Supplementary Information

Items Belonging to the Homework Rating Scale – Mobile Application Version

| Item |
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| 1. Quantity: I was able to do the activity |
| 2. Quality: I was able to do the activity well |
| 3. Difficulty: The activity was difficult for me |
| 4. Obstacles: I experienced obstacles in doing the activity |
| 5. Comprehension: I understood what to do for the activity |
| 6. Rationale: The reason for doing the activity was clear to me |
| 7. Collaboration: I had an active role in planning the activity |
| 8. Specificity: The guidelines for how to carry out the activity were specific |
| 9. Match with therapy goals: The activity matched with my goals for using the app |
| 10. Pleasure: I enjoyed the activity |
| 11. Mastery: I gained a sense of control over my problems |
| 12. Progress: The activity helped with my progress in using the app |

Note. Items are given a rating of 0 (*not at all*), 1 (*a little/somewhat*), 2 (*some/moderately/somewhat*), 3 (*a lot/very*), or 4 (*completely/extremely/extensive*).

Factor Loadings for the 12-item Homework Rating Scale – Mobile Application Version

	Factor 1	Factor 2	Factor 3
Item 1	.56		
Item 2	.62		
Item 3			.69
Item 4			1.00
Item 5		.77	
Item 6	.40	.76	
Item 7	.62		
Item 8	.47	.65	
Item 9	.69	.45	
Item 10	.71	.38	
Item 11	.78		
Item 12	.81		

MoodMission Screenshots Showing the Two Levels of Support
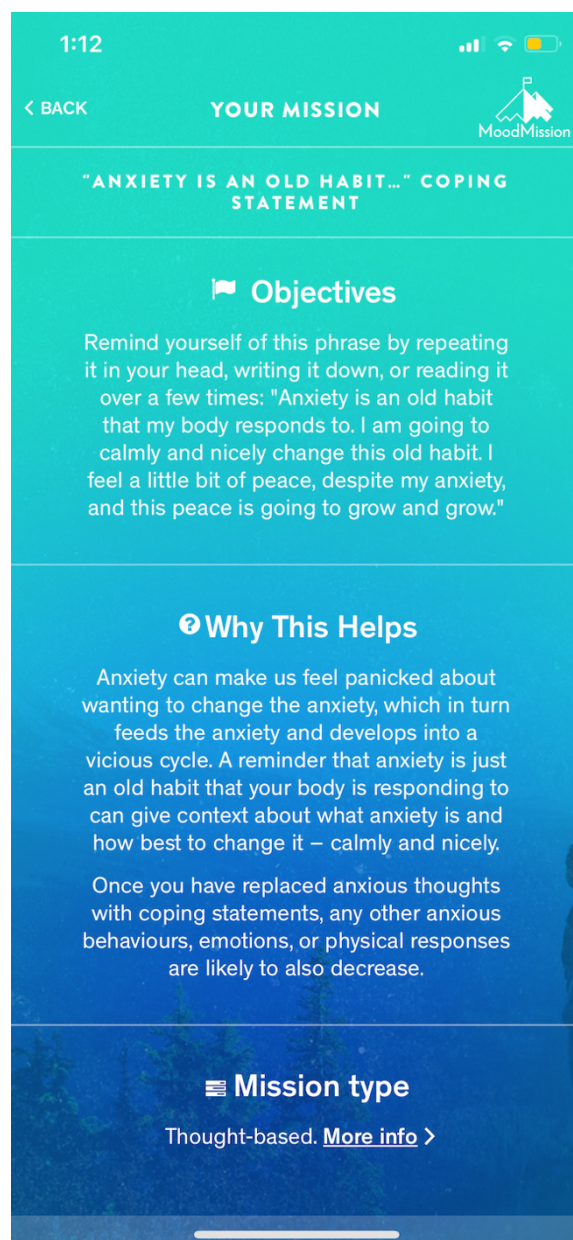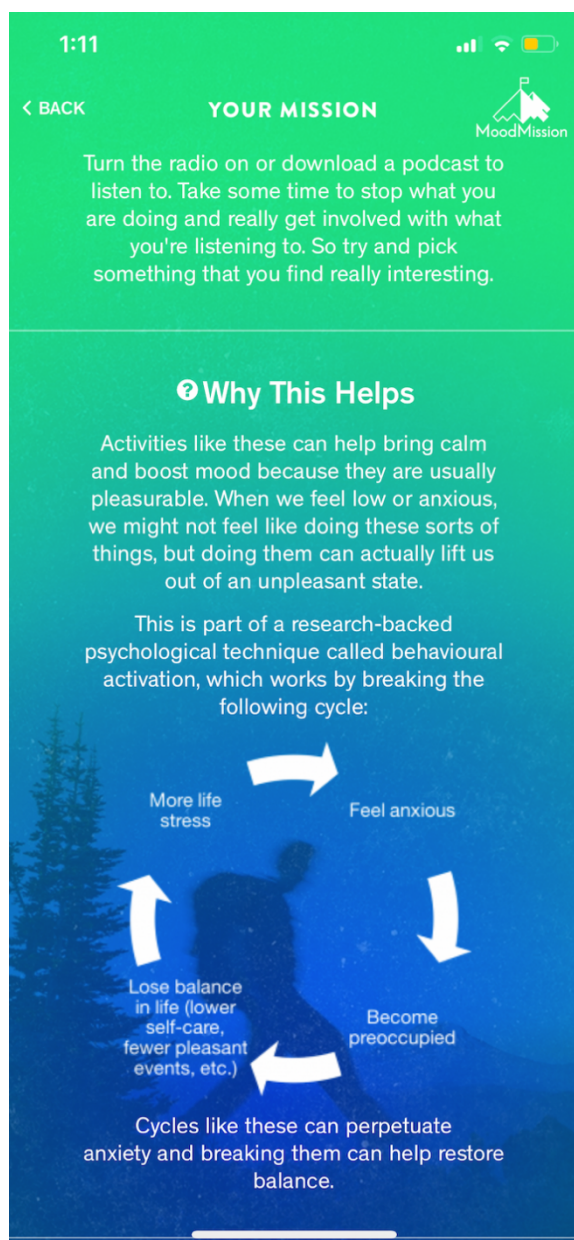
Note. The Mission shown in the left screenshot contains both diagram and text, so would be given a level of support coding of one. The screenshot on the right is of a Mission that contains text only, with this Mission therefore being given a coding of zero.

Mean and Standard Deviation Scores for the Homework Rating Scale – Mobile Application

Version Items

Item	M	SD
1. Quantity: I was able to do the activity	2.22	0.91
2. Quality: I was able to do the activity well	2.08	0.89
3. Difficulty: The activity was difficult for me	1.18	0.91
4. Obstacles: I experienced obstacles in doing the activity	1.35	0.88
5. Comprehension: I understood what to do for the activity	2.76	1.00
6. Rationale: The reason for doing the activity was clear to me	2.70	0.95
7. Collaboration: I had an active role in planning the activity	1.94	1.07
8. Specificity: The guidelines for how to carry out the activity were specific	2.52	0.92
9. Match with therapy goals: The activity matched with my goals for using the app	2.35	0.95
10. Pleasure: I enjoyed the activity	2.30	0.87
11. Mastery: I gained a sense of control over my problems	2.01	1.00
12. Progress: The activity helped with my progress in using the app	2.13	0.96

Note. Items are scored on a range of zero to four.

Mean and Standard Deviation Scores for the Questionnaires

Questionnaire		*n*	*M*	*SD*	95% CI
HRS-MA					
	Engagement subscale	226	6.83	2.19	[6.54, 7.12]
	Beliefs subscale	226	12.27	3.89	[11.76, 12.78]
	Consequences subscale	226	6.44	2.47	[6.11, 6.76]
MHR		1229	5.57	2.10	[5.45, 5.68]
SUDS					
	Pre-Mission	1229	5.92	2.10	[5.80, 6.03]
	Post-Mission	1229	4.52	2.15	[4.40, 4.64]
	Change	1229	1.40	1.97	[-1.51, -1.29]
PHQ-9					
	Baseline	235	13.42	5.97	[12.65, 14.19]
	30-day	235	12.93	6.25	[12.13, 13.74]
	Change	235	0.49	5.62	[-0.23, 1.21]
GAD-7					
	Baseline	234	10.65	5.02	[10.01, 11.30]
	30-day	234	10.77	5.60	[10.04, 11.49]
	Change	234	-0.11	4.66	[-0.71, 0.49]
WEMWBS					
	Baseline	59	36.32	8.94	[33.99, 38.65]
	30-day	59	36.34	8.38	[34.16, 38.52]
	Change	59	0.02	8.42	[-2.18, 2.21]

Note. CI = confidence interval. HRS-MA = Homework Rating Scale – Mobile Application Version. MHR = Mission Helpfulness Rating scale. SUDS = Subjective Units of Distress Scale. PHQ-9 = Patient Health Questionnaire. GAD-7 = Generalised Anxiety Disorder scale. WEMWBS = Warwick-Edinburgh Mental Well-being Scale. For the MHR and SUDS, *n* refers to the number of Missions. For the HRS-MA, PHQ-9, GAD-7, and WEMWBS, *n* refers to the number of participants. Descriptive statistics were based on participants who completed all questionnaire items. The SUDS change score was calculated by subtracting the

post-Mission scores from the pre-Mission scores, the PHQ-9 and GAD-7 change scores were

calculated by subtracting the 30-day scores from the baseline scores, and the WEMWBS

change score was calculated by subtracting the baseline scores from the 30-day scores.