



The Decisional Conflict Scale

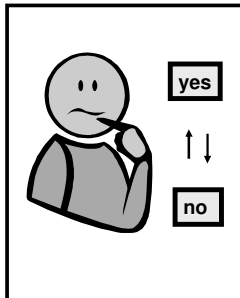
France Legare
Ottawa, ON, May 6th and 7th 2010

Plan

- Definition
- Evidence & use
- Versions
- Strengths/limitations/gaps

Symposium: The Ottawa Decision Support Framework: Update, gaps, and research priorities

Definition of Decisional Conflict

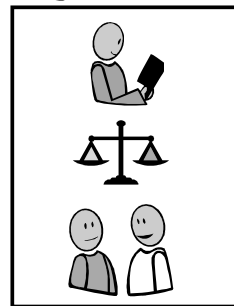


- **Personal uncertainty about which course of action to take**

North American Nursing Diagnosis Association, 2002



'Modifiable' contributing factors



- Uninformed
- Unclear values
- Unsupported

Origins of the scale



- Originally published in 1995:
O'Connor AM. Validation of a decisional conflict scale. *Medical Decision Making* 1995;15(1):25-30.
- Measures personal perceptions of:
 - uncertainty in choosing options;
 - modifiable factors contributing to uncertainty; and
 - effective decision making

Decisional Conflict Scale (DCS)



Uncertainty Subscale (3 items)



Uninformed Subscale (3 items)



Unclear values Subscale (3 items)



Unsupported Subscale (3 items)

Ineffective decision-making Subscale (4 items)

Application of the DCS

- Assess decisional needs
- Tailor decision support to needs
- Evaluate decision support interventions

Reliability

- Test-retest >0.80
- Internal consistency coefficients 0.78-0.89.

Validity

- Discriminates between known groups: those who make and delay decisions
 - effect size [ES] ranges 0.4 to 0.8.
- Correlated to related constructs:
 - knowledge
 - regret [Brehaut et al.]
 - discontinuance [Bunn et al.]

Responsiveness to change

- Scores improve significantly following decision support interventions
- ES: 0.4 to 1.2.

Predictive Validity- Hypotheses

Uninformed subscale

→ Knowledge

Delay

Discontinuance

Regret

Total DCS
(Predictor)



Results 10 pooled studies

Sung MSc Thesis

Predictor	Response	Corr	OR	95% CI
Uninformed	Knowledge	-0.36*** -0.25*** -0.18*	3.10	1.58-6.05
DCS	Delay	0.62*** 0.44*** 0.40***	23.81	4.66-121.51
DCS	Change from status quo	0.40*** 0.19* -.06	59.37	4.09-861.05
	Change from active treatment	0.33* 0.34* 0.20	3.39	1.42-8.00
DCS	Regret	0.52*** .39*** 0.32*	5.52	3.35-9.12

* p<0.05 ** p< 0.01 *** p<0.001

Implications

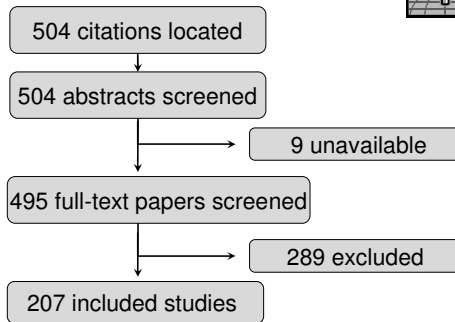
- Reliable
- Valid
- Uninformed subscale not a proxy for knowledge
- Promise in predicting downstream decision delay, regret, and discontinuance of active treatment

Evidence and use (Drake L. 2010)

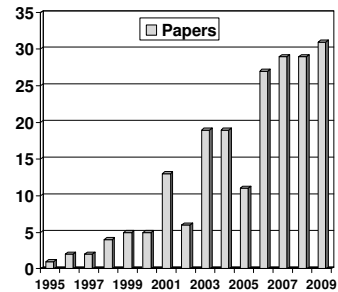
Based on a systematic search of the health care literature to determine the extent of use of the Decision Conflict Scale.



Search Results



Year of Publication



Study Designs

Design	N	%
RCT	84	41%
Descriptive	35	17%
Pre-Post	34	16%
Survey	13	6%
Scale development	12	6%
Correlational	7	3%
Psychometrics	4	2%
Needs assessment	4	2%
Prospective cohort	4	2%
Other	10	5%
Total	207	100%

Decisions

Topic	N	%
Medical	52	25%
Surgical	48	23%
Genetic Screening	27	13%
Disease Screening	24	12%
Childbirth	8	4%
End-of-life	7	3%
Vaccine	6	3%
Family planning	5	2%
Other	25	12%
Total	207	100%

Interventions* (n=138)

Topic	N	%
Decision aid	97	70%
Information	21	15%
Counseling	4	3%
Interview	4	3%
Consultation	3	2%
Workshop	2	1%
Other	7	5%
Total	138	99%

*Evaluated using the DCS

Version of scale used

Version	N	%
16-item	143	69%
10-item	14	7%
Subscales (various)	39	19%
Unknown	11	5%
Total	207	100%

Location

Country	N	%
USA	75	36%
Canada	71	34%
Australia	26	13%
United Kingdom	16	8%
The Netherlands	9	4%
France	3	1%
Germany	3	1%
Chile	2	1%
Other (Japan/Denmark)	2	1%
Total	207	100%

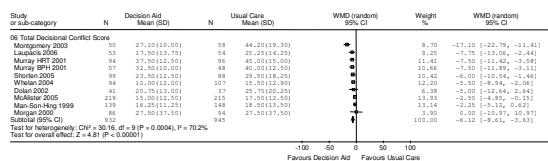
Languages

Language*	N	%
English	179	86%
French	15	7%
Dutch	10	5%
Spanish	6	3%
German	2	1%
Other (Japanese/Chinese)	2	1%

*8 studies were conducted in more than one language

Cochrane Review 2006

(Decision Aid versus Usual Care)



WMD -6.1 (-8.6, -3.6)

Translation*

- The scale is currently available in English, French, Danish, Chinese, Spanish and German.
- Permission has also been granted to translate the scale into Danish, Indonesian, Korean, Norwegian, Portuguese and Turkish.
- Queries about using the scale have come from 18 different countries.

*Based on email correspondence in the last ten years

Versions



- Three versions:
 - statement format 16-item/5 response categories;
 - question format 16-item/5 response categories; and
 - question format 10-item/3 response categories (low literacy).
- Short screening version S.U.R.E
 - 4 items with yes or no
- Dyadic version for providers and patients
 - Ask Annie LeBlanc (PhD thesis)

Reliability in complex design (Rousseau 2009)

D-Study (DMC/I) For Pt

Sources of var.	Differ. Variance	Sources of var.	Relative err. Var.	Absolute err. Var.	% of error variance
C	(0.000)				
M:C	0.00127				
D:M:C	0.098				
		I		0.013	40.2
		CI	0.0001	0.0001	0.5
		M:C	0.00001	0.00001	0.2
		DI:M:C	0.01978	0.01978	59.2

Coef_G relative = 0.832

Coef_G absolute = 0.748

Discussion

1. Take 2 minutes to jot down
 - Strengths
 - Weaknesses
 - Gaps in research
2. Discussion

Strengths, Weaknesses, Gaps

- Strengths
 - .
 - .
- Knowledge Gaps
 - .
 - .
- Weaknesses
 - .
 - .