Supplementary Information S2 (Theoretically Driven Research Project)

- S2.1 – Full demographics table
- S2.2 – Adapted Norbeck Full Scores
- S2.3 – Full description of supplementary analysis with grouping excluding comorbid OCD and HD

S2.1 – Full demographics table

	Group		
	HD	OCD	Total
	(*N* = 69)	(*N* = 42)	(*N* = 111)
Relationship between POS and PWC			
Relationship type			
Spouse or partner	8 (11.6%)	16 (38.1%)	24 (21.6%)
Significant other	5 (7.2%)	2 (4.8%)	7 (6.3%)
Family member or relative	36 (52.2)	16 (38.1%)	52 (46.8%)
Neighbour	1 (1.4%)	-	1 (.9%)
Friend	18 (26.1%)	5 (11.9%)	23 (20.7%)
Work associate	-	1 (2.4%)	1 (.9%)
Other	1 (1.4%)	2 (4.8%)	3 (2.7%)
Years known	*M* = 32.4, *SD* = 17.4	*M* = 22.5, *SD* = 16.4	*M* = 28.7, *SD* = 17.1
Have you ever lived with the PWC?			
Currently, for more than 10 years	14 (20.3%)	13 (31.0%)	27 (24.3%)
Currently, for less than 10 years	6 (8.7%)	12 (28.6%)	18 (16.2%)
Previously, for more than 10 years	18 (26.1%)	8 (19.0%)	26 (23.4%)
Previously, for less than 10 years	5 (7.2%)	1 (2.4%)	6 (5.4%)
Never lived together	26 (37.7%)	8 (19.0%)	34 (30.6%)
PWC demographics			
Formal Diagnoses			
Hoarding Disorder	6 (8.7%)	-	6 (5.4%)
Obsessive Compulsive Disorder	3 (4.3%)	29 (69.0%)	32 (28.8%)
Hoarding Disorder and Obsessive Compulsive Disorder	-	1 (2.4%)	1 (.9%)
No formal diagnosis of Hoarding Disorder nor Obsessive Compulsive Disorder	60 (87.0%)	12 (28.6%)	72 (64.9%)
Has the PWC sought help for their condition?			
Yes	18 (26.1%)	31 (73.8%)	49 (44.1%)

No	51 (73.9%)	11 (26.2 %)	62 (55.9%)
Years since onset of condition	*M* = 25.6, *SD* = 13.7	*M* = 22.2, *SD* = 11.9	*M* = 24.3, *SD* = 13.1
Age	*M* = 63.0, *SD* = 12.9	*M* = 41.2, *SD* = 10.7	*M* = 54.8, *SD* = 16.1
Gender identity			
Woman	39 (56.5%)	21 (50.0%)	60 (54.1%)
Man	28 (40.6%)	19 (45.2%)	47 (42.3%)
Transgender	2 (2.9%)	-	2 (1.8%)
Non-binary	-	2 (4.8%)	2 (1.8%)
Ethnicity			
White (English / Welsh / Scottish / Northern Irish / British)	59 (85%)	35 (83.3%)	94 (84.7%)
White (Irish)	1 (1.4%)	-	1 (.9%)
White (Any other White Background)	4 (5.8%)	2 (4.8%)	6 (5.4%)
Mixed / Multiple Ethnic Groups (White and Black Caribbean)	1 (1.4%)	1 (2.4%)	2 (1.8%)
Mixed / Multiple Ethnic Groups (White and Asian)	-	2 (4.8%)	2 (1.8%)
Mixed / Multiple Ethnic Groups (Any other Mixed / Multiple Ethnic Background)	-	1 (2.4%)	1 (.9%)
Asian / Asian British (Indian)	1 (1.4%)	-	1 (.9%)
Asian / Asian British (Pakistani)	1 (1.4%)	1 (2.4%)	2 (1.8%)
Asian / Asian British (Any other Asian Background)	1 (1.4%)	-	1 (.9%)
Black / African / Caribbean / Black British (Any other Black / African / Caribbean Background)	1 (1.4%)	-	1 (.9%)
Marital status			
Married or in a civil partnership	18 (26.1)	11 (26.2%)	29 (26.1%)
Cohabiting	7 (10.1%)	8 (19.0%)	15 (13.5%)
Divorced or separated	12 (17.4%)	1 (2.4%)	13 (11.7%)
Widowed	7 (10.1%)	1 (2.4%)	8 (7.2%)
Single	25 (36.2%)	21 (50.0%)	46 (41.4%)
Employment status			

Employed full-time	12 (17.4%)	15 (35.7%)	27 (24.3%)
Employed part-time	10 (14.5%)	6 (14.3%)	16 (14.4%)
Unemployed	14 (20.3%)	16 (38.1%)	30 (27.0%)
Retired	33 (47.8%)	4 (9.5%)	37 (33.3%)
Volunteering	-	1 (2.4%)	1 (.9%)
Highest educational attainment			
No formal Qualification	10 (14.5%)	5 (11.9%)	15 (13.5%)
GCSEs/GNVQs/Scottish Standard	11 (15.9%)	11 (26.2%)	22 (19.8%)
A-Levels/BTEC/Scottish Higher	12 (17.4%)	4 (9.5%)	16 (14.4%)
Apprenticeship	4 (5.8%)	-	4 (3.6%)
Graduate Degree (e.g. BA, BSc)	21 (30.4%)	9 (21.4%)	30 (27%)
Higher Degree (e.g. MA, MSc, PGCE)	8 (11.6%)	10 (23.8%)	18 (16.2%)
Doctorate (e.g. PhD, EdD)	1 (1.4%)	2 (4.8%)	3 (2.7%)
Prefer not to say	2 (2.9%)	1 (2.4%)	3 (2.7%)
POS demographics			
Age	*M* = 52.2, *SD* = 13.4	*M* = 47.6, *SD* = 14.6	*M* = 50.4, *SD* = 14.0
Gender identity			
Woman	59 (85.5%)	28 (66.7%)	87 (78.4%)
Man	6 (8.7%)	12 (28.6%)	18 (16.2%)
Non-binary	3 (4.3%)	1 (2.4%)	4 (3.6%)
Prefer not to say	1 (1.4%)	1 (2.4%)	2 (1.8%)
Ethnicity			
White (English / Welsh / Scottish / Northern Irish / British)	60 (87.0%)	33 (78.6%)	93 (83.8%)
White (Irish)	1 (1.4%)	-	1 (.9%)
White (Any other White Background)	2 (2.9%)	5 (11.9%)	7 (6.3%)
Mixed / Multiple Ethnic Groups (White and Black Caribbean)	-	1 (2.4%)	1 (.9%)
Mixed / Multiple Ethnic Groups (White and Asian)	-	1 (2.4%)	1 (.9%)
Mixed / Multiple Ethnic Groups (Any other Mixed / Multiple Ethnic Background)	2 (2.9%)	-	2 (1.8%)

Asian / Asian British (Indian)	1 (1.4%)	-	1 (.9%)
Asian / Asian British (Pakistani)	1 (1.4%)	1 (2.4%)	2 (1.8%)
Asian / Asian British (Any other Asian Background)	1 (1.4%)	1 (2.4%)	2 (1.8%)
Black / African / Caribbean / Black British (Any other Black / African / Caribbean Background)	1 (1.4%)	-	1 (.9%)
Marital status			
Married or in a civil partnership	30 (43.5%)	18 (42.9%)	48 (43.2%)
Cohabiting	15 (21.7%)	11 (26.2%)	26 (23.4%)
Divorced or separated	8 (11.6%)	2 (4.8%)	10 (9.0%)
Widowed	-	3 (7.1%)	3 (2.7%)
Single	16 (23.2%)	8 (19.0%)	24 (21.6%)
Employment status			
Employed full-time	29 (42.0%)	17 (40.5%)	46 (41.4%)
Employed part-time	15 (21.7%)	10 (23.8%)	25 (22.5%)
Unemployed	4 (5.8%)	4 (9.5%)	8 (7.2%)
Retired	17 (24.6%)	8 (19.0%)	25 (22.5%)
Volunteering	4 (5.8%)	3 (7.1%)	7 (6.3%)
Highest educational attainment			
No formal Qualification	2 (2.9%)	4 (9.5%)	6 (5.4%)
GCSEs/GNVQs/Scottish Standard	4 (5.8%)	5 (11.9%)	9 (8.1%)
A-Levels/BTEC/Scottish Higher	15 (21.7%)	2 (4.8%)	17 (15.3%)
Apprenticeship	-	1 (2.4%)	1 (.9%)
Graduate Degree (e.g. BA, BSc)	27 (39.1%)	19 (45.2%)	46 (41.4%)
Higher Degree (e.g. MA, MSc, PGCE)	17 (24.6%)	7 (16.7%)	24 (21.6%)
Doctorate (e.g. PhD, EdD)	3 (4.3%)	3 (7.1%)	6 (5.4%)
Prefer not to say	1 (1.4%)	1 (2.4%)	2 (1.8%)

S2.2 – Adapted Norbeck Full Scores

(reverse coded items have been transformed)

		HD (*n*=69)		OCD (*n*=42)	
Item ID	Item as worded on survey	Mean	Standard Deviation	Mean	Standard Deviation
Contact 1	How frequently do you usually attempt to make contact with this person via phone call/letter/email/social media?	3.2174	1.02713	3.4762	1.04153
Contact 2	How often does the person usually respond?	2.7681	1.12649	3.1429	1.09481
Contact 3	How frequently does the person usually attempt to make contact with you via phone call/letter/email/social media?	2.6087	1.36357	3.2619	1.16994
Contact 4	How often do you usually respond?	3.5942	.71371	3.8095	.67130
Contact 5	How frequently do you usually see this person face-to-face at your home or in a public place?	2.5507	1.41978	3.1429	1.35379
Contact 6	How frequently do you usually see this person in their home?	2.0580	1.59857	3.1190	1.41770
Contact 7	When was your most recent contact with this person?	3.2319	1.07300	3.7381	.82815

Emotional support 1	How much do you try to make the person feel liked or loved?	3.0145	1.03601	3.5476	.83235
Emotional support 2	How much do you actually make this person feel liked or loved?	2.2174	1.09638	2.8810	.94230
Emotional support 3	How much do you try to make this person feel respected or admired?	2.5362	1.24357	3.2381	1.00752
Emotional support 4	How much do you actually make this person feel respected or admired?	1.7971	1.21969	2.5238	1.01784
Emotional support 5	How open are you to this person confiding in you?	3.2174	1.12288	3.7381	.62701
Emotional support 6	How much does the person confide in you?	2.3188	1.33387	2.8333	1.01011
Emotional support 7	How much do you agree with or support this person's actions or thoughts regarding over acquiring and keeping possessions and/or obsessional and compulsive problems?	2.8986	1.03106	2.3571	1.18572
Emotional support 8	How much do you agree with or support this person's actions or thoughts (other than matters regarding over acquiring and keeping possessions and/or	1.9710	1.15008	2.4048	1.08334

	obsessional and compulsive problems)?				
Tangible support 1	How available are you to help and support the person to do what they need to do?	3.0435	.99165	3.3333	.75439
Tangible support 2	How much does the person accept help and support from you with doing what they need to do?	1.4783	1.23203	2.4762	1.27333
Tangible support 3	How available are you to help and support the person meet their basic needs?	2.5942	1.15452	3.1429	.97709
Tangible support 4	How much does the person accept help and support from you with meeting their basic needs?	1.7246	1.34912	2.4048	1.34454
Tangible support 5	If the person needed help and support for several weeks, how available could you be to help this person?	2.8551	1.04706	3.2381	.95788
Tangible support 6	How much would the person accept help and support from you if you offered this for several weeks?	1.6667	1.29099	2.7143	1.27424
Tangible support 7	If the person needed help and support in an emergency, how available could you usually be?	3.5507	.77718	3.7143	.67302

Tangible support 8	How much would the person accept help and support from you in an emergency?	2.6232	1.36232	3.3333	1.00406
Perceived effectiveness 1	How warmly does the person respond to your efforts to help and support them?	1.7826	1.19889	2.5238	1.06469
Perceived effectiveness 2	Is the person grateful of your efforts to help and support them?	1.8116	1.45799	2.6429	1.28446
Perceived effectiveness 3	Does the person recognise the effort you put into helping and supporting them?	1.5507	1.36701	2.5238	1.34777
Perceived effectiveness 4	Is the person welcoming of your help and support?	1.6377	1.33913	2.5000	1.21475
Perceived effectiveness 5	Does the person reject your help and support?	2.1304	1.42368	2.5714	1.03930
Perceived effectiveness 6	How pointless does it feel to offer help and support to the person?	1.6812	1.50970	2.0476	1.43054
Perceived effectiveness 7	How confident are you that you are offering the right kind of help and support to the person?	1.6812	1.15673	1.7857	1.07149

Perceived effectiveness 8	Does the help and support you offer to the person make a difference?	1.3188	1.24254	2.2619	1.16994
Perceived effectiveness 9	How frustrated do you feel when offering help and support to the person?	1.2899	1.24972	1.8810	1.13056
Perceived effectiveness 10	How often do you snap at the person when offering help and support?	2.8551	1.23996	2.8333	1.08012
Perceived effectiveness 11	How satisfied are you that you do your best to help and support to the person?	2.5072	1.20810	2.4286	1.30931
Perceived effectiveness 12	Do you feel hopeless about offering help and support to the person?	1.4783	1.35699	1.7857	1.35315
Perceived effectiveness 13	Do you get angry with the person when offering help and support?	2.5797	1.45931	2.8095	1.17366
Perceived effectiveness 14	Do you find helping and supporting the person rewarding?	1.3478	1.25822	2.0714	1.27629
Perceived effectiveness 15	Do you feel resentful towards the person that you help and support?	2.5072	1.56828	3.1667	1.18767

Perceived effectiveness 16	Do you feel guilty about not offering enough help and support to the person?	2.4783	1.41014	2.0238	1.38789
Reciprocity 1	How much does this person make you feel liked or loved?	2.0000	1.26025	2.9762	1.19935
Reciprocity 2	How much does this person make you feel respected or admired?	1.7971	1.31261	2.8333	1.36000
Reciprocity 3	How much can you confide in this person?	1.7681	1.42607	2.8095	1.36575
Reciprocity 4	How much does this person agree with or support your actions or thoughts (other than matters regarding over acquiring and keeping possessions and/or obsessional and compulsive problems)?	1.9420	1.13609	2.3571	1.20611
Reciprocity 5	If you needed immediate help, how much could this person usually help?	2.0580	1.43367	2.5000	1.32977
Reciprocity 6	If you needed help for several weeks, how much could this person help you?	1.7826	1.42323	2.2619	1.36256

S2.3 – Full description of supplementary analysis with grouping excluding comorbid OCD and HD

The primary and secondary analyses were re-run, omitting cases where the POS identified the PWC as having comorbid OCD or HD. In terms of group differences, results were broadly in line with the main group classification, however there were some discrepancies. With the 'pure' condition groups, there was a significant difference in POS age, the HD group being older: HD (M=51.7 SD=14.0), OCD (M=42.6, SD=13.5) U=379.5, p=011. There were also significantly more PWC currently unemployed in the HD group (64.0%) versus the OCD group (37.5%) X^2 (1, N=74)=4.6, p=.032, and significantly more PWC in the HD group having a maximum educational attainment up to and including A-Levels (64.0%), compared to the OCD group (37.5%) X^2 (1, N = 74)=4.6, p=.032. The grouping excluding comorbidity also showed that this HD group had a similar likelihood of having weekly face-to-face contact in the PWC homes to the OCD group X^2 (1, N = 74)=2.2, p=.136 and a similar rate of the POS having ever lived with the PWC X^2 (1, N = 74)=1.3, p=.246.

As per the first round of analysis, evaluation of the adapted NSSQ-R subscales found a significant main effect of subscale $F_{(2,144)}$=60.0, p<.001 and a significant interaction effect of subscale x group $F_{(2,144)}$=5.0, p=.008. One difference found was that the significant difference between perceived success and supporter experience subscales within the OCD group was no longer significant when removing comorbidity, $t_{(23)}$=2.0, p=.063.

Running a mixed model for the ASS subscales between groups revealed a significant main effect of subscale $F_{(1,69)}$=27.0, p<.001. Again, the interaction effect of subscale x group here was not significant $F_{(1,69)}$=1.4, p=.237. There was a significant main effect of group $F_{(1,69)}$=55.7, p<.001. For the CAMI, another significant main effect of subscale

was detected $F_{(1,70)}$=14.0, p<.001, with the interaction effect of subscale x group still not meeting significance $F_{(1,70)}$=.25, p=.874. There was a difference from the first round of analysis in that the main effect of group was not significant $F_{(1,70)}$=3.6, p=.062.