Appendix F, Table 3: Differential Item Functioning of Fatigue Domain, OA-K cross-sectional sample

	<u>Chi</u> <sup>2</sup>	Value <u>s</u>	McFadden Pseudo R <sup>2</sup> Change Value		
	Uniform	Non-uniform	Uniform	Non-uniform	DIF
Items	Model 1 v 2	Model 2 v 3	Model 1 v 2	Model 2 v 3	Interpret.
Sex (male vs. female)					
In the past 7 days, how often did you experience extreme exhaustion?	0.228	0.636	0.001	0.000	No
In the past 7 days, how often did you feel tired even when you hadn't done anything?	0.610	0.457	0.000	0.000	No
In the past 7 days, how often were you bothered by your fatigue?	0.996	0.547	0.000	0.000	No
In the past 7 days, how often did you have to push yourself to get things done because of your fatigue?	0.058	0.124	0.002	0.001	No
In the past 7 days, how often did your fatigue make you feel less alert?	0.274	0.012	0.001	0.004	No
In the past 7 days, how often were you too tired to leave the house?	0.672	0.695	0.000	0.000	No
During the past 7 days: I have to limit my social activity because I am tired	0.024	0.035	0.003	0.003	No
During the past 7 days: I feel fatigued	0.170	0.568	0.001	0.000	No
Age (≤55 vs. >55)					
In the past 7 days, how often did you experience extreme exhaustion?	0.016	0.888	0.003	0.000	No
In the past 7 days, how often did you feel tired even when you hadn't done anything?	0.043	0.858	0.003	0.000	No
In the past 7 days, how often were you bothered by your fatigue?	0.270	0.875	0.001	0.000	No
In the past 7 days, how often did you have to push yourself to get things done because of your fatigue?	0.232	0.429	0.001	0.000	No

	Ch:2	Values	McFadden Pseudo R <sup>2</sup> Change Value		
	Uniform	<u>Values</u> Non-uniform	Uniform	<u>Re value</u> Non-uniform	DIF
Items	Model 1 v 2	Model 2 v 3	Model 1 v 2	Model 2 v 3	Interpret.
Age (≤55 vs. >55) - continued					·
In the past 7 days, how often did your fatigue make you feel less alert?	0.312	0.411	0.001	0.000	No
In the past 7 days, how often were you too tired to leave the house?	0.184	0.716	0.001	0.000	No
During the past 7 days: I have to limit my social activity because I am tired	0.190	0.207	0.001	0.001	No
During the past 7 days: I feel fatigued	0.394	0.414	0.000	0.000	No
Education (completed college or not)					
In the past 7 days, how often did you experience extreme exhaustion?	0.306	0.075	0.001	0.002	No
In the past 7 days, how often did you feel tired even when you hadn't done anything?	0.007	0.388	0.004	0.001	No
In the past 7 days, how often were you bothered by your fatigue?	0.171	0.021	0.001	0.003	No
In the past 7 days, how often did you have to push yourself to get things done because of your fatigue?	0.739	0.506	0.000	0.000	No
In the past 7 days, how often did your fatigue make you feel less alert?	0.180	0.048	0.001	0.002	No
In the past 7 days, how often were you too tired to leave the house?	0.288	0.254	0.001	0.001	No
During the past 7 days: I have to limit my social activity because I am tired	0.054	0.045	0.002	0.002	No
During the past 7 days: I feel fatigued	0.243	0.186	0.001	0.001	No

Abbreviation: DIF is Differential Item Functioning, Interpret. is Interpretation. Models: Model 1 = ability explanatory term only; Model 2 = ability + group explanatory terms; Model 3 = ability + group + ability-by-group interaction explanatory terms.