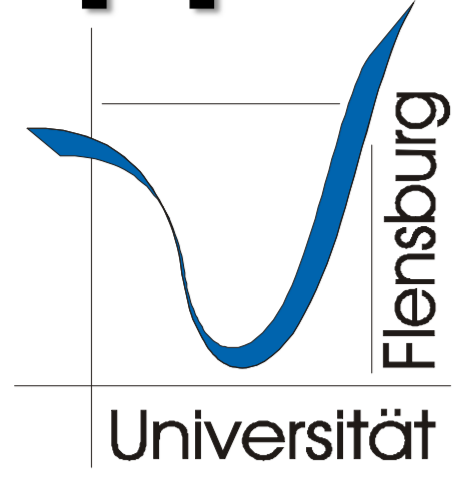


# Coping in patients with somatic conditions: Application and Validation of the Essen Coping Questionnaire (ECQ)



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## Objectives

Coping with diseases is an important research field of health psychology. Crucial for understanding coping processes are psychometric properties of assessment instruments. Therefore aims of this study are 1<sup>st</sup> to investigate coping strategies of patients with chronic diseases using the Essener Coping Questionnaire (EFK; Franke et al., 2000) and 2<sup>nd</sup> to evaluate the reliability and validity of the EFK. The EFK consists of 45 items and nine scales: (1) Active problem-solving coping, (2) Diversion and Encouragement, (3) Information-seeking and exchange of experiences, (4) Minimization and wishful thinking, (5) Depressive coping, (6) Openness for help, (7) Active search for social support, (8) Confidence in doctor's competence, (9) Working out an intrinsic stability.

## Method

### QUESTIONNAIRES

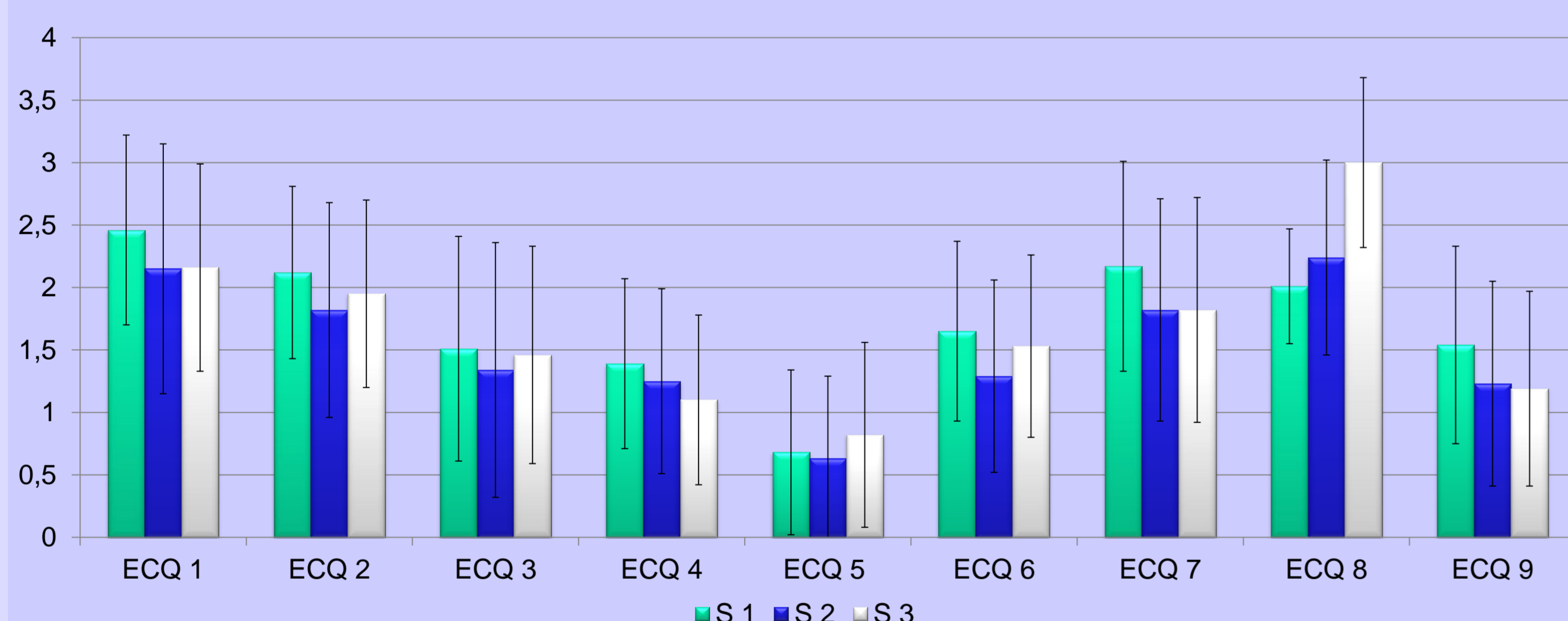
- Essen Coping Questionnaire (EFK; Franke et al., 2000)
- Instruments assessing coping:
  - Freiburger Fragebogen zur Krankheitsverarbeitung (FKV; Muthny, 1989)
  - Trierer Skalen zur Krankheitsbewältigung (TSK; Klauer & Filipp, 1991)
- Instrument assessing quality of life
  - Health Survey SF-36 (SF-36; Bullinger & Kirchberger, 1998)
- Instrument assessing psychological distress
  - Brief Symptom Inventory (BSI; Franke, 2000)
- Instrument assessing social support
  - Fragebogen zur Sozialen Unterstützung (F-SOZU; Fydrich et al., 2007)

### SAMPLE

Group	N	Age	Gender
<b>WHOLE SAMPLE</b>	<b>1656</b>	<b>47,5 (±15,4)</b>	♂ 803 (48,5%) ♀ 853 (51,5%)
<b>S1: Nephrology</b>	529	46,7 (±13,1)	♂ 298 (56,3%) ♀ 231 (43,7%)
<b>S2: Ophthalmology</b>	437	51,7 (±14,1)	♂ 181 (41,4%) ♀ 256 (58,6%)
<b>S3: Orthopaedy, Gynaecology, Internal Medicine, Dermatology, Adolescents with Eating Disorders</b>	690	45,3 (±17,2)	♂ 324 (47,0%) ♀ 366 (53,0%)

## Results

### Differences in the use of coping strategies in the three samples



Overall, patients (N=1656) scored highest on the coping strategy "Active problem-solving coping" as well as "Confidence in doctors' competence", whereas they scored lowest on "Depressive coping". Statistically significant differences ( $p \leq 0,0001$ ) between the three groups were found for eight of nine scales (except scale 3). Differences were most obvious for "Confidence in doctors' competence". Analyses of variance with post-hoc-comparison indicate that the ECQ can discriminate between groups patients.

### Psychometric Properties of the Essen Coping Questionnaire

#### RELIABILITY & SCALE FIT

Scales	Cronbach's Alpha	Scale fit
Active problem-solving coping	.80	100%
Diversion and Encouragement	.63	82,5%
Information-seeking and exchange of experiences	.79	100%
Minimization and wishful thinking	.51	92,5%
Depressive coping	.73	100%
Openness for help	.64	85%
Active search for social support	.78	100%
Confidence in doctor's competence	.51	90%
Working out an intrinsic stability	.65	90%

#### VALIDITY

	ECQ 1	ECQ 2	ECQ 3	ECQ 4	ECQ 5	ECQ 6	ECQ 7	ECQ 8	ECQ 9
TSK-RU				.35 **					
TSK-SS	.42 **	.42 **				.43 **	.60 **		.34 **
TSK-BA	.38 **	.37 **							.30 **
TSK-SI	.32 **	.38 **	.69 **			.41 **			.35 **
TSK-SR									.66 **
FKV-DV					.67 **				
FKV-APC	.52 **	.41 **	.44 **						
FKV-AUS	.49 **	.60 **	.41 **			.36 **	.37 **		.42 **
FKV-RUS		.34 **	.32 **						.69 **
FKV-BUW				.31 **	.36 **				

Note: \*\*  $p \leq 0,01$ ; only correlations  $r < .30$  are shown; TSK & FKV: n=392 patients

Reliability analyses of the nine scales demonstrated acceptable reliability for most of the scales. Convergent and divergent validity indicators were found using correlations with scales measuring coping (TSK, FKV), quality of life (SF-36), psychological distress (BSI), and social support (F-SozU). Results show medium to high correlations with related scales in the expected direction.

## Conclusion

Results of the psychometric analyses have shown that the Essen Coping Questionnaire is a short and sufficiently reliable and valid instrument to assess coping strategies in patients with different somatic conditions.

#### Literature:

- Bullinger, M. & Kirchberger, I. (1998). SF-36 Fragebogen zum Gesundheitszustand - Handanweisung. Göttingen: Hogrefe.  
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