



**Finnish Institute of
Occupational Health**

Data extraction + exercise

Basic Systematic Review Course, May 10-11, 2012

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Data extraction (or collection) form



- Bridge between what is reported by the investigators and what is ultimately reported by the review authors
- Linked directly to the review question and inclusion criteria
-> provides a clear summary (operationalisation) of these that can be applied to identified study reports
- Historical record of the decisions (and changes to decisions) that occur throughout the review process
- Source of data for inclusion in an analysis

Data extraction exercise

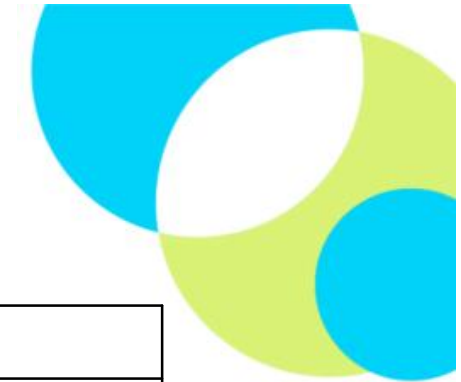


- You have a half-filled in form titled: "Data extraction form, CSR: Interventions to prevent occupational stress in healthcare workers (update)"
- Go through the article by Rowe 2006 and fill in the results data for:

The primary outcome of interest (MBI) at 2 months

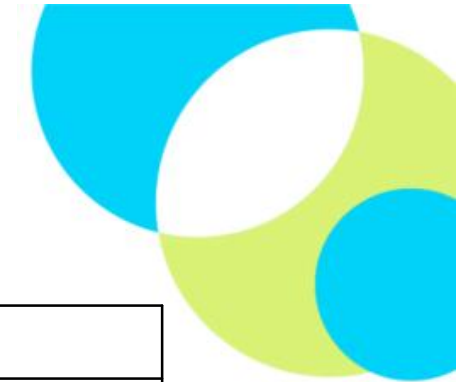
- After 10 minutes we discuss

Data extraction exercise



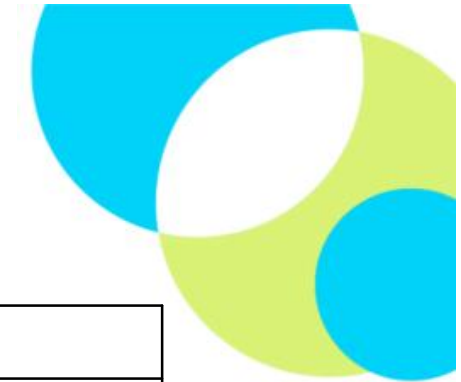
Comparison 1	A Interv 1	N: 42	B Control	N: 42
Outcome: Emotional Exhaustion				
At Baseline	25.92	4.39	26.10	4.69
At Follow-up time 2 months				
At Follow-up time 6 months	23.48	3.95	25.49	4.79
At Follow-up time 1 year	25.93	4.52	25.67	5.70
At Follow-up time 2 years	25.87	4.44	25.38	5.41
At Follow-up time 2.5 years	25.22	4.17 (n = 38)	25.17	5.10 (n = 36)
At Follow-up time 4 years	25.41	4.72 (n = 37)	25.29	4.93 (n = 34)

Data extraction exercise



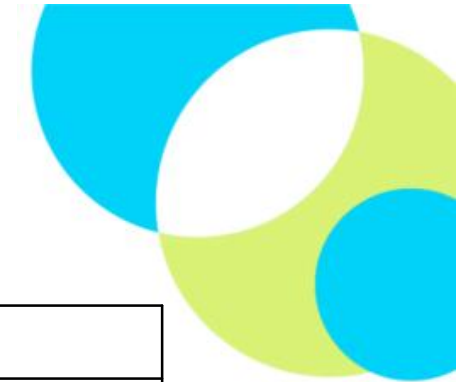
Comparison 1	A Interv 1	N: 42	B Control	N: 42
Outcome: Emotional Exhaustion				
At Baseline	25.92	4.39	26.10	4.69
At Follow-up time 2 months	23.20	4.03	25.60	4.60
At Follow-up time 6 months	23.48	3.95	25.49	4.79
At Follow-up time 1 year	25.93	4.52	25.67	5.70
At Follow-up time 2 years	25.87	4.44	25.38	5.41
At Follow-up time 2.5 years	25.22	4.17 (n = 38)	25.17	5.10 (n = 36)
At Follow-up time 4 years	25.41	4.72 (n = 37)	25.29	4.93 (n = 34)

Data extraction exercise



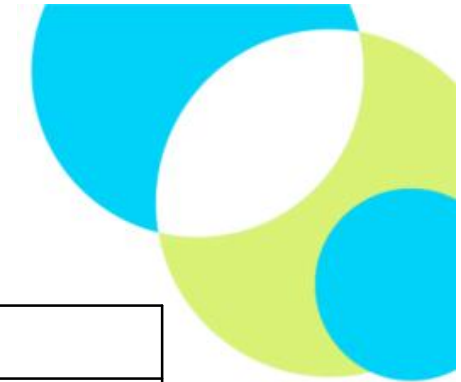
Comparison 2	A Interv 1	N: 42	B Control	N: 42
Outcome: Depersonalisation				
At Baseline	7.83	3.86	7.35	3.50
At Follow-up time 2 months				
At Follow-up time 6 months	7.00	2.35	7.56	3.43
At Follow-up time 1 year	7.77	2.01	7.79	3.35
At Follow-up time 2 years	7.58	2.12	7.49	3.39
At Follow-up time 2.5 years	7.22	2.23 (n = 38)	7.51	3.44 (n = 36)
At Follow-up time 4 years	7.41	2.04 (n = 37)	7.63	3.11 (n = 34)

Data extraction exercise



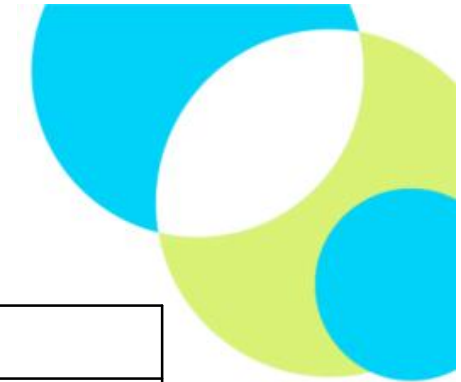
Comparison 2	A Interv 1	N: 42	B Control	N: 42
Outcome: Depersonalisation				
At Baseline	7.83	3.86	7.35	3.50
At Follow-up time 2 months	6.95	3.13	7.30	3.41
At Follow-up time 6 months	7.00	2.35	7.56	3.43
At Follow-up time 1 year	7.77	2.01	7.79	3.35
At Follow-up time 2 years	7.58	2.12	7.49	3.39
At Follow-up time 2.5 years	7.22	2.23 (n = 38)	7.51	3.44 (n = 36)
At Follow-up time 4 years	7.41	2.04 (n = 37)	7.63	3.11 (n = 34)

Data extraction exercise



Comparison 3	A Interv 1	N: 42	B Control	N: 42
Outcome: Lack of personal accomplishment				
At Baseline	37.95	3.75	37.90	4.34
At Follow-up time 2 months				
At Follow-up time 6 months	35.72	3.90	37.26	4.45
At Follow-up time 1 year	37.72	3.81	37.46	5.31
At Follow-up time 2 years	37.67	4.05	37.03	5.04
At Follow-up time 2.5 years	37.88	3.75 (n = 38)	36.98	4.96 (n = 36)
At Follow-up time 4 years	37.89	4.01 (n = 37)	37.20	4.79 (n = 34)

Data extraction exercise



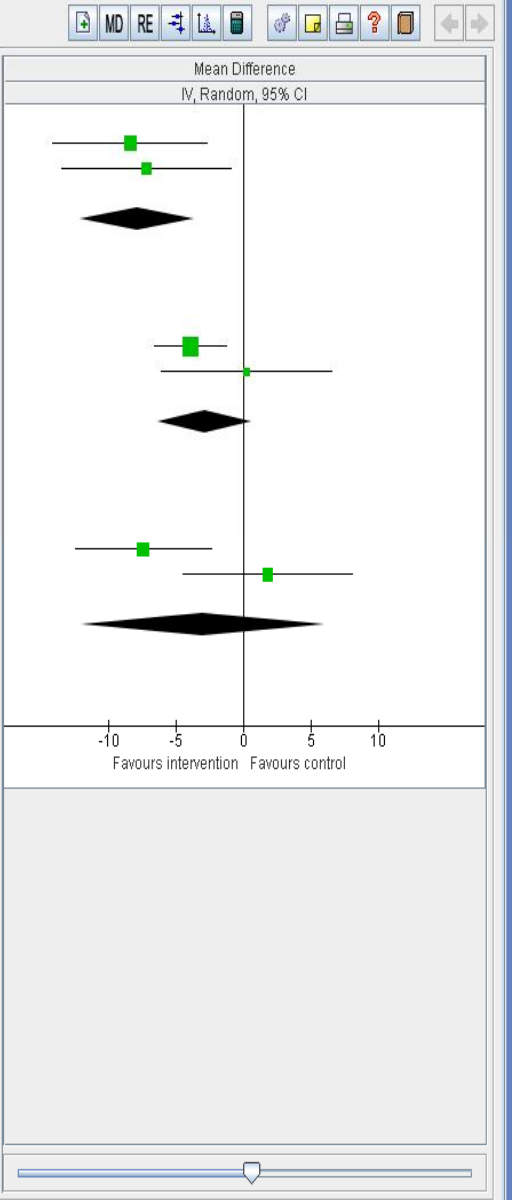
Comparison 3	A Interv 1	N: 42	B Control	N: 42
Outcome: Lack of personal accomplishment				
At Baseline	37.95	3.75	37.90	4.34
At Follow-up time 2 months	35.10	3.96	37.38	4.28
At Follow-up time 6 months	35.72	3.90	37.26	4.45
At Follow-up time 1 year	37.72	3.81	37.46	5.31
At Follow-up time 2 years	37.67	4.05	37.03	5.04
At Follow-up time 2.5 years	37.88	3.75 (n = 38)	36.98	4.96 (n = 36)
At Follow-up time 4 years	37.89	4.01 (n = 37)	37.20	4.79 (n = 34)



- Intervention review
 - Title
 - Review information
 - Main text
 - Tables
 - Studies and references
 - Data and analyses
 - 1 Cognitive-behavioural intervention vs. no in
 - 1.1 Maslach Burnout Inventory
 - 1.1.1 Emotional exhaustion
 - Ewers 2002
 - Norvell 1987
 - Rowe 2006
 - 1.1.2 Depersonalisation
 - 1.1.3 Personal accomplishment (lack of)
- Figures
- Sources of support
- Feedback
- Appendices

Comparison: 1 Cognitive-behavioural intervention vs. no intervention (MD), Outcome: 1.1 Maslach Burnout Inventory

Study or Subgroup	Intervention			Control			Weight	Mean Difference IV, Random, 95% CI
	Mean	SD	Total	Mean	SD	Total		
<input checked="" type="checkbox"/> 1.1.1 Emotional exhaustion								
<input checked="" type="checkbox"/> Ewers 2002	10.51	6.525	10	18.91	6.525	10	54.8%	-8.40 [-14.12, -2.68]
<input checked="" type="checkbox"/> Norvell 1987	27.1	5.56	6	34.3	5.56	6	45.2%	-7.20 [-13.49, -0.91]
<input checked="" type="checkbox"/> Rowe 2006	0	0	0	0	0	0		Not estimable
Subtotal (95% CI)			16			16	100.0%	-7.86 [-12.09, -3.62]
Heterogeneity: Tau ² = 0.00; Chi ² = 0.08, df = 1 (P = 0.78); I ² = 0%								
Test for overall effect: Z = 3.64 (P = 0.0003)								
<input checked="" type="checkbox"/> 1.1.2 Depersonalisation								
<input checked="" type="checkbox"/> Ewers 2002	2.04	3.045	10	5.96	3.045	10	74.9%	-3.92 [-6.59, -1.25]
<input checked="" type="checkbox"/> Norvell 1987	10.1	5.56	6	9.9	5.56	6	25.1%	0.20 [-6.09, 6.49]
<input checked="" type="checkbox"/> Rowe 2006	0	0	0	0	0	0		Not estimable
Subtotal (95% CI)			16			16	100.0%	-2.89 [-6.39, 0.62]
Heterogeneity: Tau ² = 2.41; Chi ² = 1.40, df = 1 (P = 0.24); I ² = 28%								
Test for overall effect: Z = 1.62 (P = 0.11)								
<input checked="" type="checkbox"/> 1.1.3 Personal accomplishment (lack of)								
<input checked="" type="checkbox"/> Ewers 2002	-39.64	5.77	10	-32.21	5.77	10	52.1%	-7.43 [-12.49, -2.37]
<input checked="" type="checkbox"/> Norvell 1987	41.7	5.56	6	39.9	5.56	6	47.9%	1.80 [-4.49, 8.09]
<input checked="" type="checkbox"/> Rowe 2006	0	0	0	0	0	0		Not estimable
Subtotal (95% CI)			16			16	100.0%	-3.01 [-12.05, 6.02]
Heterogeneity: Tau ² = 34.11; Chi ² = 5.02, df = 1 (P = 0.03); I ² = 80%								
Test for overall effect: Z = 0.65 (P = 0.51)								



Footnote: