Coping with Psychosomatic Symptoms: The impact on Quality of Life and the Buffering Role of Psychological Flexibility

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Background

- Somatic symptom and illness anxiety symptomatology influence the individuals' *functioning in the psychological, social, professional and other domains*, mostly due to avoidance of daily activities in order to prevent worsening of symptoms, frequent health care visits and high comorbidity with other psychological disorders (e.g. Terluin, van Rhenen, Anema, & Taris, 2011; Woolfolk &Allen, 2010).
- *Prevalence* in general population reported in DSM-5 (APA, 2013)
  - 6-7% for somatic symptom disorder
  - 1.3-10% for illness anxiety disorder
- Investigation of the behavioural patterns and coping strategies → a step towards understanding potential maintenance mechanisms of psychosomatic symptomatology
- Individuals with increased levels of health anxiety or somatisation were found to utilize *coping strategies* such as cognitive avoidance, rumination, catastrophizing, self-blame, other blame, expressive suppression, and impact minimisation, as well as more adaptive strategies such as reappraisal, and planning (Fergus & Valentiner, 2010; Gorgen, Hiller, & Witthoft, 2013; Hall, Kuzminskyte, Pedersen, Ørnbøl, & Fink, 2011; Marcus, Hughes, & Arnaus, 2008)
- Evidence suggests that *flexibility in the use of emotion regulation and coping strategies* is related to adaptive coping and adjustment (Bonanno, et al., 2004; Thompson, 1994)
- Related to this: ***Psychological Flexibility***: adaptation to changing situational demands, reconfigurating mental resources, shifting perspective and equilibrating competing needs and values (Kashdan & Rottenberg, 2010)
  - Positively linked to well-being and better Quality of Life (QoL), reduced negative emotions, anxiety symptoms, somatization and avoidance behaviors (Masuda & Tully, 2012; Shapiro, Oman, Thoresen, Plante, & Flinders, 2008)

Aim: to investigate the impact of somatic symptom and illness anxiety symptomatology on QoL, potential differences on the coping strategies utilized by these individuals and the role of psychological flexibility

Methods

Participants

- Greek-Cypriot community volunteers (initial *N*=295; Female=182; M_{age} = 44.84, *SD* = 1.17), recruited for the purposes of a larger epidemiological study on anxiety disorders in Cyprus

Procedure

- Stratified random sampling through the telephone catalogues
- Printed questionnaires sent to the participants with a return envelope

Measures

- Somatic Symptom and Illness Anxiety Symptomatology: Psychiatric Diagnostic Screening Questionnaire (PDSQ; Forehand & Long, 2010)
- Psychological Flexibility: Acceptance and Action Questionnaire (AAQ-II; Bond et al., 2011)
- Coping: Brief COPE (Carver, 1997)
- Quality of Life: World Health Organisation's Quality of Life Instrument, Short Form (WHO-QOL-BREF; Harper, Power, & Group, 1998)
- Questions about demographics and the health status

Results

Adjusted means and differences between the four groups in the four domains of QoL, after controlling for participants' severity of medical conditions (*N*=61)

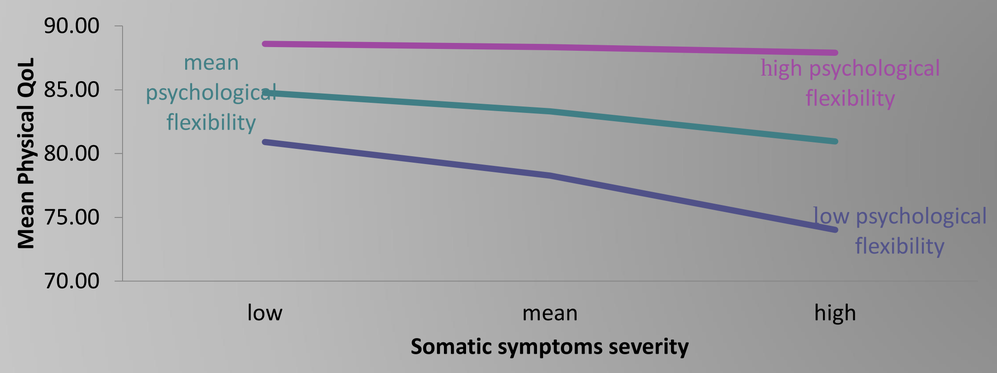
	Control (*n*=23)	Illness anxiety (*n*=18)	Somatic symptoms (*n*=9)	Both (*n*=11)			
	M [95% C.I.]	*M* [95% C.I.]	*M* [95% C.I.]	*M* [95% C.I.]	*F*	*p*	η_p^2
Physical QoL	78.14[a] [72.23, 84.05]	72.813 [66.17, 78.09]	59.44[a] [50.66, 68,23]	72.38 [63.55, 81.21]	3.94	.01	.17
Psychological QoL	71.60 [64.13, 79.08]	67.30 [59.76, 74.82]	58.27 [47.16, 69.38]	57.72 [46.55, 68.89]	1.59	.20	.08
Social QoL	67.51 [58.52, 76.51]	64.43 [55.37, 73.49]	65.19 [51.82, 78.55]	80.75 [67.32, 94.19]	1.55	.21	.08
Environmental QoL	69.59 [63.51, 75.66]	61.63 [55.50, 67.75]	59.57 [50.53, 68.60]	66.04 [56.96, 75.12]	1.74	.17	.09

Note. [a]Significant difference as indicated by PostHoc univariate analyses between the four groups. Because the assumptions of the homogeneity of covariance matrices and of the independence of the covariate and the homogeneity of regression slopes were not met, follow-up analyses were carried out, omitting the covariate from the analysis, indicating similar results as the above. The assumptions of normality of distributions of the dependent variables and homogeneity of variance were met for this analysis.

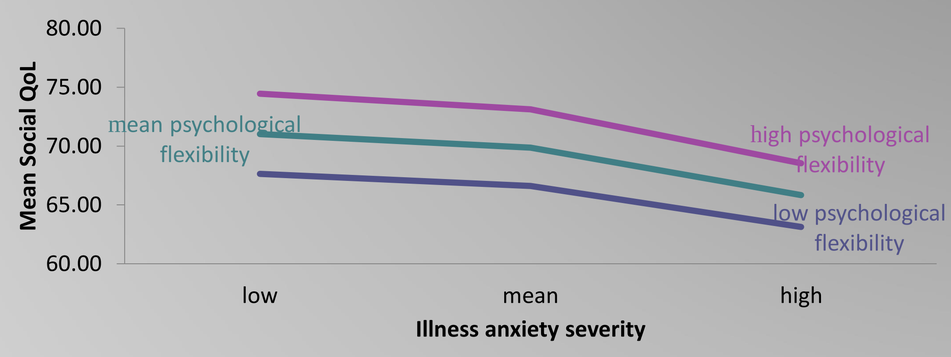
Adjusted means and differences between the four groups in coping strategies and psychological flexibility, after controlling for participants' severity of medical conditions (*N*=95)

	Control (*n*=30)	Illness anxiety (*n*=31)	Somatic symptoms (*n*=17)	Both (*n*=17)			
	M [95% C.I.]	*M* [95% C.I.]	*M* [95% C.I.]	*M* [95% C.I.]	*F*	*p*	η_p^2
Support seeking	2.08 [1.79, 2.38]	2.30 [2.02, 2.58]	2.22 [1.84, 2.60]	2.32 [1.91, 2.74]	.46	.71	.02
Avoidance	1.91 [1.67, 2.14][abc]	2.44 [2.21, 2.27][a]	2.47 [2.17, 2.78][b]	2.68 [2.35, 3.01][c]	5.57	.00	.16
Negative affect	2.41 [2.19, 2.62]	2.60 [2.39, 2.81]	2.39 [2.11, 2.67]	2.84 [2.54, 3.15]	2.25	.09	.07
Behavioural disengagement	1.26 [1.04, 1.48]	1.63 [1.42, 1.84]	1.74 [1.45, 2.02]	1.71 [1.40, 2.02]	3.15	.03	.10
Psychological flexibility	53.69 [50.34, 57.03][abc]	46.05 [42.86, 49.25][a]	46.13 [41.83, 50.43][b]	41.41 [36.75, 46.06][c]	6.37	.00	.18

Note. [abc]Significant differences as indicated by Post Hoc univariate analyses between the four groups. For this analysis, normality of distribution for dependent variables, homogeneity of variance (except of the behavioural disengagement variable) and homogeneity of covariance were met. Homogeneity of regression slopes and the independence of the covariate was not met, however, follow-up analyses omitting the covariate from the analysis, indicated similar results as above.



The moderating role of psychological flexibility (*B*=0.54 [0.33, 0.75], *t*=5.25, *p*<.001) on the effect of somatic symptoms severity (*B*=-2.63 [-4.90, -0.35], *t*=-2.29, *p*<.05) on physical QoL (Psychological flexibility x Somatic symptom severity: *B*=0.23 [0.04, 0.42], *t*=2.37, *p*<.05), R^2=.39



The moderating role of psychological flexibility (*B*=1.16 [0.83, 1.49], *t*=6.91, *p*<.001) on the effect of illness anxiety severity (*B*=-3.87 [-7.59, -0.16], *t*=-2.07, *p*<.05) on social QoL (Psychological flexibility x Illness anxiety severity: *B*=-0.56 [-1.02, -0.10], *t*=-2.43, *p*<.05), R^2=.36

Discussion

- ***QoL:*** Significant differences were only found in the physical domain, with the somatic symptoms group showing decreased physical QoL, compared to the control group
- ***Coping strategies:*** Significant differences found in avoidant coping strategies, with the groups meeting screening criteria for somatic symptom disorders utilizing avoidant coping in greater extend than the control group
- ***Psychological flexibility:*** **Si**gnificant difference between the groups meeting screening criteria, who reported lower levels of psychological flexibility, and the control group
  - Psychological flexibility buffers the impact of somatic symptoms severity on Physical QoL and the impact of illness anxiety severity on Social QoL

Clinical Implications

- Identification of psychological characteristics, behavioural patterns and coping approaches related to somatic symptom disorders, and to the functioning and QoL of individuals who present with this symptomatology, provide evidence about the maintenance mechanisms of the disorders
- Psychological flexibility and coping strategies are potential mechanisms that can be subjected to psychological interventions, based on cognitive-behavioural theories, and especially third wave therapies, such as acceptance and commitment therapy, aiming to improve QoL and reduce psychological distress as a consequence of somatic symptom disorders
  - Promising findings from studies that show the effectiveness of such interventions for the treatment of somatic symptom disorders (e.g. Eilenber, Krostrand, Fink, & Frostholm, 2013)

Future directions

- Replication of these findings in larger samples and clinical populations
- Investigation of the buffering role of adaptive coping strategies, such as positive reappraisal and planning and of an index of coping flexibility on the effect of psychosomatic symptomatology on QoL and other psychological outcomes

***References available upon request.**

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