Biopsychosocial Health: Examining the Relationships Between Loneliness, Social Connection, and College Students' Health

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INTRODUCTION

- Study Background
  - There has been a surge of interest in the connections between physical health, mental health, and social experiences such as interpersonal relationships, and loneliness.
  - Current literature showed that social connection is important for psychological, emotional, and physical wellbeing.
  - Loneliness has been shown to be associated with negative mental and physical health symptoms
- Aim & Hypotheses
  - The study aimed to examine the relationships between college students' physical health, mental health, and social experiences.
  - We hypothesized a positive association between physical health, mental health, social connection, perceived social support, and social participation. We also expected to find a negative association between physical health, mental health, and loneliness.

METHODS

- Data Source
  - This research used cross-sectional data collected from a larger study examining biopsychosocial contributions to physical and mental health.
- Methods & Analysis
  - Data examined physical and mental health, loneliness, social connection, social support, and social participation was collected from 74 college students via online self-report surveys.
  - Descriptive statistics and correlations were analyzed in order to test the research hypothesis.

RESULTS

Health Measures: Physical health symptoms was negatively correlated with psychological health and wellbeing. It was also positively correlated with attenuated negative psychotic symptoms. Psychological health was positively correlated with psychological well being and negatively correlated with attenuated negative psychotic symptoms. Psychological well being was negatively correlated with attenuated positive psychotic symptoms. Anxiety was positively correlated with depression and attenuated positive symptoms. Finally, depression was positively correlated with attenuated positive symptoms.

Social Experience Measures: Loneliness was negatively correlated with perceived social support. Social participation was positively correlated with social connection

Health and Social Experience Measures: Psychological health was positively correlated with perceived social support and negatively correlated with loneliness. Psychological well being was positively correlated with perceived social support and negatively correlated associated with loneliness. Finally, attenuated negative symptoms was negatively correlated with social support and positively correlated with loneliness.

Contrary to Hypothesis: Social participation was negatively correlated with psychological well being, psychological health, and perceived social support. It was also positively correlated with attenuated negative psychotic symptoms.

Table 1

Bivariate Data Summary (n=74)

Health Measures Intercorrelations					
	Psychological Health	**Psychological Well Being**	**Depression**	**Att. Positive Symptoms**	**Att. Negative Symptoms**
Physical Health Symptoms	-0.498	-0.454	X	X	0.415
Psychological Health	X	0.712	X	X	-0.619
Psychological Well Being	X	X	X	X	-0.711
Anxiety	X	X	0.802	0.623	X
Depression	X	X	X	0.538	X

Health Measures & Social Experience Measures Correlations			
	Percieved Social Support	**Loneliness**	**Social Participation**
Psychological Health	0.58	-0.566	-0.54
Psychological Well Being	0.726	-0.727	-0.669
Att. Negative Symptoms	-0.654	0.628	0.598

Social Measures Intercorrelations			
	Percieved Social Support	**Loneliness**	**Social Connection**
Loneliness	-0.721	X	X
Social Connection	X	X	X
Social Participation	-0.63	X	0.659

Note: The correlations that are shown are those that pass the Bonferroni significance correction of about P<.001

RESULTS

Table 2

Demographic Data Summary (n=74)

Age	Frequency	Percent	Sex	Frequency	Percent	Race	Frequency	Percent
18	4	5.3	Male	14	18.7	White	61	81.3
						Black or African		
19	18	24	Female	60	80	American	1	1.3
20	20	26.7				Asian	10	13.3
21	11	14.7				Other	2	2.7
22	5	6.7						
23	5	6.7						
24	1	1.3						
25	3	4						
27	2	2.7						
28	1	1.3						
29	2	2.7						
30	1	1.3						
32	1	1.3						

Table 3

Descriptive Data Summary (n=74)

	Range	Mean	Std. Deviation		Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Statistic	Std. Error	Statistic	Std. Error
Social Participation	44	14.3514	1.12286	9.65917	0.793	0.279	0.28	0.552
Social Connection	24	68.8919	0.62692	5.39296	-0.467	0.279	0.11	0.552
Loneliness	45	38.473	1.29093	11.10501	0.895	0.279	0.142	0.552
Percieved Social Support	5.42	5.4088	0.13197	1.13527	-0.678	0.279	0.672	0.552
Physical Health Symptoms	56	16.7568	1.57801	13.57456	1.078	0.279	0.51	0.552
Psychological Wellbeing	82	94.9595	1.8619	16.01663	-0.798	0.279	0.925	0.552
Psychological Health	24	24.2703	0.6333	5.44788	-0.342	0.279	-0.033	0.552
Att. Positive Psychotic Sym.	36	6.0405	0.82815	7.12403	2.281	0.279	5.979	0.552
Depression	42	10.3784	1.29114	11.10683	1.204	0.279	0.696	0.552
Anxiety	26	6.1351	0.72745	6.25776	1.328	0.279	1.3	0.552
Att. Negative Psychotic Sym.	54	21.7432	1.12559	9.68272	0.577	0.279	1.056	0.552

DISCUSSION

- Future Direction
  - Move on to Multivariate analysis
  - Gather data from a larger population
- Limitations
  - Self report survey
  - University sample; Might not generalize to the larger population
  - Small sample size (N=74)
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