Dimensional psychopathology of participants

Dimensional psychopathology of common mental disorders was assessed to ensure that the small samples were fully comparable between the two intervention groups. Adapted scales from the Patient Health Questionnaire (PHQ) were used for this purpose. As no Turkish version of the PHQ-15 was available, it was translated and culturally adapted into Turkish following the forward- and backward-translation method (Brislin, 1970).

Measures

The Patient Health Questionnaire's Depressive Symptoms Scale (PHQ-9). The severity of depressive symptoms was measured with the PHQ-9 (Kroenke et al., 2001), which is highly sensitive and specific for the identification of depressive disorder. Its nine items assess depressive symptoms in the last two weeks according to the DSM-IV criteria. Response categories range from 0 ('not at all') to 3 ('nearly every day'); sum scores range from 0 to 27. German and Turkish versions were available online (Pfizer Inc., n.d.). The validity of the German version has been proven repeatedly (e.g. Gräfe, Zipfel, Herzog, and Löwe, 2004). Reliability and validity of the Turkish version was acceptable (Yazıcı Güleç et al., 2012). Sum scores from the German and Turkish PHQ-9 versions have been shown to be fully comparable (Reich et al., 2018).

The Patient Health Questionnaire's Adapted Somatic Symptoms Scale (PHQ-15a). Somatoform symptoms were assessed using the PHQ-15 (Kroenke et al., 2002). This 15-item checklist assesses somatic symptoms which are typical for primary care patients (e.g. back pain, headache, chest pain). The items about menstrual pain and pain during sexual intercourse were omitted since they were considered as culturally inappropriate in previous studies. One item about health concerns was added. Considering the last four weeks, the severity of each symptom was rated from 0 ('not bothered at all') to 2 ('bothered a lot'); sum scores ranged from 0 to 28 in the present study. The German version was available online (Pfizer Inc., n.d.) and was found to be valid and well accepted (Gräfe et al., 2004). A Turkish version was translated as described above.

The Patient Health Questionnaire's Generalized Anxiety Disorder Scale (GAD-7). The Generalized Anxiety Disorder Scale (GAD-7) measures the frequency of anxiety symptoms during the last two weeks using seven items (Spitzer et al., 2006). While it was originally developed for the screening of generalized anxiety disorder, it also covers panic disorder, social anxiety disorder, and posttraumatic stress disorder. Response categories range from 0 ('not at all') to 3 ('nearly every day'); sum scores range from 0 to 21. The German version has been shown to be reliable and valid (Löwe et al., 2008). German and Turkish versions were available online (Pfizer Inc., n.d.).

Results of the dimensional assessment

Depressive, somatic, and anxiety symptoms were severe among the participating inpatients. There were no statistically significant differences between the experimental groups in terms of dimensional psychopathology (see Suppl. Table 1).

Supplementary Table 1: Dimensional psychopathology of participants.

	Active control intervention (*N* = 12)	Engagement intervention (*N* = 14)	Test statistic
Clinical characteristics (dimensional)			
PHQ-9 sum score	9-23, 16.0 (4.0)	11-27, 19.1 (4.4)	$t(24)$=1.92, p=.06
PHQ-15a sum score	10-26, 17.8 (4.8)	12-25, 18.2 (3.9)	$t(21)$=0.27, p=.79
GAD-7 sum score	12-21, 17.7 (3.3)	9-21, 18.0 (3.8)	U=95, p=.58

Note. Minimum to maximum, mean and standard deviation are given.

References

Gräfe, K., Zipfel, S., Herzog, W., & Löwe, B. (2004). Screening for psychiatric disorders with the Patient Health Questionnaire (PHQ). Results from the German validation study. *Diagnostica*, *50*(4), 171–181. https://doi.org/10.1026/0012-1924.50.4.171

Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2001). The PHQ-9: validity of a brief depression severity measure. *J Gen Intern Med*, *16*(16), 606–613.

Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2002). The PHQ-15: validity of a new measure for evaluating the severity of somatic symptoms. *Psychosomatic Medicine*, *64*(2), 258–266.

Löwe, B., Decker, O., Müller, S., Brähler, E., Schellberg, D., Herzog, W., & Herzberg, P. Y. (2008). Validation and standardization of the Generalized Anxiety Disorder Screener (GAD-7) in the general population. *Medical Care*, *46*(3), 266–274.

Pfizer Inc. (n.d.). *Patient Health Questionnaires (PHQ) Screeners*. Retrieved December 12, 2012, from https://www.phqscreeners.com/

Reich, H., Rief, W., Brähler, E., & Mewes, R. (2018). Cross-cultural validation of the German and Turkish versions of the PHQ-9: An IRT approach. *BMC Psychology*, *6*(26).

Spitzer, R. L., Kroenke, K., Williams, J. B. W., & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder: the GAD-7. *Archives of Internal Medicine*, *166*, 1092–1097.

Yazıcı Güleç, M., Güleç, H., Şimşek, G., Turhan, M., & Aydin Sünbül, E. (2012). Psychometric properties of the Turkish version of the Patient Health Questionnaire-Somatic, Anxiety, and Depressive Symptoms. *Comprehensive Psychiatry*, *53*(5), 623–629. https://doi.org/10.1016/j.comppsych.2011.08.002