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Antonovsky's Sense of Coherence Scale and It's Relation with Quality of Life: A Systematic Review.

Appendix

Table 1. Quantitative Studies Using *specific instruments* for Measuring Quality of Life.

a) Studies with a *cross-sectional* study design

<p align="center">The Comprehensive Quality of Life Scale – Subjective Dimension (ComQoL)</p> <p>Description: This scale measures subjective QoL within seven life domains: material wellbeing, health, productivity, intimacy, safety, community, and emotional wellbeing.¹</p>				
Sample	Methods for the analysis	N	Coeff r	References
Patients with arthritis and healthy controls	Hierarchical regression	375	-.69 - -.73	Germano D. 2001 ¹
<p align="center">Czapinski's Quality of Life Questionnaire</p> <p>Description: A 6-point Polish version of Satisfaction with 16 life areas. The scoring alternatives ranged from very satisfied to very unsatisfied (6 points). In the study below the original version of the questionnaire was modified by adding a question about the satisfaction in the past and in the future (personal communication with H.Sek September 07 2006).</p>				
Sample	Methods for the analysis	N	Coeff r	References
Poles	Multiple regression	150	-.29-.54	Sek H. ²
<p align="center">EORTC Quality-of-Life Questionnaire (QOL-C30)</p> <p>Description: A cancer-specific 30-item questionnaire designed to be multi-dimensional in structure, appropriate for self-administration and hence brief and easy to complete, applicable across a range of cultural settings, and suitable for use in clinical trials of cancer therapy. It measures health related quality of life (HRQOL). It incorporates five functional scales (physical, role, cognitive, emotional, and social), three symptom scales (fatigue, pain, and nausea and vomiting), a global health-status/QoL scale, and a number of single items assessing additional symptoms commonly reported by cancer patients and perceived financial impact of the disease. Response categories with four levels except to items for overall physical condition and overall QoL, which use seven-point items. High scale scores represent high response levels, with high functional sale scores representing high/healthy levels of functioning, and high scores for symptom scales/items representing high levels of symptomatology/problems. Has been widely used in multinational cancer clinical trials. It has been found to be sensitive to differences between patients, treatment effects, and changes over time.^{3 p. 21}</p>				
Sample	Methods for the analysis	N	Coeff r	References
Men with prostate cancer and men with benign prostatic hyperplasia	Multiple logistic regression	108	.49 - .55	Jakobsson L. 2002 ⁴

Family Quality of Life Scale – Parent Form				
Description: The Family Quality of Life Scale (FQOLS), a 10-item self report measure in a Likert-type format developed from the original 40-item scale assesses the degree of satisfaction with various aspects of family life. ⁵				
Sample	Methods for the analysis	N	Coeff r	References
Families with subjects with a serious illness	Multiple regression	78	.55	Hoehn Anderson K. 1998 ⁵
Ferrans' and Powers' Quality of Life Index				
Description: A 64-items instrument designed to measure QoL on patients with cancer, divided into four subscales: health and functioning, socioeconomic/spiritual area, psychological functioning and family arena. It is applicable to both healthy subjects and disease specific groups. ⁶				
Sample	Methods for the analysis	N	Coeff r	References
Older women	Hierarchical multiple regression	137	.64	Nesbitt BJ. 2000 ⁷
Flanagan Quality of Life Scale				
Description: A 15-item measure with a 7-point Delighted-Terrible Scale (7 is delighted, 6 pleased, 5 mostly satisfied, 4 mixed, 3 mostly dissatisfied, 2 unhappy and 1 terrible). The measure reflects 5 domains: physical and material well-being, relations with other people, social, community, and civic activities, personal development and fulfilment, and recreation. Flanagan used the his categories of critical incidents as items to reflect life satisfaction in his QoL Scale. He considered these domains valid for the general population and recommended studying QoL in the disabled by focusing on problems specifically created by their disabilities. ⁸				
Sample	Methods for the analysis	N	Coeff r	References
Persons with CHD	Hierarchical multiple regression	149	.73	Motzer S. 1996 ⁹
Women with IBS and healthy controls	Correlation	324	.66	Motzer Adams S. 2003 ⁸
The Pediatric Asthma Quality of Life Questionnaire				
Description: A self-reported 23-item Likert-scale that measures three domains: activity limitations (5 items), emotional function (8 items), and symptoms (10 items). ¹⁰				
Sample	Methods for the analysis	N	Coeff r	References
Children with asthma and their parents	Structural equation modeling	235	.20 - .23	Vinson JA. 2002 ¹⁰
The World Health Organization Quality of Life Scale (WHOQOL)				
Description: "WHO defines Quality of Life as an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. It is a broad ranging concept affected in a complex way by the person's physical health, psychological state, personal beliefs, social relationships and their relationship to salient features of their environment. The instrument was rigorously tested to assess its validity and reliability in each of the field centers and is currently being tested to assess responsiveness to change. The WHOQOL-BREF, an				

abbreviated 26 item version of the WHOQOL-100, was developed using data from the field-trial version of the WHOQOL-100. The WHOQOL instruments can be used in particular cultural settings, but at the same time results are comparable across cultures. The instrument can be used in medical practice, in assessing the effectiveness of treatments, in health services evaluation, in research (how disease impairs or impacts the subjective wellbeing) and finally in policy making.” <http://www.who.int/evidence/assessment-instruments/qol>

Sample	Methods for the analysis	N	Coeff r	References
Patients with total spinal cord transaction and healthy controls	Multivariate analysis of variance	20 20	.62-.76	O’Carroll RE. ¹¹

Table 1. Quantitative Studies Using *specific instruments* for Measuring Quality of Life.

b) Studies with a *longitudinal* study design

Sample	Methods for the analysis	N	Coeff r	References
<p>EORTC Quality-of-Life Questionnaire (QOL-C30)</p> <p>Description: A cancer-specific 30-item questionnaire designed to be multi-dimensional in structure, appropriate for self-administration and hence brief and easy to complete, applicable across a range of cultural settings, and suitable for use in clinical trials of cancer therapy. It measures health related quality of life (HRQOL). It incorporates five functional scales (physical, role, cognitive, emotional, and social), three symptom scales (fatigue, pain, and nausea and vomiting), a global health-status/QoL scale, and a number of single items assessing additional symptoms commonly reported by cancer patients and perceived financial impact of the disease. Response categories with four levels except to items for overall physical condition and overall QoL, which use seven-point items. High scale scores represent high response levels, with high functional sale scores representing high/healthy levels of functioning, and high scores for symptom scales/items representing high levels of symptomatology/problems. Has been widely used in multinational cancer clinical trials. It has been found to be sensitive to differences between patients, treatment effects, and changes over time.^{3 p. 21}</p>				
Cancer patients	Correlation	16	ns	Persson L. 1995 ¹²
Cancer patients	Correlation	20	.67	Wettergren L. 1997 ¹³
<p>Ferrans’ and Powers’ Quality of Life Index</p> <p>Description: A 64-items instrument designed to measure QoL on patients with cancer, divided into four subscales: health and functioning, socioeconomic/spiritual area, psychological functioning and family arena. It is applicable to both healthy subjects and disease specific groups.⁶</p>				
Elderly hip fracture patients	Multiple linear regression	73	..	Johansson I. 1998 ¹⁴
<p>Kajandi’s Quality of Life Scale</p> <p>Description: A self-rating questionnaire measuring satisfaction with material conditions (housing, study/work, economy), interpersonal relations (partner, friends, mother and father, children) and inner feelings (engagement, energy, self-actualization, self-assuredness, self-acceptance, security, freedom, mood). The scale captures seventeen variables contributing to the QoL.¹⁵</p>				

Sample	Methods for the analysis	N	Coeff r	References
Middle-aged psychiatric high-risk subjects	Multiple regression	148	.77	Cederblad M. 1996 ¹⁶
<p>Lancashire Quality of Life Profile</p> <p>Description: A structured self-report interview. Objective quality of life as well as subjective life satisfaction are assessed in nine life domains: work, leisure, religion, finances, living situation, safety, family relations, social relations and health. The instrument also includes a global well-being scale, a patient global assessment of quality of life (Cantril's ladder), and an interviewer assessment of the individuals global quality of life, an affect balance scale, a self-esteem scale and a happiness scale. Life satisfaction is rated on a 7-point Likert scale.¹⁷</p>				
Sample	Methods for the analysis	N	Coeff r	References
Schizophrenic patients	Multiple regression	120	.60	Bengtsson-Tops A. 2000 ¹⁷
<p>The World Health Organization Quality of Life Scale (WHOQOL)</p> <p>Description: "WHO defines Quality of Life as an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. It is a broad ranging concept affected in a complex way by the person's physical health, psychological state, personal beliefs, social relationships and their relationship to salient features of their environment. The instrument was rigorously tested to assess its validity and reliability in each of the field centers and is currently being tested to assess responsiveness to change. The WHOQOL-BREF, an abbreviated 26 item version of the WHOQOL-100, was developed using data from the field-trial version of the WHOQOL-100. The WHOQOL instruments can be used in particular cultural settings, but at the same time results are comparable across cultures. The instrument can be used in medical practice, in assessing the effectiveness of treatments, in health services evaluation, in research (how disease impairs or impacts the subjective wellbeing) and finally in policy making." http://www.who.int/evidence/assessment-instruments/qol</p>				
Sample	Methods for the analysis	N	Coeff r	References
Japanese civil servants	Multiple linear regression	1392	.51	Nasermoaddeli A. ¹⁸

Table 2. Qualitative Studies Using *specific instruments* for Measuring Quality of Life.

a) Studies with a *cross-sectional* study design

<p>EORTC Quality-of-Life Questionnaire (QOL-C30)</p> <p>Description: A cancer-specific 30-item questionnaire designed to be multi-dimensional in structure, appropriate for self-administration and hence brief and easy to complete, applicable across a range of cultural settings, and suitable for use in clinical trials of cancer therapy. It measures health related quality of life (HRQOL). It incorporates five functional scales (physical, role, cognitive, emotional, and social), three symptom scales (fatigue, pain, and nausea and vomiting), a global health-status/QoL scale, and a number of single items assessing additional symptoms commonly reported by cancer patients and perceived financial impact of the disease. Response categories with four levels except to items for overall physical condition and overall QoL, which use seven-point items. High scale scores represent high response levels, with high functional scale scores representing high/healthy levels of functioning, and high</p>
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Sample	Methods for the analysis	N	References
Men with prostate cancer and men with benign prostatic hyperplasia	Phenomenological-hermeneutic	11	Jakobsson L. 1997 ¹⁹

Table 2. Qualitative Studies Using *specific instruments* for Measuring Quality of Life.

b) Studies with a *longitudinal* study design

EORTC Quality-of-Life Questionnaire (QOL-C30)			
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Sample	Methods for the analysis	N	References
Cancer patients	Content analysis	5	Persson L. 2001 ¹²

Table 3. Quantitative Studies Using *generic instruments* for Measuring Health.

a) Studies with a *cross-sectional* study design.

Health Index				
Description: Health Index consists of nine items measuring energy, temper, fatigue, loneliness, sleep, vertigo, bowel function, pain, and mobility. The items have four response categories ranging from very poor to very good. The higher the score, the better is the perceived general health. ²⁰				
Sample	Methods for the analysis	N	Coeff r	References
HIV-infected patients and healthy controls	Multiple regression	189	.46 - .66	Cederfjäll C. 2001 ²⁰
Uremic patients and healthy controls	Correlation	306	- .44	Klang B. 1996 ²¹
Nottingham Health Profile (NHP)				
Description: Measures emotional, social and physical distress. The NHP was influenced by the SIP, but				

asks about feelings and emotions directly rather than by changes in behaviour. Thus although the authors did not develop or claim it to be a QoL instrument, it does emphasise subjective aspects of health assessment. It was based upon the perceptions and the issues that were mentioned when patients were interviewed. The version one contains 45 items, the version two 38 items in six sections, covering sleep, pain, emotional reactions, social isolation, physical mobility and energy level. Each question takes a yes/no answer. Each item reflects departures from normal and items are weighted to reflect their importance. Earlier versions included seven statements about areas of life that may be affected by health, with the respondent indicating whether there has been any impact in those areas. These statements were less applicable to the elderly, unemployed, disabled or those on low income than were the items, and are usually omitted. The NHP forms a *profile* of six scores corresponding to the different sections of the questionnaire, and there is no single summary index. It is often used in population studies of general health evaluation, and has been used in medical and non-medical settings. It is also frequently used in clinical trials, although it was not designed for that purpose. It tends to emphasise severe disease states and is perhaps less sensitive to minor changes and differences in health state. The NHP assesses whether there are any health problems, but is not sufficiently specific to identify particular problems. Not recommended for patients.^{3, 22 p. 438 ff}

Sample	Methods for the analysis	N	Coeff r	References
Patients with lower limb ischaemia and healthy controls	Multiple logistic regression	270		Klevsgård R. 1999 ²³

Medical Outcomes Study 36-Item Short Form (SF-36)/12-Item Short Form (SF-12)

Description: This questionnaire was designed as a generic indicator of health status for use in population surveys and for evaluation of health policy. It can also be used in clinical practice and research. The SF-36 includes multi-item scales to measure eight dimensions of physical functioning, role limitations due to physical health problems, bodily pain, social functioning, general mental health, psychological distress and wellbeing, role limitations due to emotional problems, vitality, energy or fatigue and finally general health perceptions.^{22 p. 447 ff}

Sample	Methods for the analysis	N	Coeff r	References
Patients with angina pectoris	Multiple regression	589	.17- .31	Guldvog B. 1999 ²⁴
Patients with Menier's disease and reference group	Multiple regression	112 268	.05 – -.54	Hessén Söderman AC. 2002 ²⁵

Sickness Impact Profile

Description: The Sickness Impact Profile (SIP) is a measure of perceived health status, as measured by its impact upon behavior. It was designed for assessing new treatments and for evaluating health levels in the population, and is applicable across a wide range of types and severities of illness. The SIP consists of 136 items, which describe everyday activities, and the respondents have to mark those activities they can accomplish and those statements they agree with. It may be either interviewer- or self-administered. Twelve main areas of dysfunction are covered but there is no global question about overall health or QoL. It emphasizes the impact of health upon activities and behavior, including social functioning, rather than on feelings and perceptions, although there are some items relating to emotional wellbeing. The items are negatively worded, representing dysfunction.^{3 pp. 17-18}

Sample	Methods for the analysis	N	Coeff r	References
Cancer patients	Correlation	25	- .64	Edman L. 2001 ²⁶
Patients with Menier's disease and reference groups	Multiple regression	112 145 268	-.18 – -.42	Hessén Söderman AC. 2002 ²⁵
Patients receiving home	Multiple regression	91	-.29	Markström A. 2002 ²⁷

mechanical ventilation				
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Table 3. Quantitative Studies Using *generic instruments* for Measuring Health.

b) Studies with a longitudinal study design.

Nottingham Health Profile (NHP)				
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Sample	Methods for the analysis	N	Coeff r	References
Patients with lower limb ischaemia and healthy controls	Multiple logistic regression	112	-.51	Klevsgård R. 2000 ²⁸
	Multiple logistic regression	102	-.40	Klevsgård R. 2001 ²⁹
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