

Men's Psychotherapy Use, Male Role Norms, and Male-Typical Depression Symptoms: Examining 716 Men and Women Experiencing Psychological Distress

Supplementary material

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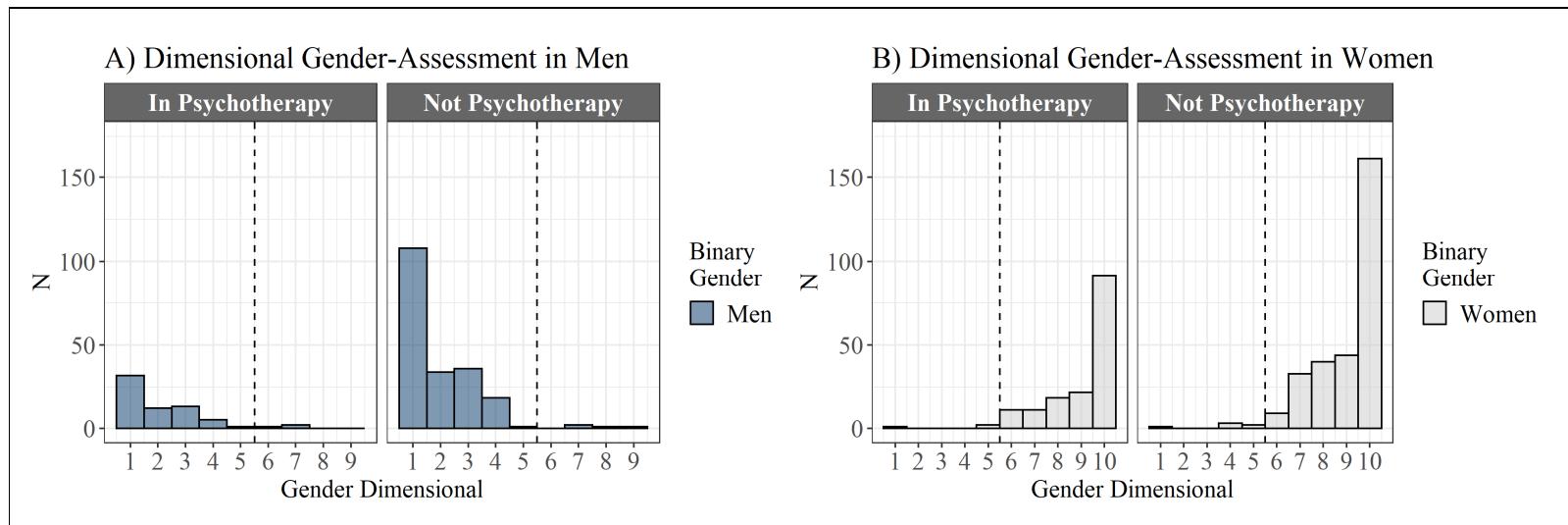


Figure S1. Distribution of Self-Assessed Dimensional Gender

Note. N = Number of participants. 1 = masuline pole, 10 = feminine pole. The vertical dashed line indicates the middle of the scale (above = more towards femininity pole; below = more towards masculinity pole).

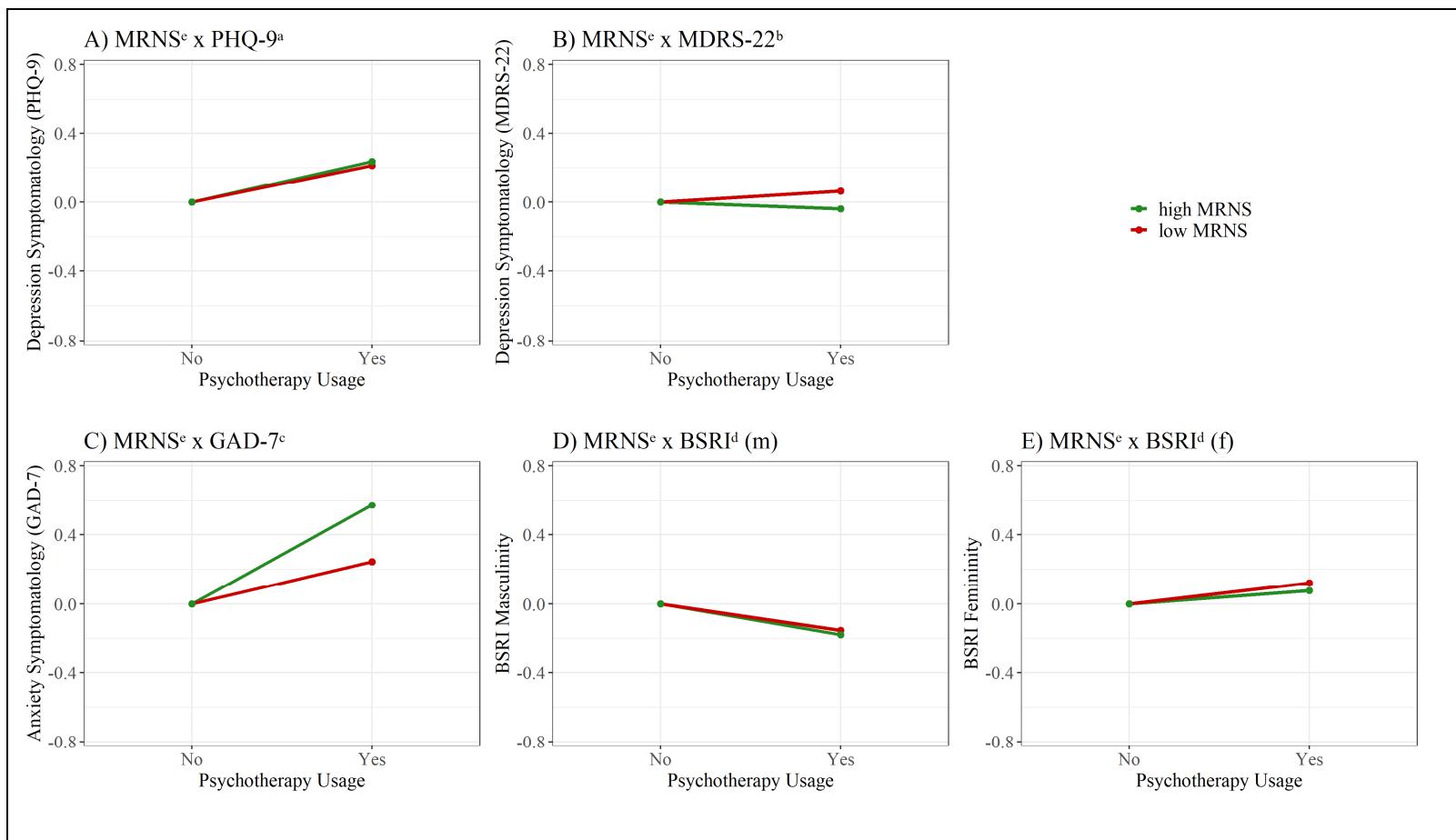


Figure S2. Interaction Effects in Female Participants

Note. \times = interaction, m = masculine subscale, f = feminine subscale. The questionnaire values on the y-axis were z -standardized and linearly transformed to have a joint reference point at $y = 0$

^a PHQ-9 = Patient Health Questionnaire - 9

^b MDRS-22 = Male Depression Risk Scale - 22

^c GAD-7 = Generalized Anxiety Disorder - 7

^d BSRI = Bem Sex Role Inventory

^e MRNS = Male Role Norm Scale

Table S1. Group Comparisons for Heterosexual Male and Female Participants

PHQ-9 ^a			MDRS-22 ^b			GAD-7 ^c			
	M (SD)	t (df)	p	M (SD)	t (df)	p	M (SD)	t (df)	p
Men in PT	12.4 (6.2)			30.3 (20.0)			10.9 (5.1)		
Men not in PT	12.9 (5.6)	-1.48 (186)	.630	34.3 (19.8)	-2.73 (186)	0.242	9.5 (4.8)	1.68 (186)	0.094
Women in PT	15.4 (5.6)			32.2 (18.7)			12.9 (3.9)		
Women not in PT	14.0 (5.3)	2.02 (277)	0.045*	31.8 (16.6)	0.15 (277)	0.0878	10.5 (3.9)	4.3 (277)	<0.001***

BSRI ^d (m)			BSRI ^d (f)			MRNS ^e			
	M (SD)	t (df)	p	M (SD)	t (df)	p	M (SD)	t (df)	p
Men in PT	55.0 (11.5)	-2.12		68.8 (13.7)			73.5 (31.4)		
Men not in PT	59.6 (16.2)	(100.1)	0.037*	67.6 (14.0)	0.49 (186)	0.626	78.3 (27.1)	-0.98 (186)	0.326
Women in PT	54.2 (14.4)			74.9 (11.8)			58.1 (17.3)		
Women not in PT	57.4 (14.7)	-1.70 (277)	0.094	73.2 (11.6)	1.13 (277)	0.259	61.7 (22.8)	-1.30 (277)	0.194

Note. M = mean score, SD = standard deviation, t = t-value, df = degrees of freedom, p = p-value

^a PHQ-9 = Patient Health Questionnaire - 9

^b MDRS-22 = Male Depression Risk Scale - 22

^c GAD-7 = Generalized Anxiety Disorder - 7

^d BSRI = Bem Sex-Role Inventory

^e MRNS = Male Role Norm Scale

* = p < 0.05, ** = p < 0.01, *** = p < 0.001

Table S2. Second-Order Partial Correlation Matrices for the applied Questionnaires

A) Male Participants							
Variable	<i>M</i>	<i>SE</i>	PHQ-9 ^a	MDRS-22 ^b	GAD-7 ^c	BSRI ^d (m)	BSRI ^d (f)
PHQ-9 ^a	13.7	6.0					
MDRS-22 ^b	33.7	19.7	0.53***				
GAD-7 ^c	10.3	5.0	0.65***	0.51***			
BSRI ^d (m)	57.8	14.7	-0.31***	-0.12	-0.19**		
BSRI ^d (f)	67.9	13.3	-0.08	-0.16*	-0.01	0.30***	
MRNS ^e	73.2	26.7	0.09	0.29***	0.12	0.12*	-0.22***

B) Female participants							
Variable	<i>M</i>	<i>SE</i>	PHQ-9 ^a	MDRS-22 ^b	GAD-7 ^c	BSRI ^d (m)	BSRI ^d (f)
PHQ-9 ^a	14.8	5.4					
MDRS-22 ^b	32.0	17.1	0.56***				
GAD-7 ^c	11.6	4.5	0.63***	0.46***			
BSRI ^d (m)	55.7	14.0	-0.30***	-0.12*	-0.21***		
BSRI ^d (f)	73.4	11.3	-0.08	-0.02	0.05	0.25***	
MRNS ^e	57.7	20.1	-0.03	0.05	-0.05	0.04	-0.14**

Note. *m* = masculine subscale, *f* = feminine subscale, *M* = mean value, *SE* = standard error. Partial correlations were controlled for age and educational level.

^a PHQ-9 = Patient Health Questionnaire—9

^b MDRS-22 = Male Depression Risk Scale—22

^c GAD-7 = Generalized Anxiety Disorder—7

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^e MRNS = Male Role Norm Scale

* = *p* < 0.05, ** = *p* < 0.01, *** = *p* < 0.001

Table S3. Summary of the Binary Logistic Regression Models controlled for Covariates for Male Participants

	No interaction		MRNS x PHQ-9		MRNS x MDRS-22		MRNS x GAD-7		MRNS x BSRI (m)		MRNS x BSRI (f)	
Predictor	β (SE)	p	β (SE)	p	β (SE)	p	β (SE)	p	β (SE)	p	β (SE)	p
Intercept	0.12 (1.40)	0.930	4.17 (1.89)	0.028*	2.02 (1.60)	0.207	2.18 (1.65)	0.186	-2.35 (2.02)	0.244	-3.24 (2.33)	0.164
PHQ-9^a	-0.23 (0.34)	0.505	-2.72 (0.84)	0.001**	-0.18 (0.35)	0.609	-0.15 (0.35)	0.660	-0.24 (0.34)	0.481	-0.20 (0.34)	0.558
MDRS-22^b	-0.71 (0.25)	0.004**	-0.77 (0.26)	0.002**	-2.16 (0.63)	<0.001***	-0.68 (0.25)	0.006**	-0.71 (0.25)	0.004**	-0.73 (0.25)	0.004**
GAD-7^c	0.85 (0.31)	0.006**	0.99 (0.32)	0.002**	1.00 (0.32)	0.002**	-0.72 (0.70)	0.301	0.81 (0.31)	0.009**	0.84 (0.31)	0.007**
BSRI^d (m)	-0.44 (0.19)	0.021*	-0.37 (0.20)	0.067	-0.42 (0.19)	0.029*	-0.39 (0.19)	0.044*	0.29 (0.47)	0.533	-0.46 (0.19)	0.015*
BSRI^d (f)	0.04 (0.19)	0.823	0.03 (0.20)	0.893	0.06 (0.20)	0.774	0.07 (0.20)	0.732	0.03 (0.20)	0.868	0.82 (0.48)	0.083
MRNS^e	-0.02 (0.17)	0.902	-1.53 (0.52)	0.003**	-0.82 (0.36)	0.021*	-1.02 (0.45)	0.024*	0.97 (0.61)	0.113	1.19 (0.69)	0.086
Age	0.01 (0.01)	0.427	0.01 (0.02)	0.705	0.01 (0.02)	0.425	0.01 (0.01)	0.459	0.01 (0.01)	0.592	0.01 (0.01)	0.411
Relationship	0.03 (0.14)	0.854	0.06 (0.15)	0.704	0.03 (0.15)	0.863	0.04 (0.15)	0.809	0.06 (0.15)	0.688	0.04 (0.14)	0.777
Sex. Orient.	0.09 (0.15)	0.552	0.11 (0.15)	0.449	0.09 (0.15)	0.566	0.12 (0.15)	0.427	0.08 (0.15)	0.569	0.10 (0.15)	0.482
Education	-0.03 (0.09)	0.757	-0.07 (0.15)	0.427	-0.04 (0.09)	0.690	-0.03 (0.09)	0.783	-0.03 (0.09)	0.740	-0.02 (0.09)	0.864
Interaction		0.93 (0.29)	0.001**	0.47 (0.18)	0.011*	0.58 (0.24)	0.015*	-0.27 (0.17)	0.097	-0.30 (0.16)	0.073	
Omnibus statistics												
χ^2 (df)	21.70 (10)		33.22 (11)		29.14 (11)		27.88 (11)		24.67 (11)		24.89 (11)	
p (omnibus)	0.017*		<0.001***		0.002**		<0.003**		0.010*		0.009**	
Pseudo R² (Nagelkerke)	0.116		0.174		0.154		0.147		0.131		0.132	

Note. x = interaction, m = masculine subscale, f = feminine subscale, β = estimated regression coefficient, SE = standard error, p = p-value. All calculations were controlled for age (Age), relationship status (Relationship), sexual orientation (Sex. Orient.) and education level (Education).

^a PHQ-9 = Patient Health Questionnaire-9

^b MDRS-22 = Male Depression Risk Scale-22

^c GAD-7 = Generalized Anxiety Disorder-7

^d BSRI = Bem Sex-Role Inventory

^e MRNS = Male Role Norm Scale

* = $p < 0.05$, ** = $p < 0.01$, *** = $p < 0.001$

Table S4. Summary of the Binary Logistic Regression Models controlled for Covariates for Female Participants

	No interaction		MRNS x PHQ-9		MRNS x MDRS-22		MRNS x GAD-7		MRNS x BSRI (m)		MRNS x BSRI (f)	
Predictor	β (<i>SE</i>)	<i>p</i>	β (<i>SE</i>)	<i>p</i>	β (<i>SE</i>)	<i>p</i>	β (<i>SE</i>)	<i>p</i>	β (<i>SE</i>)	<i>p</i>	β (<i>SE</i>)	<i>p</i>
Intercept	-1.99 (1.12)	0.076	-3.40 (1.37)	0.013*	-3.66 (1.29)	0.005**	-2.23 (1.41)	0.116	-1.37 (1.86)	0.461	-1.74 (2.63)	0.509
PHQ-9^a	0.09 (0.25)	0.728	1.06 (0.61)	0.082	0.06 (0.25)	0.814	0.08 (0.25)	0.743	0.09 (0.25)	0.716	0.09 (0.25)	0.730
MDRS-22^b	-0.32 (0.17)	0.061	-0.31 (0.17)	0.065	1.02 (0.56)	0.068*	-0.32 (0.17)	0.060	-0.32 (0.17)	0.060	-0.32 (0.17)	0.060
GAD-7^c	0.80 (0.22)	<0.001***	0.82 (0.22)	<0.001**	0.82 (0.22)	<0.001***	0.96 (0.64)	.131	0.80 (0.22)	<0.001***	0.80 (0.22)	<0.001***
[*]												
BSRI^d (m)	-0.11 (0.12)	0.350	-0.13 (0.13)	0.302	-0.13 (0.13)	0.295	-0.12 (0.12)	0.346	-0.28 (0.41)	0.496	-0.12 (0.12)	0.354
BSRI^d (f)	0.19 (0.15)	0.199	0.18 (0.15)	0.230	0.20 (0.15)	0.190	0.19 (0.15)	0.215	0.19 (0.15)	0.200	0.14 (0.52)	0.791
MRNS^e	-0.20 (0.15)	0.173	0.38 (0.34)	0.274	0.46 (0.28)	0.109	-0.10 (0.38)	0.793	-0.43 (0.57)	0.454	-0.29 (0.86)	0.739
Age	-0.01 (0.01)	0.675	-0.01 (0.01)	0.735	-0.01 (0.01)	0.749	-0.01 (0.01)	0.678	-0.01 (0.01)	0.679	-0.01 (0.01)	0.673
Relationship	0.07 (0.11)	0.501	0.07 (0.11)	0.519	0.08 (0.11)	0.481	0.07 (0.11)	0.504	0.07 (0.11)	0.500	0.07 (0.11)	0.501
Sex. Orient.	0.02 (0.09)	0.852	0.01 (0.09)	0.868	0.01 (0.09)	0.929	0.02 (0.09)	0.859	0.01 (0.09)	0.868	0.02 (0.09)	0.850
Education	0.05 (0.07)	0.520	0.04 (0.08)	0.612	0.03 (0.07)	0.653	0.05 (0.07)	0.525	0.05 (0.07)	0.527	0.05 (0.07)	0.521
Interaction			-0.37 (0.21)	0.078	-0.49 (0.20)	0.130	-0.06 (0.21)	0.784	0.06 (0.14)	0.675	0.02 (0.18)	0.916
Omnibus statistics												
χ^2 (df)	30.88 (10)		33.83 (11)		37.41 (11)		30.96 (11)		31.06 (11)		30.90 (11)	
<i>p</i> (omnibus)	<0.001***		<0.001***		<0.001***		0.001**		0.001**		0.001**	
pseudo R² (Nagelkerke)	0.092		0.100		0.110		0.092		0.092		0.092	

Note. x = interaction, m = masculine subscale, f = feminine subscale, β = estimated regression coefficient, SE = standard error, p = p -value. All calculations were controlled for age (*Age*), relationship status (*Relationship*), sexual orientation (*Sex. Orient.*) and education level (*Education*).

^a PHQ-9 = Patient Health Questionnaire - 9

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