Appendix (Barth et al.; ETS)

APPENDIX Table 1. Description of the 5 final items in English and German

Table 1. Description of the 5 final items in English and German

Description: The overarching construct of ETS is treatment-related outcome expectation of patients. Outcomes of interest for patients are coping (item 1), vitality (item 3) and physical health (item 4). Two items (items 2 and 5) capture the reduction of patient complaints, either an absence or a considerable reduction thereof. The scale can be adapted to specific treatments of interest. Instead of the term "treatment", a specific term can be used (e.g., acupuncture, counselling, or physiotherapy). We used the term complaints [German Beschwerden] as previously used by other authors as in the symptom checklist (SCL-90-R)[46]. Therefore, any type of complaint can be captured and allow the use of this instrument across patient groups and settings. The term complaints can be adapted if needed to the clinical situation if one specific target symptom is predominant (e.g., pain, depression, or nausea). The scale should be used in a clinical setting by patients with sufficient German or English language skills.

English version

There are several statements below that capture your expectations about the [acupuncture] treatment. Please indicate to what extent these statements apply to you personally. **There are no right or wrong answers. We are only interested in your current _personal_ thoughts.**

Please select for each statement _one_ response.

1. I expect the treatment [acupuncture] will help me to cope with my complaints.

partially disagree	partially agree	agree	definitely agree
❑	❑	❑	❑

2. I expect the treatment [acupuncture] will make my complaints disappear.

partially disagree	partially agree	agree	definitely agree
❑	❑	❑	❑

3. I expect the treatment [acupuncture] will improve my energy.

partially disagree	partially agree	agree	definitely agree
❑	❑	❑	❑

4. I expect the treatment [acupuncture] will improve my physical performance.

partially disagree	partially agree	agree	definitely agree
❑	❑	❑	❑

5. I expect that after the treatment [acupuncture], my complaints will be considerably better.

partially disagree	partially agree	agree	definitely agree
❑	❑	❑	❑

*We used the term acupuncture in our study. The general version of ETS uses the term treatment.

Im Folgenden finden Sie einige Aussagen darüber, was man von einer Behandlung [Akupunktur] erwarten kann. Geben Sie bitte an, inwieweit die einzelnen Aussagen für Sie persönlich zutreffen. **Es gibt keine richtigen und falschen Antworten. Uns interessiert nur, was Sie persönlich denken.**

*Bitte wählen Sie für jede Aussage **eine** Antwort aus.*

1. Ich erwarte, dass ich durch die Behandlung [Akupunktur] mit meinen Beschwerden besser umgehen kann.

trifft eher nicht zu	trifft eher zu	trifft sehr zu	trifft völlig zu
❑	❑	❑	❑

2. Ich erwarte, dass meine Beschwerden durch die Behandlung [Akupunktur] verschwinden.

trifft eher nicht zu	trifft eher zu	trifft sehr zu	trifft völlig zu
❑	❑	❑	❑

3. Ich erwarte, dass sich meine Energie durch die Behandlung [Akupunktur] verbessert.

trifft eher nicht zu	trifft eher zu	trifft sehr zu	trifft völlig zu
❑	❑	❑	❑

4. Ich erwarte durch die Behandlung [Akupunktur] eine verbesserte körperliche Leistungsfähigkeit.

trifft eher nicht zu	trifft eher zu	trifft sehr zu	trifft völlig zu
❑	❑	❑	❑

5. Ich erwarte, dass sich nach der Behandlung [Akupunktur] meine Beschwerden deutlich verbessern.

trifft eher nicht zu	trifft eher zu	trifft sehr zu	trifft völlig zu
❑	❑	❑	❑

*Wir haben den Begriff Akupunktur in unserer Studie verwendet. Die allgemeine Version des ETS verwendet den Begriff Behandlung.

<u>Scoring of the questionnaire</u>

The values from the 5 single items are summed to build the ETS sum score (min 5, max 20). If one item has a missing value, the sum score can be calculated. Therefore, the values of the remaining 4 items are summed, divided by 4 and multiplied by 5. However, multiple imputation procedures to impute the missing value should be preferred over this re-calculation. In the case of more than one missing value, imputation procedures are needed, and no manual recalculation should be considered.

APPENDIX Table 2: Sample characteristics in scales in subjects with current pain (N = 102)

	Median Mean (SD)
ETS (9 items) (range 9–36)	22 22.63 (.64)
ETS (5 items) (range 5–20)	11 11.62 (4.01)
AES (range 4–20)	12.0 11.82 (4.10)
PHQ-9 (range 0–27)	7 8.46 (6.06)
RS-11 (range 11–77)	60 58.36 (11.13)
BEE (range 5–20)	14 13.71 (2.90)
PSM (range 5–25)	11 12.77 (6.13)
LOT-R Optimism (range 0–12)	8 7.93 (2.77)
LOT-R Pessimism (range 0–12)	8 7.93 (2.38)
NEO-FFI Neuroticism (range 0–48)	21 21.08 (8.19)
NEO-FFI Openness to experience (range 0–44)	30 29.84 (5.77)

Expectation for Treatment Scale; AES= Acupuncture Expectancy Scale; LOT-R= Life-Orientation Test; PHQ-9= Patient Health Questionnaire-9; RS-11= Die Resilienzskala - Ein Fragebogen zur Erfassung der psychischen Widerstandsfähigeit als Personenmerkmal; BEE= Body-Efficacy Expectation; PSM= Perceived Sensitivity to Medicines Scale; NEO-FFI= NEO Five-Factor Inventory

Appendix Table 3. Scale and factor analysis of the 9-item ETS for subjects with current pain (N = 102)

Item	Mean (SD)	Item-total correlation corrected	Cronbach`s alpha if item deleted	Factor loading	Retest ICC [95%–CI]
Item 1	2.71 (1.0)	.782	.920	.839	.684 [.499, .810]
Item 2	2.66 (.93)	.816	.918	.863	.725[.557, .836]
Item 3**	2.38 (1.03)	.736	.924	.790	.697 [.517, .818]
Item 4**	1.97 (.96)	.735	.923	.793	.724 [.556, .835]
Item 5**	2.41 (1.0)	.745	.923	.799	.840 [.732, .907]
Item 6	2.97 (.59)	.612	.931	.685	.649 [.450, .787]
Item 7	2.68 (.65)	.744	.924	.806	.658 [.462, .793]
Item 8**	2.33 (.83)	.772	.921	.821	.749 [.592, .851]
Item 9**	2.52 (.90)	.826	.917	.874	.836 [.725, .904]
			Cronbach's α	% of variance	
ETS 9			.930	65.512	.879 [.794, .930]

**marked items are included in the final version of its scale.

Item 1: I expect the treatment [acupuncture] will clearly reduce my complaints.

Item 2: I expect my complaints will be much better because of the treatment [acupuncture].

Item 3: I expect the treatment [acupuncture] will help me to cope with my complaints.

Item 4: I expect the treatment [acupuncture] will make my complaints disappear.

Item 5: I expect the treatment [acupuncture] will improve my energy.

Item 6: The treatment [acupuncture] is in general effective.

Item 7: I myself have positive expectations about the treatment [acupuncture].

Item 8: I expect the treatment [acupuncture] will improve my physical performance.

Item 9: I expect that after the treatment [acupuncture], my complaints will be considerably better.

Appendix Table 4. Between-item correlations for sample with current pain (N = 102). Pearson Correlation and significance (2-tailed). **Correlation is significant at the 0.01 level (2-tailed).

	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	Item 8	Item 9
Item 1	1								
Item 2	.840** .000	1							
Item 3	.636** .000	.605** .000	1						
Item 4	.568** .000	.627** .000	.580** .000	1					
Item 5	.533** .000	.611** .000	.664** .000	.637** .000	1				
Item 6	.540** .000	.556** .000	.442** .000	.437** .000	.505** .000	1			
Item 7	.692** .000	.679** .000	.541** .000	.575** .000	.509** .000	.521** .000	1		
Item 8	.528** .000	.571** .000	.673** .000	.664** .000	.762** .000	.470** .000	.631** .000	1	
Item 9	.733** .000	.754** .000	.605** .000	.673** .000	.603** .000	.592** .000	.701** .000	.673** .000	1

Item 1: I expect the treatment [acupuncture] will clearly reduce my complaints.

Item 2: I expect my complaints will be much better because of the treatment [acupuncture].

Item 3: I expect the treatment [acupuncture] will help me to cope with my complaints.

Item 4: I expect the treatment [acupuncture] will make my complaints disappear.

Item 5: I expect the treatment [acupuncture] will improve my energy.

Item 6: The treatment [acupuncture] is in general effective.

Item 7: I myself have positive expectations about the treatment [acupuncture].

Item 8: I expect the treatment [acupuncture] will improve my physical performance.

Item 9: I expect that after the treatment [acupuncture], my complaints will be considerably better.