mediates social buffering of the stress response. *Biological Psychiatry*. doi:10.1016/j.biopsych.2013.09.017

- Sperry, D. M., & Widom, C. S. (2013). Child abuse and neglect, social support, and psychopathology in adulthood: A prospective investigation. *Child Abuse & Neglect*, 37(6), 415–425. doi:10.1016/j.chiabu.2013.02.006
- Tyrka, A. R., Wyche, M. C., Kelly, M. M., Price, L. H., & Carpenter, L. L. (2009). Childhood maltreatment and adult personality disorder symptoms: Influence of maltreatment type. *Psychiatry Research*, 165(3), 281–287. doi:10.1016/j.psychres.2007.10.017
- Wittchen, H.-U., & Jacobi, F. (2005). Size and burden of mental disorders in Europe—a critical review and appraisal of 27 studies. *European Neuropsychopharmacology*, 15(4), 357–376. doi:10.1016/j.euroneuro.2005.04.012
- Yu, Y., Peng, L., Chen, L., Long, L., He, W., Li, M., & Wang, T. (2014). Resilience and social support promote posttraumatic growth of women with infertility: The mediating role of positive coping. *Psychiatry Research*, 215(2), 401–405. doi:10.1016/j.psychres.2013.10.032

Appendix

22. Hversu auðvelt eða erfitt væri fyrir þig að fá eftirtalið hjá foreldrum þínum?

(Merktu í EINN reit í hverjum lið)

a) Umhyggju og hlýju

Mjög erfitt	Frekar erfitt	Frekar auðvelt	Mjög auðvelt
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

b) Samræður um persónuleg málefni

Mjög erfitt	Frekar erfitt	Frekar auðvelt	Mjög auðvelt
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

c) Ráðleggingar varðandi námið

Mjög erfitt	Frekar erfitt	Frekar auðvelt	Mjög auðvelt
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

d) Ráðleggingar varðandi önnur verk (viðfangsefni) þín

Mjög erfitt	Frekar erfitt	Frekar auðvelt	Mjög auðvelt
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

e) Aðstoð við ýmis verk

Mjög erfitt	Frekar erfitt	Frekar auðvelt	Mjög auðvelt
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

23. Hversu auðvelt eða erfitt væri fyrir þig að fá eftirtalið hjá vinum þínum?

(Merktu í EINN reit í hverjum lið)

a) Umhyggju og hlýju

Mjög erfitt	Frekar erfitt	Frekar auðvelt	Mjög auðvelt
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

b) Samræður um persónuleg málefni

Mjög erfitt	Frekar erfitt	Frekar auðvelt	Mjög auðvelt
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

c) Ráðleggingar varðandi námið

Mjög erfitt	Frekar erfitt	Frekar auðvelt	Mjög auðvelt
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

d) Ráðleggingar varðandi önnur verk (viðfangsefni) þín

Mjög erfitt	Frekar erfitt	Frekar auðvelt	Mjög auðvelt
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

e) Aðstoð við ýmis verk

Mjög erfitt	Frekar erfitt	Frekar auðvelt	Mjög auðvelt
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

31. Hversu oft varðst þú var/vör við eftirfarandi vanlíðan eða óþægindi síðastliðna viku?

(Merktu í EINN reit í hverjum lið)

(Nær) aldrei Sjaldan Stundum Oft

a) Taugaóstyrk

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------

b) Skyndilega hræðslu án nokkurrar ástæðu

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------

c) Þú varst uppspennt/ur ^[1]_[SEP]

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------

- d) Þú varst leið/ur eða hafðir lítinn áhuga á að gera hluti ☐ ☐ ☐ ☐
- e) Þú hafðir litla matarlyst^[SEP]
☐ ☐ ☐ ☐
- f) Þér fannst þú einmana^[SEP]
☐ ☐ ☐ ☐
- g) Þú grést auðveldlega eða langaði til að gráta^[SEP]
☐ ☐ ☐ ☐
- h) Þú áttir erfitt með að sofna eða halda þér sofandi^[SEP]
☐ ☐ ☐ ☐
- i) Þú varst niðurdregin(n) eða dapur/döpur^[SEP]
☐ ☐ ☐ ☐
- j) Þú varst ekki spenntur fyrir að gera nokkurn hlut^[SEP]
☐ ☐ ☐ ☐
- k) Þér fannst þú vera hægfara eða hafa lítinn mátt^[SEP]
☐ ☐ ☐ ☐
- l) Þér fannst framtíðin vonlaus^[SEP] ☐ ☐ ☐ ☐
- m) Þú hugsaðir um að stytta þér aldur ☐ ☐ ☐ ☐

35. Hefur eitthvað af eftirfarandi komið fyrir þig? (Merktu í EINN reit eða FLEIRI eftir því sem við á)

- a) Þú lent í alvarlegu slysi
 Já, á síðustu 30 dögum ☐ Já, á síðustu 12 mánuðum ☐ Já, fyrir meira en 12 mánuðum ☐ Nei ☐
- b) Þú átt í alvarlegum veikindum
 Já, á síðustu 30 dögum ☐ Já, á síðustu 12 mánuðum ☐ Já, fyrir meira en 12 mánuðum ☐ Nei ☐
- c) Foreldrar þínir skilið eða slitið sambúð
 Já, á síðustu 30 dögum ☐ Já, á síðustu 12 mánuðum ☐ Já, fyrir meira en 12 mánuðum ☐ Nei ☐
- d) Þú rifist alvarlega við foreldra þína
 Já, á síðustu 30 dögum ☐ Já, á síðustu 12 mánuðum ☐ Já, fyrir meira en 12 mánuðum ☐ Nei ☐
- e) Þú orðið vitni að alvarlegu rifrildi foreldra þinna^[SEP]
 Já, á síðustu 30 dögum ☐ Já, á síðustu 12 mánuðum ☐ Já, fyrir meira en 12 mánuðum ☐ Nei ☐
- f) Þú orðið vitni að líkamlegu ofbeldi^[SEP] á heimilinu þar sem fullorðinn átti hlut að máli
 Já, á síðustu 30 dögum ☐ Já, á síðustu 12 mánuðum ☐ Já, fyrir meira en 12 mánuðum ☐ Nei ☐
- g) Þú lent í líkamlegu ofbeldi á heimilinu þar sem fullorðinn átti hlut að máli
 Já, á síðustu 30 dögum ☐ Já, á síðustu 12 mánuðum ☐ Já, fyrir meira en 12 mánuðum ☐ Nei ☐
- h) Foreldri eða systkyni þitt látist^[SEP]
 Já, á síðustu 30 dögum ☐ Já, á síðustu 12 mánuðum ☐ Já, fyrir meira en 12 mánuðum ☐ Nei ☐
- i) Vinur þinn látist^[SEP]
 Já, á síðustu 30 dögum ☐ Já, á síðustu 12 mánuðum ☐ Já, fyrir meira en 12 mánuðum ☐ Nei ☐
- j) Hætt með kærasta þínum/kærustu þinni^[SEP]
 Já, á síðustu 30 dögum ☐ Já, á síðustu 12 mánuðum ☐ Já, fyrir meira en 12 mánuðum ☐ Nei ☐

☐☐☐☐

k) Þér verið hafnað af vinum eða vinkonum^[1]_{SEP}

Já, á síðustu 30 dögum Já, á síðustu 12 mánuðum Já, fyrir meira en 12 mánuðum Nei

☐☐☐☐

l) Þú lent í viðskilnaði við vin þinn eða vinkonu m) Þú fengið óvenjuslæmacinkunn^[1]_{SEP}

Já, á síðustu 30 dögum Já, á síðustu 12 mánuðum Já, fyrir meira en 12 mánuðum Nei

☐☐☐☐

n) Faðir eða móðir misst atvinnu sína

Já, á síðustu 30 dögum Já, á síðustu 12 mánuðum Já, fyrir meira en 12 mánuðum Nei

☐☐☐☐

^[1]_{SEP}

o) Þú verið rekin(n) úr skóla

Já, á síðustu 30 dögum Já, á síðustu 12 mánuðum Já, fyrir meira en 12 mánuðum Nei

☐☐☐☐

p) Þú orðið fyrir kynferðislegri misnotkun/ofbeldi af hálfu fullorðins einstaklings^[1]

Já, á síðustu 30 dögum Já, á síðustu 12 mánuðum Já, fyrir meira en 12 mánuðum Nei

☐☐☐☐

q) Þú orðið fyrir kynferðislegri misnotkun/ofbeldi af hálfu jafnaldra þíns eða eldri unglings^[1]

Já, á síðustu 30 dögum Já, á síðustu 12 mánuðum Já, fyrir meira en 12 mánuðum Nei

☐☐☐☐