

Table 1. Socio-demographic, Lifestyle, and Clinical Characteristics of the Participants

	PwMS (n=41)	Controls (n=41)	t-test/ χ^2	p value	d/Phi
Female n (%)	29 (70.7%)	29 (70.7%)	-	-	
Age M (SD)	48.48 (11.85)	48.99 (12.02)	$t=0.194$	0.85	0.04
Marital status n (%)			$\chi^2=3.973$	0.26	0.22
Single	7 (17.1%)	8 (19.5%)			
Married	32 (78%)	26 (63.4%)			
Separated/Divorced	2 (4.9%)	5 (12.2%)			
Widow-er	0 (0%)	2 (4.9%)			
Educational level n (%)			$\chi^2=9.342$	0.053	0.34
Unschoolled	0 (0%)	1 (2.4%)			
Elementary	11 (26.8%)	6 (14.6%)			
Secondary	6 (14.6%)	6 (14.6%)			
FP or equivalent	10 (24.4%)	3 (7.3%)			
University	14 (34.1%)	25 (61%)			
Family history (diseases) n (%)					
Multiple Sclerosis	5 (12.2%)	2 (4.9%)	$\chi^2=1.406$	0.24	0.13
Autoimmune	7 (17.1%)	15 (36.6%)	$\chi^2=3.976$	0.05*	0.22
Cancer	25 (61%)	29 (70.7%)	$\chi^2=0.868$	0.35	0.10
Neurodegenerative	16 (39%)	12 (29.3%)	$\chi^2=0.868$	0.35	0.10
Psychopathologic	9 (22%)	4 (9.8%)	$\chi^2=2.285$	0.13	0.17
Lifestyle (before diagnosis) n (%)					
Tobacco consumption (TC)	22 (53.7%)	8 (19.5%)	$\chi^2=10.303$	0.001**	0.36
Alcohol consumption	3 (7.3%)	3 (7.3%)	-	-	
Drugs consumption	4 (9.8%)	0 (0%)	$\chi^2=4.205$	0.04*	0.23
Work activity	40 (97.6%)	37 (90.2%)	$\chi^2=1.917$	0.17	0.12
Physical activity (PA)	28 (68.3%)	35 (85.4%)	$\chi^2=3.357$	0.07	0.20
MS age diagnosis M (SD; range)	35.93 (10.71; 12-62)	-			
MS duration y M (SD; range)	13.46 (7.64; 3-29)	-			
EDSS M (SD; range)	1.96 (1.69; 0-6)	-			

Note. MS = multiple sclerosis; EDSS = Expanded Disability Status Scale; y = years. Significance (two-tailed) = *p<.05,

**p<.01

Table 2. Psychosocial Variables Scores Comparing PwMS and Control Participants

	PwMS	Controls			
	M (SD)	M (SD)	t-test/Chi	p value	d/Phi
Coping (SACS)	n=39	n=41			
Assertive	24.10 (6.12)	25.34 (5.16)	$t=0.981$	0.33	0.22
Social joining	13.10 (3.63)	12.29 (3.66)	$t=-0.993$	0.32	0.22
Seek social support	21.21 (6.93)	25.68 (5.06)	$t=3.313$	0.001**	0.74
Cautious	10.62 (3.29)	10.71 (3.54)	$t=0.120$	0.91	0.03
Instinctive	12.31 (3.44)	10.05 (3.49)	$t=-2.915$	0.005**	0.65
Avoidance	15.10 (7.99)	10.22 (6.28)	$t=-3.048$	0.003**	0.68
Aggressive/Antisocial	8.67 (6.34)	7.05 (5.77)	$t=-1.195$	0.24	0.27
Social Support (MSPSS)	n=32	n=41			
Family	23.09 (6.24)	26.02 (2.77)	$t=2.472$	0.02*	0.58
Friends	21.72 (5.81)	23.71 (5.14)	$t=1.549$	0.13	0.36
Relevant persons	24.22 (5.53)	26.29 (2.40)	$t=1.980$	0.05*	0.46
Total Score	69.03 (15.74)	76.02 (7.70)	$t=2.307$	0.03*	0.54
Anxiety (STAI-T)	n=30	n=41			
Anxiety Trait	25.00 (11.79)	17.17 (8.60)	$t=-3.085$	0.003**	0.73
High Anxiety Trait P75 n(%)	11 (36.7%)	3 (7.3%)	$\chi^2=9.427$	0.002**	0.36
Alexithymia (TAS-20)	n=40	n=41			
Difficulty identifying feelings	17.80 (8.24)	13.88 (6.18)	$t=-2.418$	0.02*	0.54
Difficulty describing feelings	13.05 (4.88)	11.49 (3.26)	$t=-1.690$	0.10	0.38
Externally oriented thinking	20.48 (5.13)	18.49 (4.23)	$t=-1.904$	0.06	0.43
Total Score	51.33 (14.95)	43.85 (10.87)	$t=-2.577$	0.01*	0.58
Score ≥ 52 n(%)	16 (40%)	8 (19.5%)	$\chi^2=4.076$	0.04*	0.22
Early-Life Stress (CTQ-SF)	n=40	n=41			
Emotional abuse	3.25 (4.53)	1.80 (2.56)	$t=-1.762$	0.08	0.39
Physical abuse	0.98 (3.04)	0.51 (1.36)	$t=-0.889$	0.38	0.20
Sexual abuse	1.13 (3.79)	0.78 (2.34)	$t=-0.494$	0.62	0.11
Emotional neglect	5.00 (4.45)	3.44 (3.42)	$t=-1.773$	0.08	0.39
Physical neglect	1.63 (2.19)	0.98 (1.89)	$t=-1.429$	0.16	0.32
Total Score	12.90 (14.69)	8.10 (8.47)	$t=-1.808$	0.07	0.40

Note. PwMS = people with multiple sclerosis; SACS = Strategic Approach to Coping Scale; MSPSS = Multidimensional Scale of Perceived Social Support; STAI-T = State-Trait Anxiety Inventory; TAS-20 = Toronto Alexithymia Scale; CTQ-SF = Childhood Trauma Questionnaire; P75 = percentile 75. Significance (two-tailed) = * $p<.05$, ** $p<.01$

Table 3. Psychosocial Correlates of EDSS-tot, EDSS-relative, and FAMS

	EDSS-tot r (95% CI)	EDSS-relative r (95% CI)	FAMS r (95% CI)
Coping (SACS)			
Assertive	0.04 (-0.28 to 0.35)	0.10 (-0.23 to 0.40)	0.16 (-0.17 to 0.45)
Social joining	0.41 ^{**} (0.11 to 0.65)	0.17 (-0.16 to 0.46)	-0.41 ^{**} (-0.65 to -0.11)
Seek social support	-0.12 (-0.42 to 0.21)	-0.16 (-0.45 to 0.17)	-0.002 (-0.32 to 0.32)
Cautious	0.11 (-0.22 to 0.42)	0.24 (-0.09 to 0.52)	-0.48 ^{**} (-0.69 to -0.19)
Instinctive	-0.13 (-0.43 to 0.20)	-0.10 (-0.41 to 0.23)	0.11 (-0.21 to 0.42)
Avoidance	0.48 ^{**} (0.18 to 0.69)	0.27 (-0.05 to 0.54)	-0.56 ^{**} (-0.74 to -0.29)
Aggressive/Antisocial	0.07 (-0.25 to 0.38)	0.14 (-0.19 to 0.44)	-0.26 (-0.54 to 0.07)
Social Support (MSPSS)	0.09 (-0.26 to 0.42)	-0.18 (-0.50 to 0.18)	0.70 ^{**} (0.46 to 0.84)
Trait Anxiety (STAI-T)	0.18 (-0.19 to 0.51)	0.16 (-0.21 to 0.49)	-0.77 ^{**} (-0.89 to -0.57)
Alexithymia (TAS-20)	0.23 (-0.10 to 0.51)	0.21 (-0.12 to 0.49)	-0.63 ^{***} (-0.79 to -0.39)
Early-Life Stress (CTQ-SF)	-0.11 (-0.41 to 0.22)	-0.06 (-0.37 to 0.26)	-0.49 ^{**} (-0.70 to -0.20)

Note: *n* range 30-40. SACS = Strategic Approach to Coping Scale; MSPSS = Multidimensional Scale of Perceived Social Support; STAI-T = State-Trait Anxiety Inventory; TAS-20 = Toronto Alexithymia Scale; CTQ-SF = Childhood Trauma Questionnaire. Significance (two-tailed) = **p*<.05, ***p*<.01.

Table 4. Hierarchical Regressions: Psychosocial Predictors of EDSS and FAMS

	EDSS-tot			FAMS		
	Beta	p value	ΔR^2	Beta	p value	ΔR^2
Step 1: Socio-demographic variables			0.12 (F = 1.61, p = 0.21)			0.08 (F = 0.686, p = 0.57)
			95% CI			95% CI
Age	0.37	0.04*	0.07 to 0.61	0.13	0.56	-0.19 to 0.42
Gender	-0.10	0.55	-0.40 to 0.21	-0.15	0.47	-0.44 to 0.16
Educational level	0.03	0.84	-0.28 to 0.34	0.25	0.22	-0.07 to 0.51
Step 2: Socio-demographic and Psychosocial factors			0.23 (F = 3.569, p = 0.01)			0.71 (F = 6.66, p < 0.001)
			95% CI			95% CI
Age	0.26	0.11	-0.05 to 0.52	0.11	0.48	-0.21 to 0.40
Gender	-0.18	0.25	-0.46 to 0.14	0.03	0.80	-0.28 to 0.34
Educational level	0.09	0.53	-0.22 to 0.39	0.05	0.73	-0.26 to 0.35
Coping process (SACS)						
Social joining	0.17	0.31	-0.16 to 0.46	-0.09	0.61	-0.40 to 0.24
Cautious	-	-		-0.22	0.14	-0.51 to 0.11
Avoidance	0.42	0.02*	0.11 to 0.65	-0.30	0.05*	-0.57 to 0.02
Social Support (MSPSS)	-	-		0.30	0.15	-0.05 to 0.59
Trait Anxiety (STAI-T)	-	-		-0.39	0.04*	-0.66 to -0.04
Alexithymia (TAS-20)	-	-		0.14	0.57	-0.19 to 0.44
Early-Life Stress (CTQ-SF)	-	-		-0.08	0.65	-0.39 to 0.25

Note: SACS = Strategic Approach to Coping Scale; MSPSS = Multidimensional Scale of Perceived Social Support; STAI-T = State-Trait Anxiety Inventory; TAS-20 = Toronto Alexithymia Scale; CTQ-SF = Childhood Trauma Questionnaire. Significance (two-tailed) = *p<.05, **p<.01