			McFadden Ps	eudo R ² Change	
	<u>Chi² Values</u>		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	Interpre
Sex (male vs. female)					
Over the past 7 days, how short of breath did you get with each of the	ese activities?				
Walking 50 steps/paces on flat ground at a normal speed without stopping	0.920	0.350	0.000	0.001	No
Lifting something weighing 10-20 lbs (about 4.5-9 kg, like a large bag of groceries)	0.085	0.693	0.002	0.000	No
Walking (faster than your usual speed) for ½ mile (almost 1 km) without stopping	0.028	0.173	0.004	0.001	No
Walking 10 steps/paces on flat ground at a normal speed without stopping	0.996	0.001	0.000	0.007	No
Walking up 5 stairs without stopping	0.987	0.186	0.000	0.001	No
Walking up 10 stairs (1 flight) without stopping	0.003	0.967	0.006	0.000	No
Lifting something weighing less than 5 lbs (about 2 kg, like a houseplant)	0.012	0.017	0.004	0.004	No
Lifting something weighing 5-10 lbs (about 2-4.5 kg, like a basket of clothes)	0.024	0.841	0.003	0.000	No
Lifting something weighing more than 20 lbs (about 9 kg, like a medium-sized suitcase)	0.000	0.431	0.011	0.000	No
Carrying something weighing less than 5 lbs (about 2 kg, like a houseplant) from one room to another	0.009	0.668	0.004	0.000	No

Appendix E, Table 4: Differential Item Functioning of Dyspnea Domain, HF cross-sectional sample

Chi ² Values		McFadden Pseudo R ² Change Value		
Uniform Model 1 v 2	Non-uniform Model 2 v 3	Uniform Model 1 v 2	Non-uniform Model 2 v 3	DIF Interpret.
ese activities?				
0.648	0.577	0.000	0.000	No
0.405	0.699	0.001	0.000	No
0.601	0.018	0.000	0.004	No
0.036	0.786	0.003	0.000	No
0.539	0.851	0.000	0.000	No
0.408	0.431	0.001	0.000	No
0.166	0.294	0.001	0.001	No
0.814	0.814	0.000	0.000	No
0.067	0.445	0.002	0.000	No
0.279	0.724	0.001	0.000	No
	Uniform Model 1 v 2 0.648 0.405 0.601 0.036 0.539 0.408 0.166 0.814 0.067	Model 1 v 2 Model 2 v 3 Model 2 v 3 Model 2 v 3 Model 3 Model 3 Model 3 Model 3	Chi² Values Von-uniform Vuniform Vuniform Model 1 v 2 Model 2 v 3 Model 1 v 2 Model 1 v 2 Model 2 v 3 Model 1 v 2 eese activities? 0.648 0.577 0.000 0.648 0.577 0.000 0.001 0.601 0.699 0.001 0.601 0.018 0.000 0.6036 0.786 0.003 0.539 0.851 0.000 0.408 0.431 0.001 0.166 0.294 0.001 0.814 0.814 0.002	Chi ² Values Value Uniform Non-uniform Uniform Non-uniform Model 1 v 2 Model 2 v 3 Model 1 v 2 Model 2 v 3 Model 1 v 2 Model 2 v 3 Model 1 v 2 Model 2 v 3 ese activities? 0.648 0.577 0.000 0.000 0.648 0.577 0.001 0.000 0.405 0.699 0.001 0.000 0.601 0.018 0.000 0.001 0.036 0.786 0.003 0.000 0.539 0.851 0.001 0.000 0.408 0.294 0.001 0.001 0.814 0.000 0.000 0.001 0.814 0.002 0.000 0.001

			McFadden Pseudo R ² Change		
	Chi ² Values		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.
Education (completed college or not)					
Over the past 7 days, how short of breath did you get with each of the	ese activities?				
Walking 50 steps/paces on flat ground at a normal speed without stopping	0.089	0.305	0.002	0.001	No
Lifting something weighing 10-20 lbs (about 4.5-9 kg, like a large bag of groceries)	0.010	0.099	0.005	0.002	No
Walking (faster than your usual speed) for ½ mile (almost 1 km) without stopping	0.024	0.095	0.004	0.002	No
Walking 10 steps/paces on flat ground at a normal speed without stopping	0.104	0.685	0.002	0.000	No
Walking up 5 stairs without stopping	0.696	0.488	0.000	0.000	No
Walking up 10 stairs (1 flight) without stopping	0.285	0.209	0.001	0.001	No
Lifting something weighing less than 5 lbs (about 2 kg, like a houseplant)	0.309	0.412	0.001	0.000	No
Lifting something weighing 5-10 lbs (about 2-4.5 kg, like a basket of clothes)	0.598	0.305	0.000	0.001	No
Lifting something weighing more than 20 lbs (about 9 kg, like a medium-sized suitcase)	0.104	0.204	0.002	0.001	No
Carrying something weighing less than 5 lbs (about 2 kg, like a houseplant) from one room to another	0.001	0.926	0.007	0.000	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.