Appendix A

Study characteristics of research included in the meta-analysis

Table A1. Study characteristics of research included in the meta-analysis.

Authors	N	Sample description	Mean age	% of females	Personality measures	Sense of coherence measures
Bachem & Maercker, 2018	334	Bereaved people	43.73	87.40%	BFMM	OLQ-A & SOCS - R
Ebert et al., 2002	202	Students	20.7	70.79%	NEO-FFI	OLQ
Foldt at al. 2007	114	Community sample	42	100%	NEO-FFI	OLQ-A
Feidt et al., 2007	109	Community sample	42	0%	NEO-FFI	OLQ-A
Finogenow, 2013	240	Community sample	60.10	-	NEO-FFI	OLQ
Frommberger et al., 1999	51	Road traffic accident victims	-	-	MPT	OLQ
Grevenstein & Bluemke, 2015	1842	Community sample	28.11	85.50%	BFI-A	OLQ-A
Grevenstein et al., 2016	286	Students	15.00	-	FPI-R	OLQ-A
Grevenstein et al., 2018	1033	Community sample	41.83	75.20%	BFI-A	OLQ-A
Gruszczyńska, 2006	139	Community sample	38.04	57.55%	NEO-FFI	OLQ
Hochwälder, 2012	419	Community sample	47.91	100%	A 30-item scale developed by Shafer (1999) A 30-item scale	OLQ-A
	279	Community sample	48.98	0%	developed by Shafer (1999)	OLQ-A
Kase et al., 2018	1088	Community sample	20.35	51.47%	TIPI	OLQ
Kerksieck et al., 2017	8594	Catholic Pastoral Workers	-	25.10%	BFI-A	OLQ-A

Malik & Riaz, 2018	250	Community sample	39.40	51.20%	NEO-FFI	OLQ-A
McGee et al., 2018	268	Older adults	66.94	71.30%	BFI-A	SOCS - R
Oluyinka, 2011	452	Students	23.34	48.23%	NEO-PI	OLQ-A
Strohmaier et al., 2013	3793	Community sample	53.15	52.40%	EPI	OLQ or OLQ-A
Strümpfer & Mlonzi, 2001	141	Working adults	34.28	51.06%	IPIP	OLQ-A
Strümpfer et al., 1998	118	Students	21.01	98.30%	IPIP	OLQ & OLQ-A
	88	Employees	33.19	56.81%	IPIP	OLQ & OLQ-A
	40	Miners	-	0%	IPIP	OLQ & OLQ-A
Strümpfer et al., 2010	38	Police officers	-	0%	IPIP	OLQ & OLQ-A
	42	Special task force	-	0%	IPIP	OLQ & OLQ-A

Note. Personality trait measures: BFI-A - Big Five Inventory - abbreviated, BFMM - Big Five Mini Markers, EPI - Eysenck Personality

Inventory, FPI-R - Freiburger Personality Inventory, IPIP - International Personality Item Pool, NEO-FFI - NEO Five Factor Inventory, MPT -

Munich Personality Test, NEO-PI - NEO Personality Inventory, TIPI - Ten-Item Personality Inventory. Sense of coherence measures: OLQ -

Orientation to Life Questionnaire, OLQ-A – Orientation to Life Questionnaire – abbreviated, SOCS-R – Sense of Coherence Scale – revised.

References

- Bachem, R., & Maercker, A. (2018). Development and psychometric evaluation of a revised sense of coherence scale. *European Journal of Psychological Assessment*, *34*, 206–215. doi: 10.1027/1015-5759/a000323
- Ebert, S.A., Tukcer, D.C. & Roth, D.L. (2002). Psychological resistance factors as predictors of general health status and physical symptom reporting. *Psychology, Health and Medicine*, 7, 363 376. doi: 10.1080/13548500220139449
- Feldt, T., Metsäpelto, R.L., Kinnunen, U., & Pulkkinen, L. (2007). Sense of coherence and five-factor approach to personality: Conceptual relationships. *European Psychologist, 12*, 165–172. doi: 10.1027/1016-9040.12.3.165
- Finogenow, M. (2013). Personality traits and subjective health in retirement age The role of personal resources. *Polish Psychological Bulletin*, 44, 213-222. doi: 10.2478/ppb-2013-0024
- Frommberger, U., Stieglitz, R.D., Straub, S., Nyberg, E., Schlickewei, W., Kuner, E., Berger, M. (1999). The concept of "sense of coherence" and the development of posttraumatic stress disorder in traffic accident victims. *Journal of Psychosomatic Research*, *46*, 343-348. doi 10.1016/S0022-3999(98)00117-2
- Grevenstein, D., & Bluemke, M. (2015). Can the Big Five explain the criterion validity of Sense of Coherence for mental health, life satisfaction, and personal distress? *Personality and Individual Differences*, 77, 106–111. doi: 10.1016/j.paid.2014.12.053

- Grevenstein, D., Bluemke, M., & Kroeninger-Jungaberle, H. (2016). Incremental validity of sense of coherence, neuroticism, extraversion, and general self-efficacy: Longitudinal prediction of substance use frequency and mental health. *Health and Quality of Life Outcomes, 14* (9), 1-14. doi:10.1186/s12955-016-0412-z
- Grevenstein, D., Aguilar-Raab, C., & Bluemke, M. (2018). Mindful and resilient? Incremental validity of sense of coherence over mindfulness and big five personality factors for quality of life outcomes. *Journal of Happiness Studies*. *19*, 1883-1902. doi: 10.1007/s10902-017-9901-y
 Gruszczyńska, E. (2006). What is measured by the Orientation to Life Questionnaire? Construct validity of the instrument for the Sense of

Coherence measurement. Polish Psychological Bulletin, 27, 74-83.

- Hochwälder, J. (2012). The contribution of the big five personality factors to sense of coherence. *Personality and Individual Differences*, 53, 591–596. doi: 10.1016/j.paid.2012.05.008
- Kase, T., Ueno, Y., & Oishi, K. (2018). The overlap of sense of coherence and the Big Five personality traits: A confirmatory study. *Health Psychology Open, 5 (2),* 1-4. doi:10.1177/2055102918810654
- Kerksieck, P., Büssing, A., Frick, E., Jacobs, C., & Baumann, K. (2017). Reduced sense of coherence due to neuroticism: Are transcendent beliefs protective among catholic pastoral workers? *Journal of Religion and Health*, *56*, *1956-1970*. doi: 10.1007/s10943-016-0322-8
- Malik, S., & Riaz, M.N. (2018). Predictors of mental well-being among adults in Pakistan and Qatar: Cross-cultural study on salutogenesis model of medical health. *Pakistan Journal of Medical Research*, *57*, 50-54.

- Mc Gee, S.L., Höltge, J., Maercker, A., & Thoma, M.V. (2018) Evaluation of the revised Sense of Coherence scale in a sample of older adults: A means to assess resilience aspects, *Aging & Mental Health*, *22*, 1438-1447. doi: 10.1080/13607863.2017.1364348
- Oluyinka, O. (2011). Psychological predictors of attitude towards seeking professional psychological help in a Nigerian university student population. *South African Journal of Psychology*, *41*, 310-327. doi: 10.1177/008124631104100306
- Strohmaier, J., Amelang, M., Hothorn, L.A., Witt, S.H., Nieratschker, V., Gerhard, D., ... Schulze, T.G. (2013). The psychiatric vulnerability gene CACNA1C and its sex-specific relationship with personality traits, resilience factors and depressive symptoms in the general population. *Molecular Psychiatry*, *18*, 607-613. doi: 10.1038/mp.2012.53
- Strümpfer, D.J.W., & Mlonzi, E.N. (2001). Antonovsky's sense of coherence scale and job attitudes: Three studies. South African Journal of Psychology, 31, 30-37. doi: 10.1177/008124630103100204
- Strümpfer, D.J.W., Gouws, J.F. &Viviers, M. R. (1998). Antonovsky's Sense of Coherence Scale related to negative and positive affectivity. *European Journal of Personality*, *12*, 457-480. doi: 10.1002/(SICI)1099-0984(199811/12)12:63.3.CO;2-R
- Strümpfer, D.J.W., Eiselen, R.J., Meiring, D., & Phalatse, J.S. (2010). Validating measures of psychological well-being by contrasting samples employees in hazardous and less hazardous work. *Journal of Psychology in Africa, 20*, 23-32. doi: 10.1080/14330237.2010.10820339

Appendix B The results of the moderation analyses

Table B1. Summary of univariate meta-regression moderator analyses.

Moderators		<i>r</i> , <i>k</i> , CI (categorical moderators) β , SE, Z, k, CI (continuous moderators)		R^2
	Ne	euroticism & sense of coherence		
Group type	Non-clinical Mental disorders	r=55; k=18; 95% CI [61,50] r=43; k=2; 95% CI [52,32]	.99	.00
Age	From 15 to 66.94	β = .001, SE= .004, Z= .15, k=16, 95% CI [007, .008]	.02	.00
Gender	From 0% to 100%	β = .002, SE= .001, Z= 1.31, k=19, 95% CI [001, .004]	1.71	.00
	E	xtraversion sense of coherence		
Group type	Non-clinical Mental disorders	r=.27; k=14; 95% CI [.22, .32] r=.26; k=2; 95% CI [.17, .35]	.01	.00
Age	From 15 to 66.94	$\beta = .000, SE = .002, Z = .17, k = 15, 95\%$ CI [004, .005]	.03	.00
Gender	From 0% to 100%	β = .001, SE= .001, Z=.96, k=15, 95% CI [001, .002]	.92	.21
	Openness	s to experience and sense of coherence		
Group type	Non-clinical Mental disorders	r= .13; k=10; 95% CI [.08, .17] r= .22; k=1; 95% CI [.12, .32]	1.28	.04
Age	From 20.35 to 66.94	β =001, SE= .002, Z=21, k=11, 95% CI [005, .004]	.04	.00
Gender	From 0% to 100%	β = .000, SE= .001, Z=.50, k=12, 95% CI [001, .002]	.25	.00
	Agi	reeableness & sense of coherence		
Group type	Non-clinical Mental disorders	<i>r</i> = .29; <i>k</i> =9; 95% CI [.26, .32] <i>r</i> = .27; <i>k</i> =1; 95% CI [.17, .37]	.11	.00
Age	From 20.35 to 66.94	β =003, SE= .002, Z= -1.72, k=10, 95% CI [006, .000]	2.95	.09

The Big Five and sense of coherence

Gender	From 0% to 100%	β =001, SE= .001, Z=72, k=11, 95% CI [002, .001]	.51	.00
	Cons	cientiousness & sense of coherence		
Group type	Non-clinical Mental disorders	<i>r</i> = .33; <i>k</i> =10; 95% CI [.28, .38] <i>r</i> = .27; <i>k</i> =1; 95% CI [.17, .37]	.48	.00
Age	From 20.35 to 66.94	β =005, SE= .003, Z= -1.81, k=11, 95% CI [009, .000]	3.27	.00
Gender	From 0% to 100%	β =001, SE= .001, Z=-1.11, k=12, 95% CI [003, .001]	1.22	.00
		Neuroticism & manageability		
Group type	Non-clinical Mental disorders	-		
Age	From 20.35 to 66.94	β =003, SE= .005, Z=51, k=4, 95% CI [012, .007]	.26	.00
Gender		-		
		Extraversion & manageability		
Group type	Non-clinical			
	Mental disorders	R_{-} 001 SE - 001 Z - 76 k - 4 05% CI [002 004]	57	00
Gender	110111 20:33 10 00:94	p=.001, SL =.001, Z =.70, k =4, 95% CI [002, .004]	.57	.00
	NT 11 1	Openness & manageability		
Group type	Non-clinical Mental disorders	-		
Age	From 20.35 to 66.94	β =000, SE= .002, Z=02, k=4, 95% CI [003, .003]	.00	.00
Gender		-		
		$\Delta \sigma$ reeableness & manageability		
Carona trans	Non-clinical			
Group type	Mental disorders	-		
Age	From 20.35 to 66.94	β =003, SE= .003, Z= -1.11, k=4, 95% CI [008, .002]	1.24	.20
Gender		-		

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Conscien	fiousness	X	manageability
Combolon	nousness	\sim	managoaomi

Group type	Non-clinical Mental disorders	-		
Age	From 20.35 to 66.94	β =001, SE= .003, Z=53, k=4, 95% CI [006, .004]	.28	.00
Gender		-		
			-	

Note: β -standardized regression coefficient, CI - confidence interval, k - number of effect sizes, Q - the test of the between-group variance

differences, *r* - effect sizes, R^2 - the coefficient of determination, *SE* - standard error, Z - Z value (β /*SE*). * $p \le .05$, ** $p \le .01$, *** $p \le .001$.

Appendix C

Summary of publication bias analyses

Table C1. Effects of publication bias on the relationship between the Big Five personality traits and generalized self-efficacy.

	Rosenthal's fa	Egger's regression	
Outcome	Number of additional effect sizes to bring null relationship	Rosenthal's critical values	-
Neuroticism & sense of coherence	8 520	5*21+10 = 115	-1.00
Extraversion & sense of coherence	3 121	5*17+10 = 95	1.77
Openness & sense of coherence	447	5*12+10 = 70	.95
Agreeableness & sense of coherence	2 019	5*11+10 = 65	.50
Conscientiousness & sense of coherence	2 496	5*12+10 = 70	.97
Neuroticism & manageability	404	5*4+10 = 30	-
Extraversion & manageability	145	5*4+10 = 30	-
Openness & manageability	61	5*4+10 = 30	-
Agreeableness & manageability	140	5*4+10 = 30	-
Conscientiousness & manageability	52	5*4+10 = 30	-
Note: ^{pb} Number of additional effects sizes exceed	Desenthal's' aritical value ** n < 01 (two	tailed value)	

Note: ^{p0} Number of additional effects sizes exceed Rosenthal's' critical value. $p \leq .01$ (two-tailed value).



Figure 1. Egger's funnel plot representing publication bias in neuroticism-sense of coherence relationship.



Figure 2. Egger's funnel plot representing publication bias in extraversion-sense of coherence association.



Figure 3. Egger's funnel plot representing publication bias in openness to experience-sense of coherence relation.



Figure 4. Egger's funnel plot representing publication bias in agreeableness-sense of coherence association.



Figure 5. Egger's funnel plot representing publication bias in conscientiousness-sense of coherence relationship.