

Maes F, Berwouts J, Vanaerschot G. The pains of parentification: A cross-sectional comparison between Belgian women with fibromyalgia, rheumatoid arthritis, depression and healthy controls. J Pain Res Manag. 2025;1(1):105-117.

Supplementary tables

Table Suppl 1. Factorial ANOVA . Residential status (RES) vs diagnostic group(GROUP).

variable		F	p	Partial omega squared
PF	GROUP	15.94	<.001	.101
	RES	.293	.589	.000
SF	GROUP	10.82	<.001	.080
	RES	2.21	.138	.004
PB	GROUP	31.704	<.001	.188
	RES	2.20	.139	.003
IC	GROUP	12.70	<.001	.082
	RES	1.73	.189	.002
EC	GROUP	23.58	<.001	.146
	RES	.01	.930	.000
UNF	GROUP	41.22	<.001	.234
	RES	.744	.389	.000

Parameter estimates with robust standard errors ; all Bs of residential status were non-significant for PF, SF, PB, IC, EC, UNF.

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Table Suppl 2. A/ ANOVA for parentification parameters and sibling order

We ran an ANOVA procedure for the main effects of sibling order in the family of origin .We report the Welch Fs.

For PF $F(3, 194.88) = 2.69, p = .048$. and $\omega^2 = .010$

For SF $F(2, 202.98) = 14.89, p < .001$ and $\omega^2 = .057$

For PB $F(3, 194.28) = 2.84, p = .039$ and $\omega^2 = .012$

For IC $F(3, 198.62) = 5.47, p = .001$ and $\omega^2 = .033$

For EC $F(3, 192.46) = 2.38, p = .071$ and $\omega^2 = .010$

For UNF $F(3, 195.63) = 3.24, p = .023$ and $\omega^2 = .015$

In the Post Hoc procedure, we applied the Games Howell test since for most variables the assumption of equal variances was violated.

For PF and EC no significant differences were found between any of the siblings.

For SF both the eldest and middle siblings showed significant higher scores than the youngest ($p < .001$).

For PB and UNF the youngest showed significant higher resp lower scores than the middle siblings (resp $p = .034$ and $p = .016$), but there were no differences with the eldest.

For IC the eldest showed no significantly different scores than the other siblings, but the middle siblings scored significantly higher than the youngest or only siblings (resp $p = .002$ and $p = .013$).

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Table Suppl 2 B/ Factorial ANOVA: sibling order (SO) vs diagnostic group (GROUP)

variable		F	P	partial omega squared
PF	GROUP	13.73	<.001	.086
	SO	1.30	.275	.007
SF	GROUP	8.46	<.001	.061
	SO	10.13	<.001	.047
PB	GROUP	32.94	<.001	.190
	SO	1.54	.203	.004
IC	GROUP	11.54	<.001	.065
	SO	5.18	.002	.030
EC	GROUP	22.82	<.001	.139
	SO	.243	.243	.003
UNF	GROUP	42.37	<.001	.234
	SO	1.48	.218	.004

Parameter estimates with robust standard parameters ; all Bs of peer position were non- significant for PF, PB, EC, UNF.

Comparison with youngest child

variable		t	P	Hedges g
SF*	Eldest	4.26	<.001	.531
	Middle	4.39	<.001	.628
	youngest	.		
IC	Eldest	2.30	.023	.289
	Middle	3.65	<.001	.511
	Only	.24	.810	.038
	youngest	.	.	.

* For SF no differences were calculated for only children

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Table Suppl 3. ANOVA for educational level (EL) - robust test of equality of means

Parentification variable	D)	Mean M(S)			Welch test p	Omega squared (95% CI)
		Prim/Sec (N=175)	Bachelor (N=166)	Master (N=70)		
HPI	PF	2.30 (.86)	2.01 (.70)	1.84 (.71)	<.001	.047 (.011-.092)
	SF	2.19 (.90)	1.73 (.60)	1.58 (.52)	<.001	.101 (.049-.158)
	PB	2.75 (.09)	3.28 (1.17)	3.30 (1.16)	<.001	.043 (.009-.086)
FRS-a	IC	21.05 (8.63)	16.95 (6.63)	15.13 (5.20)	<.001	.091 (.041-.145)
	EC	27.39 (9.92)	23.50 (8.82)	22.60 (9.41)	<.001	.042 (.008-.085)
	Unf	30.65 (12.22)	23.85 (11.80)	23.83 (11.60)	<.001	.069 (.026-.120)

For SF : N= 144 / 141/ 60

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Table Suppl 4. Factorial ANOVA : Educational level (EL) vs diagnostic group (GROUP)

variable		F	P	partial omega squared
PF	GROUP	9.99	<.001	.062
	EL	4.21	.015	.015
SF	GROUP	3.57	.014	.022
	EL	12.16	<.001	.061
PB	GROUP	28.37	<.001	.167
	EL	1.52	.220	.003
IC	GROUP	5.67	<.001	.032
	EL	11.69	<.001	.049
EC	GROUP	18.41	<.001	.113
	EL	2.12	.122	.005
UNF	GROUP	34.32	<.001	.196
	EL	3.21	.042	.011

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Table Suppl 5. Post Hoc procedure- multiple comparisons (Games-Howell) for educational level (EL) comparisons- p values

EL			
PF	Prim/Sec	Bach	Master
	Bach	.001**	<.001**
	Master	-	.250
SF	Prim/Sec	-	-
	Bach	<.001**	<.001**
	Master	-	.170
PB	Prim/Sec	-	-
	Bach	<.001**	.004**
	Master	-	1.000
IC	Prim/Sec	-	-
	Bach	<.001**	<.001**
	Master	-	.066
EC	Prim/Sec	-	-
	Bach	<.001**	.002**
	Master	-	.774
UNF	Prim/Sec	-	-
	Bach	<.001**	<.001**
	Master	-	1.000

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Table Suppl 6. Bootstrap for multiple comparisons GROUP * EL

PF			Mean difference (95 % CI)	SE	p
Prim/Sec	FM	RA	.57 (.06-.98)	.18	.009
		HC	.55 (.13-.92)	.17	<.001
		AD	-.22 (-.82- .36)	.23	.990
Bach	FM	RA	.21 (-.29-.64)	.18	.726
		HC	.40 (.11-.71)	.12	.006
		AD	.23 (-.31- .71)	.22	.915
Master	FM	RA	.60 (.00-1.24)	.25	.060
		HC	.63 (.18-1.23)	.22	.018
		AD	.72 (.17- 1.32)	.23	.006
SF					
Prim/Sec	FM	RA	.35 (-.12- .76)	.18	.153
		HC	.43 (-.13- .85)	.19	.081
		AD	.27 (-.51- .85)	.29	1.000
Bach	FM	RA	-.00 (-.54- .43)	.20	1.000
		HC	.24 (- .04- .52)	.12	.141
		AD	.01 (-.37- .38)	.15	1.000
Master	FM	RA	.40 (-.11- .98)	.22	.216
		HC	.20 (-.25- .74)	.20	.834
		AD	.15 (-.43- .75)	.23	1.000
PB					
Prim/Sec	FM	RA	-.10 (-1.64- -.20)	.28	<.001
		HC	-.75(-1.32—.16)	.24	<.001
		AD	-.09 (-1.15- .87)	.41	1.000
Bach	FM	RA	-.86 (-1.57--.16)	.28	.012
		HC	-1.24 (-1.65--.83)	.18	<.001
		AD	.32 (-.53-1.12)	.34	1.000
Master	FM	RA	-1.64 (-2.50--.58)	.40	<.001
		HC	-1.23 (-1.89--.53)	.29	<.001
		AD	-.73 (-1.46-.07)	.33	.060
IC				SE	p

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Prim/Sec	FM	RA	5.34 (.98-9.38)	1.77	.009
		HC	4.53 (.35-8.33)	1.64	.027
		AD	.81 (-5.72-6.74)	2.51	1.000
Bach	FM	RA	2.13 (-2.77-6.12)	1.78	.681
		HC	3.03 (-.269-5.97)	1.24	.051
		AD	3.75 (-.70-7.25)	1.64	.057
Master	FM	RA	2.05 (-2.22- 6.28)	1.70	.663
		HC	1.40 (-2.68- 6.19)	1.76	1.000
		AD	1.60 (-2.48- 5.70)	1.73	1.000
EC					
Prim/Sec	FM	RA	8.43 (2.27-13.26)	2.28	.006
		HC	5.66 (1.14-11.33)	2.15	.030
		AD	-2.47 (-8.70- 3.41)	2.59	1.000
Bach	FM	RA	4.92 (-.75- 9.67)	2.04	.063
		HC	7.62 (3.95- 10.95)	1.46	<.001
		AD	.80 (-5.85- 7.67)	2.81	1.000
Master	FM	RA	11.91 (5.67-17.73)	2.56	<.001
		HC	9.82 (3.19-16.25)	2.63	<.001
		AD	11.76 (5.22-18.75)	2.78	<.001
UNF					
Prim/Sec	FM	RA	13.66 (5.55-19.45)	2.71	<.001
		HC	8.64 (2.00-15.86)	2.72	.012
		AD	1.99 (-4.65- 8.11)	3.33	1.000
Bach	FM	RA	7.51 (-.32-14.38)	2.96	.039
		HC	13.00 (8.87-17.08)	1.75	<.001
		AD	-2.23 (-10.68- 7.70)	3.73	1.000
Master	FM	RA	16.45 (6.98-23.83)	3.43	<.001
		HC	13.87 (6.82- 21.00)	2.91	<.001
		AD	10.02 (1.74-17.92)	3.39	<.001

CI and p adjusted for multiplicity