Camouflaging and Adjusting to College in Females with and without Autism Symptomatology

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Background

- Females may express autism symptomatology differently than males, potentially leading females to be underdiagnosed[1,2,3].
- Camouflaging refers to strategies used to minimize the appearance of autistic characteristics and may promote positive social interactions, but can also be mentally taxing[4,5].
- Prior research suggests that autistic college students struggle with adjusting to college. Therefore, it is of interest to examine the associations between camouflaging and adjustment to college[6,7].

Objectives

- Examine differences in camouflaging and college adjustment between females with and without autism symptomatology.
- Identify which aspects of camouflaging (i.e., compensation, masking, and assimilation) significantly impact college adjustment, above and beyond autism symptomatology.

Methods

- 102 college aged females were included in the study (with autism symptomatology = 51, without autism symptomatology = 51)[8].
- Camouflaging was assessed using the Camouflaging of Autistic Traits Questionnaire which has three subscales compensation, assimilation, and masking[9].
- Adjustment to college was assessed using Student Adaptation to College Questionnaire which has three subscales academic adjustment (managing academic demands), social adjustment (integration in social settings), and personal emotional adjustment (psychological and physical well-being)[10].
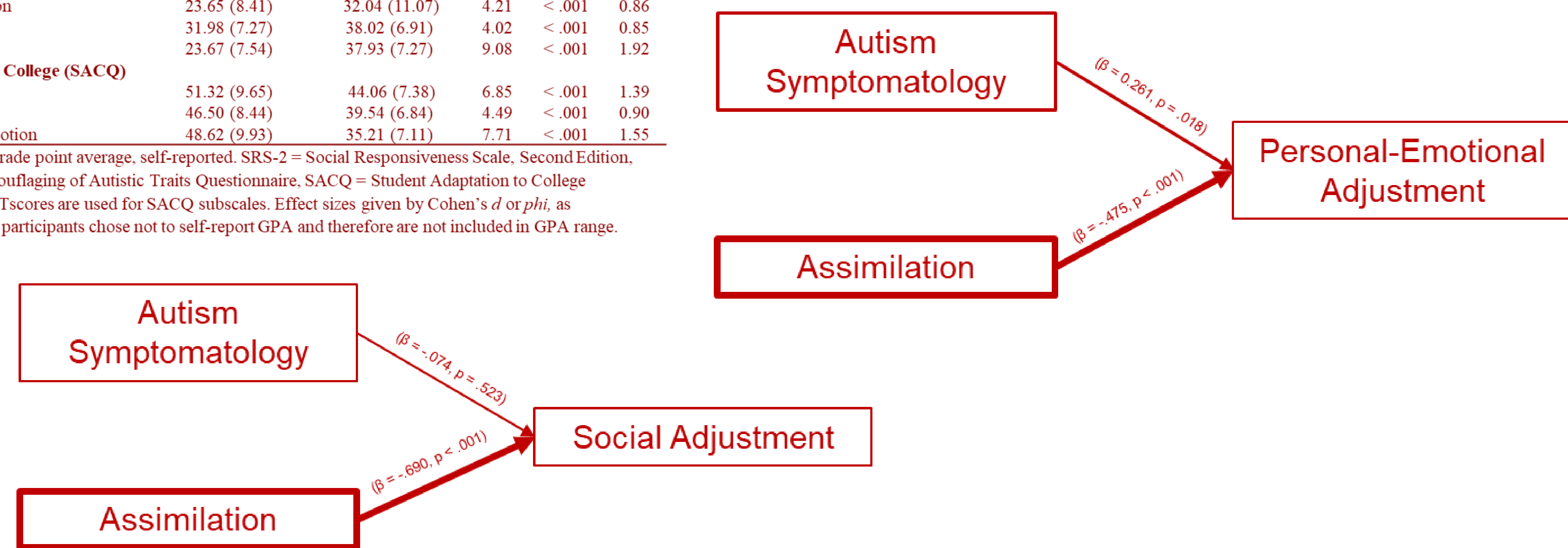
Table 1

Participant Characteristics

	Women without Autism Symptomatology (n = 51)	Women with Autism Symptomatology (n = 51)			
	M (SD)/n (%)	*M (SD)/n (%)*	*t / χ^2*	*p*	*d/phi*
Age (year; months)	18;05 (0;08)	18;10 (1;08)	1.64	.105	0.32
Racial/Ethnic Identity			6.85	.232	0.26
White/European American	28 (55%)	28 (55%)			
Black/African American	1 (2%)	3 (6%)			
Asian/Asian American	6 (12%)	11 (21%)			
Hispanic/Latinx	7 (14%)	2 (4%)			
More than one race	9 (17%)	6 (12%)			
Other	0 (0%)	1 (2%)			
Year in School			5.57	.134	0.23
Freshman	33 (64%)	35 (68%)			
Sophomore	13 (26%)	7 (14%)			
Junior	4 (8%)	3 (6%)			
Senior	1 (2%)	6 (12%)			
GPA	3.76 (.273)	3.58 (.342)	-2.43	.018	0.61
Hours Studying	16.80 (10.38)	14.08 (10.75)	-1.30	.198	0.26
ASD Symptomatology (SRS)					
SRS-2 Raw Score	39.51 (15.09)	91.67 (20.62)	14.58	< .001	2.89
SRS-2 *T*-score	49.49 (5.32)	68.08 (7.27)	14.73	< .001	2.92
Normal (59 or lower)	51 (50%)	0 (0%)			
Mild (60 - 65)	0 (0%)	22 (20%)			
Moderate (66 – 75)	0 (0%)	21 (0%)			
Severe (76+)	0 (0%)	8 (0%)			
Camouflaging (CAT-Q)					
Compensation	23.65 (8.41)	32.04 (11.07)	4.21	< .001	0.86
Masking	31.98 (7.27)	38.02 (6.91)	4.02	< .001	0.85
Assimilation	23.67 (7.54)	37.93 (7.27)	9.08	< .001	1.92
Adjustment to College (SACQ)					
Academic	51.32 (9.65)	44.06 (7.38)	6.85	< .001	1.39
Social	46.50 (8.44)	39.54 (6.84)	4.49	< .001	0.90
Personal-Emotion	48.62 (9.93)	35.21 (7.11)	7.71	< .001	1.55

Note. GPA = grade point average, self-reported. SRS-2 = Social Responsiveness Scale, Second Edition, CAT-Q = Camouflaging of Autistic Traits Questionnaire, SACQ = Student Adaptation to College Questionnaire. Tscores are used for SACQ subscales. Effect sizes given by Cohen's *d* or *phi*, as appropriate. 14 participants chose not to self-report GPA and therefore are not included in GPA range.

Table 2

Hierarchical Regression Analysis of Predictors of College Adjustment

Predictor	F	df	p	R^2	ΔR^2	Adj. R^2	B	β	t	p
Social Adjustment										
Model 1	17.365	1,88	< .001	.165	.165	.155				
Autism Symptomatology							6.995	.406	4.167	< .001
Model 2	30.288	1,87	< .001	.410	.246	.397				
Autism Symptomatology							-1.267	-.074	-0.642	.523
Assimilation							-0.580	-.690	-6.021	< .001
Personal-Emotional Adjustment										
Model 1	47.470	1,88	< .001	.350	.350	.343				
Autism Symptomatology							12.662	.591	6.890	< .001
Model 2	38.138	1,87	< .001	.467	.117	.455				
Autism Symptomatology							5.591	.261	2.401	.018
Assimilation							-0.496	-.475	-4.366	< .001

Note. *B* = unstandardized beta coefficient. β = standardized beta coefficient. Autism symptomatology was treated as a dichotomous variable (0 = with autism symptomatology, 1 = without autism symptomatology).

Autism Symptomatology → (β = 0.261, p = .018) → Personal-Emotional Adjustment
Assimilation → (β = -.475, p < .001) → Personal-Emotional Adjustment

Autism Symptomatology → (β = -.074, p = .523) → Social Adjustment
Assimilation → (β = -.690, p < .001) → Social Adjustment

Results

- Independent samples t-tests revealed that females with autism symptomatology were significantly more likely to engage in camouflaging behaviors (assimilation, masking, and compensation) and experience difficulty adjusting to college (academically, socially, and emotionally) as compared to females without autism symptomatology.
- Hierarchical regression analyses revealed that females without autism symptomatology had higher personal-emotional adjustment, while assimilation was a negative predictor of both personal-emotional adjustment and social adjustment.

Discussion

- Women with autism symptomatology showed significantly higher scores in camouflaging behavior and significantly lower scores in adjustment to college across subscales than women without autism symptomatology.
  - Assimilation, a specific type of camouflaging, was revealed as the most significant predictor of personal-emotional adjustment and social adjustment.
  - Camouflaging and autism symptomatology are closely related and can be difficult to isolate. Future directions should aim to determine their unique contributions throughout college life.
  - Based on our findings on camouflaging and its negative impact on adjustment to college, more informed and efficient support can be provided to females with autism symptomatology within college settings.

Significant Group Differences on Study Variables

	ASD Symptomatology	No ASD Symptomatology
Compensation	32.04	23.65
Masking	38.02	31.98
Assimilation	37.93	23.67
Academic Adjustment	44.06	51.32
Social Adjustment	39.54	46.5
Person-Emotional Adjustment	35.21	48.62