

Psychosocial Determinants of Subjective Well-Being: The Effects of Social Ostracism and Social Interaction Anxiety in University Students

Rabbia Iftikhar

Department of Clinical Psychology, The Superior University Lahore
Email: rabbiaiftikhar48@gmail.com

Ayesha Zafar

Department of Clinical Psychology, The Superior University Lahore
Email: Ayesha.zafar@superior.edu.pk

Saira Majid Shaikh

Head of department of clinical psychology, The Superior University Lahore
Email: sairamajid@superior.edu.pk

Muhammad Faizan

Department of Clinical Psychology, Riphah International University, Lahore
Email: mfizan1997@gmail.com

Abstract

Students living in this modern era are very energetic, enthusiastic, compassionate, and Social. The study aims to know the possible relation between social ostracism, Social Interaction Anxiety and Subjective Well-Being in University Students. It also evaluates being ostracized and having social interaction anxiety on individual's subjective well-being. Correlational research design was used in the study to check the correlation between the variables. Non probability convenient sampling technique was used to choose participants of the sample (N=200). The population of this research were university students. Ostracism Experience Scale for Adolescents, Social Interaction Anxiety Scale, and Subjective Well-Being Scales were the tools used in study to access the social ostracism, Social Interaction Anxiety and Subjective Well-Being. Descriptive of demographic, reliability analyses, Pearson's product moment, correlational analysis, regression analysis, AMOS for testing mediating model, t-test and ANOVA

analysis were conducted. All scales showed good reliability ($\alpha > .70$). Social ostracism positively correlated with social interaction anxiety ($r = .16, p = .02$) and negatively with life satisfaction ($r = -.16, p = .01$). Social interaction anxiety negatively correlated with flourishing ($r = -.17, p = .01$). Regression analyses revealed social ostracism negatively predicted life satisfaction ($\beta = -.15, p < .05, R^2 = .06, F = 2.87, p = .027$) and social interaction anxiety negatively predicted flourishing ($\beta = -.19, p < .01, R^2 = .06, F = 2.81, p = .007$); no significant prediction for affect balance. Gender differences emerged in life satisfaction, with females reporting higher levels than males, while no differences were found based on institutional type

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Corresponding E-mail & Author*:

Dr. Adeela Bibi

Lecturer, Government
Postgraduate College for Women
Mandian Abbottabad
Email: adeelabibi4@gmail.com

or class groups. Mediation analysis using structural equation modeling demonstrated that social interaction anxiety mediated the relationship between social ostracism and flourishing. Overall, the findings suggest that social ostracism and social interaction anxiety play a significant role in shaping aspects of subjective well-being among university students.

Introduction

Ostracism is typically defined as being ignored and excluded, and it often occurs without excessive explanation or over negative attention (Williams, 2007). The temporal framework of ostracism proposes that individuals feel the pain of ostracism, which threatens their need for belonging and esteem (Scott & Duffy, 2015). Ostracism has been linked with many detrimental outcomes, such as lower workplace commitment (Zheng *et al.*, 2016), psychological distress (Niu *et al.*, 2018), and even physical pain (Riva *et al.*, 2014). Social ostracism leads to rejection and other threats to interpersonal relationships that are hurtful but surprisingly common experiences (Wesselmann *et al.*, 2016). These social threats have many negative consequences for individuals, including the general feeling that one's existence does not matter to others—that for all intents and purposes they may as well be invisible (Williams, 2009). From a normative developmental perspective, social relationships provide opportunities for youth to understand multiple perspectives and social norms, both of which are necessary to develop intrapersonal and social competencies (Laursen & Hafen, 2010). Ostracized adolescents report significant and positive associations with depression, loneliness, and a sense of inadequacy. Ostracism threatens four fundamental needs: belonging, self-esteem, control and meaningful existence (Witvliet, *et al.*, 2010).

According to Need threat model, when belonging or self-esteem are threatened, individuals will strive to behave in a pro-social manner so as to regain acceptance. However, when the need of control or meaningful existence is threatened, individuals may turn to antisocial behavior and aggression for need fortification (Williams & Nida, 2011).

Theory of impaired self-regulation. It depicts ostracism primarily as a blunt instrument producing helplessness and depression rather than active pro-social or antisocial behaviors (Baumeister, DeWall, Ciarocco, & Twenge, 2006).

A variety of consequences of ostracism manifest themselves, including behavioral, motivational, cognitive, and physiological changes that leads to obedience, *aggressiveness* toward cause and others (Riva *et al.*, 2014), giving up sooner on difficult tasks (Baumeister *et al.*, 2005).

Social interaction anxiety linked to fear of encountering or communicating with other people, and social observation or social performance anxiety, relating to situations in which individuals are observed by others during presenting or performing (Kashdan, 2004), fear of negative evaluation (Schneier, 2021). Individuals with high levels of social interaction anxiety report decreased interest in pleasurable activities, energy, relationship satisfaction, and sexual satisfaction, and increased behavioral inhibition (Kashdan *et al.*, 2011a). causes of social interaction anxiety can be biological or environmental (Hofmann, 2021).

Subjective well-being (SWB) refers to how people experience and evaluate their lives and specific domains and activities in their lives (Krueger *et al.*, 2009). Subjective well-being includes broad appraisals, such as life satisfaction, health and the specific feelings that people experience about particular events that happen during their lifetimes (Diener *et al.*, 2016). According to Diener (2000), subjective well-being is a multidimensional construct that is composed of affective and cognitive dimensions. The cognitive aspect refers to an individual's degree of satisfaction about his living conditions and quality of life, while the affective aspect concerns the experiences that balance positive and negative emotions (Bradshaw *et al.*, 2011).

As students are the building block of our country and they also face ostracism in their daily life which have profound effect on their well-being and they face interaction anxiety. So, the research was conducted to find the relation between Social Ostracism, Social Interaction Anxiety and Subjective Well-being in university students to check the possible effect of Social Ostracism on young students Subjective Well-being and attitude towards society. This research necessitates extra efforts in recognizing social anxiety disorder in adolescence and students in higher academic institutions. Prompt identification and treatment will help in reducing the bad consequences of this common condition on humans Subjective Well-being. The research aims:

To identify the level of Social Ostracism, Social Interaction Anxiety and Subjective Well-being (Satisfaction with life, Affect balance and Flourishing) in university students.

To explore the relationship between Social Ostracism, Social Interaction Anxiety and Subjective Well-being (Life satisfaction, Affect Balance and Flourish).

To examine the predictive relation of Social Ostracism and Social Interaction Anxiety for Subjective Well-being (Life satisfaction, Affect Balance and Flourish).

To find out mediating relation of Social Interaction Anxiety between Social Ostracism and Subjective Well-being (Life satisfaction, Affect Balance and Flourish).

To describe gender differences regarding Social Ostracism, Social Interaction Anxiety and Subjective Well-being (Life satisfaction, Affect Balance and Flourish).

To describe the differences in students of private and public universities regarding Social Ostracism, Social Interaction Anxiety and Subjective Well-being (Life satisfaction, Affect Balance and Flourish).

Hypotheses of the Study

There is likely to be positive relation between Social Ostracism and Social Interaction Anxiety and likely to be negative relation between Social Ostracism and Subjective Wellbeing (Life satisfaction, Affect Balance and Flourish); Social Interaction Anxiety and Subjective Well-being (Life satisfaction, Affect Balance and Flourish) in University students.

Subjective Well-being is likely to be negatively predicted by Social Interaction Anxiety and Social Ostracism.

Social Interaction Anxiety is likely to mediate the relation between Social Ostracism and Subjective Well-being (Life satisfaction, Affect Balance and Flourish).

Social Ostracism, Social Interaction Anxiety and Subjective Well-being (Life satisfaction, Affect Balance and Flourish) are likely to be different in men and women; private and public university students.

Social Ostracism, Social Interaction Anxiety and Subjective Well-being (Life satisfaction, Affect Balance and Flourish) are likely to be different in class groups in university students.

Methodology

Correlational research design was used in the study to check the relationship between Social Ostracism, Social Interaction Anxiety and Subjective Well-being in university students. Sample ($N=200$) was comprised of men ($n1=100$) and women ($n2=100$) from only public and private universities of Lahore, Pakistan, with age range from 19 to 35 while students of distant learning programs and virtual universities, physically disabled and handicapped students were excluded.

Table 3.1

Descriptives of Demographic Variables in University Students (N=200) Variables	M(SD)	F (%)
Gender	Men	100 (50)
	Women	100 (50)
Age	22.03 (2.470)	
Class	B.A./B.sc 2 years	22(11)
	BS 4 years	49(24.5)
	M.A./M.Sc. 2 years	78(39.0)
	M.Phil. or Ph.D.	21(10.5)
	Other	30(15)
Institution	Public	135 (67.5)
	Private	65 (32.5)

Note: *M*= mean; *SD*= standard deviation; *f*= frequency

The final sample comprises of 200 university students from Pakistan. Table 3.1 is showing the statistic in detail about their variables and indicated that mean age of university students was 22.03. Table also shows, students at B.A.\B.Sc. level were at 11%, BS 4 years were at 24.5%, M.A.\M.Sc. were at 39.0%, M.Phil. And Ph.D. level was at 10.5% and others were at 15% regarding other education.

Measures for Data Collection

Demographic information sheet

Ostracism Experience Scale for Adolescents (Gilman, 2003)

Social Interaction Anxiety Scale (Mattick & Clarke, 1998)

Subjective Well-Being Scales (Diener, 2006)

Satisfaction with life scale (SWLS)

Scale of Positive and Negative Experiences (SPANES)

Flourishing Scale (FS)

Demographic information sheet. Demographic Information sheet assessed demographic variables such as gender, age, education, institute and religion.

Ostracism experience scale for adolescents (OES-A). This scale is a 19-item, self-report measure developed by Gilman in 2003 designed to assess an individual's perceptions of being ignored by or excluded from the social group. The scale items represent general perceptions of being ostracized and are not specific to any one source (i.e., a particular friend, romantic partner, relative, and so on). The reliability of OES-A scale comprising of two dimensions as being ignored by the peer group is $\alpha=.94$ and being excluded by the peer group is $\alpha.93$ (Gilman, 2003). The response to each item is made on a 5-point rating scale (1 = never, 5 = always). Scale scoring was such that higher scores reflected higher levels of perceived Ostracism. The alpha level for current sample is .709 which indicates good reliability of the current sample.

Social interaction anxiety scale (SIAS). It is a commonly used self-rating scale in screening for social anxiety, developed by Mattick and Clarke. The SIAS assesses fears associated with social interactions, such as sounding stupid and being ignored. The SIAS consists of 20 items 5-point Likert-type scale that are rated from 0 (not at all characteristic or true of me) to 4 (extremely characteristic or true of me). The SIAS is scored by summing the ratings after reversing the 3 positively worded items (i.e., 5, 9 and 11).

Total scores range from 0 to 80, with higher scores representing higher levels of Social Interaction Anxiety. A score of 43 or more indicates traditional social anxiety. A score of 34 to 42 indicates what is sometimes called social phobia (specific situations of irrational social fears with avoidance and impairment). Test-retest

reliability of SIAS is $r = .92$ and ranges from $.91$ to $.93$ (Edwin de Beurs, 2014). The alpha level for current sample is $.87$ which indicates high reliability of the current sample.

Subjective well-being scale. The scale comprises of three subscales. These scales are developed by Diener, Emmons, Larsen and Griffin in 2006.

Satisfaction with life scale (SWLS). The SWLS is a short 5-item instrument designed to measure global cognitive judgment of satisfaction with one's. The scale usually requires only about one minute of a respondent's time. The Satisfaction with Life Scale demonstrated acceptable internal consistency reliability $\alpha = 0.88$ (Kobau, 2010). The alpha level of current sample is $.75$ which indicates good internal consistency of the current sample.

Scale of positive and negative experiences (SPANE). The SPANE is a 12-item questionnaire includes six items to assess positive feelings and six items to assess negative feelings. For both positive and negative items, three of the items are general (e.g., positive, negative) and three per subscale are more specific (e.g., joyful, sad). Positive Feelings (SPANE-P): Add the scores, varying from 1 to 5, for the six items: positive, good, pleasant, happy, joyful, and contented. The score can vary from 6 (lowest possible) to 30 (highest positive feelings score). Negative Feelings (SPANE-N): Add the scores, varying from 1 to 5, for the six items: negative, bad, unpleasant, sad, afraid, and angry. The score can vary from 6 (lowest possible) to 30 (highest negative feelings score). Affect Balance (SPANE-B): The negative feelings score is subtracted from the positive feelings score, and the resultant difference score can vary from -24 (unhappiest possible) to 24 (highest affect balance possible). A respondent with a very high score of 24 reports that she or he rarely or never experiences any of the negative feelings, and very often or always has all of the positive feelings. The positive effect subscale demonstrated acceptable inter-item consistency reliability ($\alpha = 0.91$) as did the negative effect subscale $\alpha = 0.86$ (Kobau, 2010). The alpha level of current sample is $.70$ which indicates good internal consistency of the current sample.

Flourishing scale (FS). The Flourishing Scale consists of eight items assessing important aspects of human functioning ranging from positive relationships, to feelings of competence, to having meaning and purpose in life. The scale was called Psychological Well-being in an earlier publication. The Satisfaction with Life Scale demonstrated acceptable internal consistency reliability $\alpha = 0.85$ (Esch, 2013). The alpha level of current sample is $.78$ which indicates good internal consistency of the current sample.

Procedure

Ethical Considerations

Following ethical considerations were followed during conducting the research,

Permission from the authors had been taken to use tools.

Permission from institutes had been taken, from where the data collected.

Consent had been taken from participants in the study.

Privacy and confidentiality were maintained i.e. the data of the participants had been kept private and confidential.

It had been ensured that no physical or mental harm was given to the participants.

Results

The present study aims to examine the relationship between Social Ostracism, Social Interaction Anxiety and Subjective Well-being (Life satisfaction, Affect Balance and Flourish) in university students. Initially, data screening was carried out prior to undertaking the statistical analysis for each of the study variables, as recommended by Tabachnik and Fidel (2001). The data was analyzed in seven key steps. At the first

step descriptive statistic were computed for scales and sub-scales. At the second step reliability analyses were conducted yielding Cronbach's alpha for each of scale and subscale. At third step, Pearson Product Moment Correlation was computed to assess the relationship between Social Ostracism, Social Interaction Anxiety and Subjective Well-being. At fourth step, Linear Regression method was conducted to test prediction hypotheses. At fifth step, Structural Equation Modeling through AMOS was conducted to test mediation model. At sixth step, independent samples t-test analysis was conducted to determine gender differences across study variables. At seventh step, ANOVA was conducted to test differences in at least one mean group.

Data Screening and Basic analyses

At very first step, the data sheet was screened carefully according to the direction of Tabachnik and Fidel (2001). The minimum and maximum actual scores were checked to determine the correct record of data-on-data sheet. Missing values were checked, they were lesser than 5% and if there were some missing values, they were random. The reliability of scales for the current sample was assessed. Table 4.1 indicates that all variables have acceptable reliability. Table 4.1 reveals that reliabilities of all the variables are more than .70 suggesting a good index of reliability. Moreover, reliabilities of three variables are more than .80, indicating a strong value of internal consistency.

Descriptive and Reliability Analyses of Social Ostracism, Social interaction Anxiety and Subjective Well-Being in University Students (N=200) Variable	K	A	M(SD)	Range		Skewness
				Actual	Potential	
Social ostracism	19	.70	48.66(10.90)	12-76	19-95	-.31
Social Interaction Anxiety	20	.87	33.68(14.66)	2-69	20-100	.22
Subjective Well-Being	25	.44	52.33(13.20)	19-72	25-75	.50
Life Satisfaction	05	.75	21.97(6.59)	5-34	5-35	-.04
Affect Balance	12	.30	9.34(7.12)	0-23	12-60	-.61
Flourish	08	.78	20.99(7.09)	8-37	8-56	.50

Table 4.1

Note. K = No. of items; α = alpha; M= mean; SD= Standard deviation.

All of the scales and sub-scales of study found adequately reliable and found significant enough to carry further analysis in accordance with research hypothesis. The value of skewness indicates normal distribution of data. If the skewness is less than -1 or greater than +1, the distribution is highly skewed, which are not found for current variables. If skewness is between -1 and -0.5 or between 0.5 and 1, the distribution is moderately skewed. If skewness is between -0.5 and 0.5, the distribution is approximately symmetric.

Pearson Product moment correlation analysis was conducted to find out the correlation coefficients among demographic variables and major study variables Social Ostracism, Social interaction Anxiety and Subjective Well-Being.

Table 4.2

Inter Correlation between Social Ostracism, Social interaction Anxiety and Subjective Well-Being (N=200)

Variables	1	2	3	4	5	6	7	8	9
1. Gender		-.12	.18*	-.05	-.04	.07	.18**	-.00	-.02
2. Age			-.08	-.00	.00	-.10	.02	-.06	-.15*
3. Institution				.06	.01	.10	.06	.06	.08
4. Social Ostracism					.16*	-.06	-.16*	.00	.03
5. Social Interaction Anxiety						-.11	-.08	.05	-.17*
6. Subjective Well-Being							.60**	.56**	.73**
7. Life Satisfaction								-.08	.26**
8. Affect Balance									.11
9. Flourish									

* $p < .05$, ** $p < .001$

We hypothesized that there would be a positive relationship between Social Ostracism and Social interaction Anxiety and negative relationship between Social Ostracism and Subjective Well-being. Social Ostracism is positively correlated with Social Interaction Anxiety $r(199) = .16, p = .02$ and social ostracism is negatively correlated with Life Satisfaction $r(199) = -.16, p = .01$, which is the subscale of Subjective Well-being. The findings of product moment correlation shown in table 4.2 indicates that these hypotheses have been accepted, highly positive significant relationship is found among Social Ostracism and Social Interaction Anxiety ($p=0.02$) and highly negative significant relationship is found among Social Ostracism and Subjective Well-being (0.01).

Social Interaction Anxiety is negatively correlated with Flourish $r(199) = -.17, p = .01$ which is the subscale of Subjective Well-being. As there is highly negative significant relationship among these two variables shown in table 4.2 so the hypothesis of negative correlation between Social Interaction Anxiety and Subjective Well-being is accepted.

Table 4.2 indicates that there is a positive relationship between gender and life satisfaction, which indicates that life satisfaction is high in females. Table 4.2 indicates that there is a negative relationship between age and flourish, which indicates that flourish decreases by the increasing age.

We hypothesized in this study that social ostracism and social interaction anxiety will predict subjective well-being (life satisfaction, affect balance and flourish) of university students. To test this hypothesis, linear regression analysis was conducted. The basic assumptions to conduct regression analysis involve Independence of Error, linearity, absence of outliers, homoscedasticity, no perfect multi-collinearity, and normally distributed errors. All these assumptions were tested before regression analysis. The residual analysis was conducted through Histogram, Normal probability plot of residuals and Scatter Plot, whereas Durbin Watson and tolerance values were used as measures to test the assumptions.

Tolerance value against each variable was checked and found more than .2, indicating that there is no multi-collinearity between the variables. The Independence of errors was tested through the value of Durbin Watson which is 1.81. The value falls in acceptable range of values yet it is acceptable.

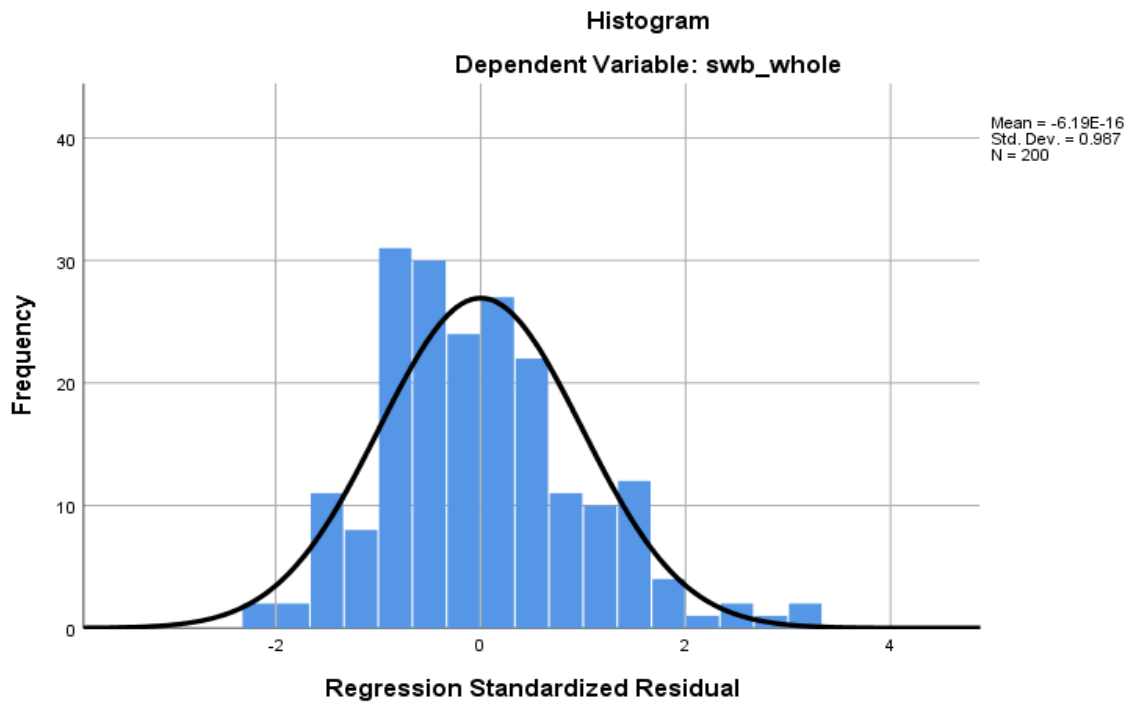


Figure 4.1. Histogram for residual analysis; to test the assumption of normally distributed errors.

Figure 4.1 indicates that residuals are distributed normally on various points of data set on outcome variable. The assumption was tested through an observation of histogram based on standardized residuals. To test the normally distributed errors, P-P plot shown in figure 4.2 was also observed. The graph indicates that the residuals are normally distributed.

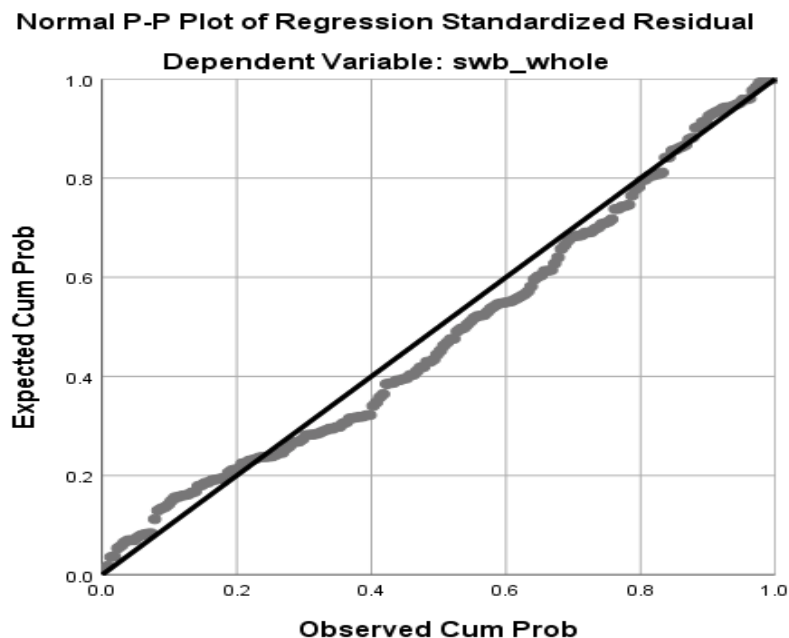


Figure 4.2. P-P plot for residual analysis; to test assumptions of normally distributed residuals, independence of errors, linearity and identification of outliers.

The figure 4.2 reveals the fulfillment of some other assumptions. Along with normally distributed errors, the plot indicates that there is no outlier in the data; no pattern in errors is visible in the plot. Though value of Durbin Watson confirms that errors are independent, yet this graph validates the measure. The straight line indicates the assumption of linearity is met as well. The scatter Plot shown in figure 4.3 was built to test assumptions of Homoscedasticity and outlier. To detect outlier, scatter plot was checked and found there is no significant outlier present in the data. In figure 4.3

further indicates that there is no large heteroscedasticity. Though it is not perfect homoscedasticity but it can be assumed that homoscedasticity is met.

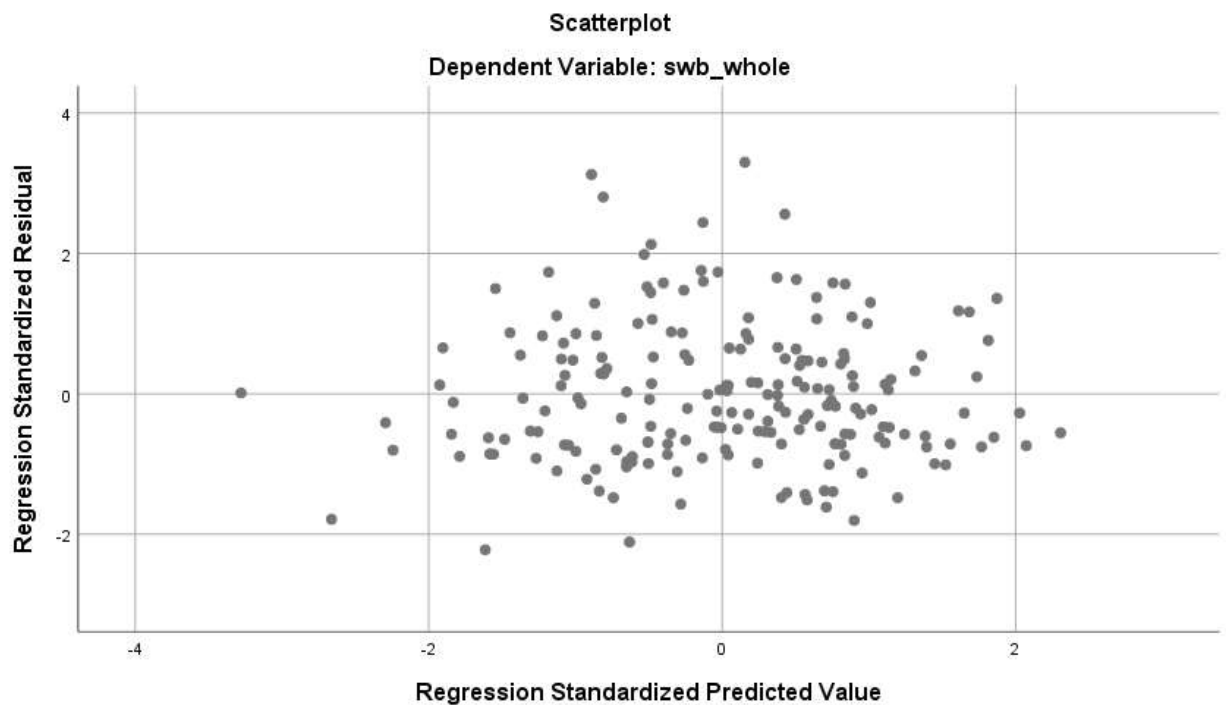


Figure 4.3. Scatter Plot of residuals; to test assumption of Homoscedasticity and Outlier.

After checking the assumptions, regression analysis was conducted to check prediction hypothesis. It was hypothesized that Subjective Well-being is likely to be negatively predicted by Social Interaction Anxiety and Social Ostracism. To test these hypothesis, linear method was selected. Demographic variables (controlled) with social ostracism and social interaction anxiety were added in independent variable and subjective well-being (life satisfaction, affect balance and flourish) were added in dependent variable.

Table 4.3

Multiple Linear Regression Analyses Predicting Subjective Well-Being (Life satisfaction) (N=200) Life Satisfaction

Variables	B	SE	95% CI
Constant	20.61	5.20	[10.09, 30.84]
Gender	2.32*	.93	[-.39, 4.12]
Age	.11	.18	[-.25, .49]
Institution	.54	.99	[-1.35, 2.61]
Social ostracism	-.09*	.04	[-.17, -.00]
Social Interaction Anxiety	-.02	.03	[-.08, .03]
F	2.87*		
R2	.069		

Note: R2= R- square; * $p < .05$, ** $p < .01$, *** $p < .001$.

The model was found fit $F(5-194) = 2.87, P .027$, which indicates well-fitted value. The theoretical model based on theory and previous literature, and observed model based on data collected fit each other. So, the observed model based on all variables (demographics and all study variables) is a fit model.

Beta values are indicating that from demographic variables, gender is positively predicting life satisfaction. Social ostracism is negatively predicting life satisfaction a subscale of Subjective well-being hence our research hypothesis is accepted. A multiple linear regression was calculated to predict Subjective Well-being (Life satisfaction) based on Social Ostracism and Social Interaction Anxiety. A significant

regression was found $F=2.87$ (5-194), $P .027$ with R^2 of .06 with Social ostracism and Subjective Well-being (Life Satisfaction). Participant's predicted Subjective Well-being (Life satisfaction) is equal to Standardized Coefficient Beta = -.15 where social ostracism was coded as 1 = never, 2 = Seldom, 3 = Sometimes, 4 = Often and 5 = Always

Table 4.4

Multiple Linear Regression Analyses Predicting Subjective Well-Being (Affect Balance) (N=200) Affect Balance

Variables	B	SE	95% CI
Constant	12.01	5.79	[.58, 23.44]
Gender	-.25	1.04	[-2.31, 1.80]
Age	-.18	.20	[-.59, .22]
Institution	.87	1.10	[-1.30, 3.05]
Social ostracism	-.00	.047	[-.09, .96]
Social Interaction	.02	.035	[-.04, .09]
Anxiety			
F	.40		
R2	.01		

Note: $R^2 = R$ -square; * $p < .05$, ** $p < .01$, *** $p < .001$.

The model was found fit F (5-194) = .40, $P > .05$, which indicates well-fitted value. The theoretical model based on theory and previous literature, and observed model based on data collected fit each other. So, the observed model based on all variables (demographics and all study variables) is a fit model. Beta values are indicating that from demographic variables and independent variables there is no significant prediction between all these variables with affect balance.

Table 4.5

Multiple Linear Regression Analyses Predicting Subjective Well-Being (Flourish) (N=200) Flourish

Variables	B	SE	95% CI
Constant	31.89	5.69	[20.85, 42.93]
Gender	-.91	1.00	[-2.89, 1.07]
Age	-.44*	.20	[-.84, -.04]
Institution	1.19	1.07	[-.91, 3.30]
Social ostracism	.03	.04	[-.05, .12]
Social Interaction	-.09**	.03	[-.15, -.02]
Anxiety			
F	2.81**		
R2	.06		

Note: $R^2 = R$ -square; * $p < .05$, ** $p < .01$, *** $p < .001$.

The model was found fit F (5-194) = 2.81, $P = .007$, which indicates well-fitted value. The theoretical model based on theory and previous literature, and observed model based on data collected fit each other. So, the observed model based on all variables (demographics and all study variables) is a fit model.

Beta values are indicating that from demographic variables, age is negatively predicting flourish. Social interaction anxiety is negatively predicting flourish subscale of Subjective well-being hence our research hypothesis is accepted. Beta values are indicating that from demographic variables, age is negatively predicting Flourish. Social Interaction Anxiety is negatively predicting Flourish a subscale of Subjective well-being hence our research hypothesis is accepted. A multiple linear regression was calculated to predict Subjective Well-being (Flourish) based on Social Ostracism and Social Interaction Anxiety.

A significant regression was found $F = 2.81$ (5-194), $P .00$ with R^2 of .06 with Social Interaction Anxiety and Subjective Well-being (Flourish). Participant's predicted

Subjective Well-being (Flourish) is equal to Standardized Coefficient Beta = -.19 where Social Interaction Anxiety was coded as 0 = not at all, 1 = slightly, 2 = moderately, 3 = very and 4 = extremely.

Table 4.6

Independent Sample test (200) Variable	Men n=100 T- N =	Men n=100		Women n=100		t(df)	p	95%CI		Cohen's d
		M	SD	M	SD			LL	UP	
Social Ostracism		49.30	9.94	48.02	11.81	.82(198)	.40	-1.76	4.32	0.11
Social Interaction Anxiety		34.33	14.19	33.03	15.17	.62(198)	.53	-2.79	5.39	0.09
SWB Whole Life Satisfaction		51.30	15.40	53.36	10.54	-1.10(198)	.27	-5.74	1.62	0.15
Affect Balance Flourish		20.78	7.39	23.22	5.59	-2.63**(198)	.00	-4.26	-.61	0.37
		9.35	6.81	9.33	7.46	.02(198)	.98	-1.97	2.01	0.00
		21.17	7.71	20.81	6.44	.35(198)	.72	-1.62	2.34	0.05

Note: CI= Confident Interval, LL=Lower limit, UL= Upper limit, (M) Mean and (SD) Standard deviation for each group, (t) t value, (df) degree of freedom, and (p) significance value.

In Hypothesis 4, it was hypothesized that there will be gender and institute differences across all study variables, which was tested through independent samples t-test. To conduct t-test, assumptions of Independence of observation, absence of significant outliers, Normality and homogeneity of variance was checked. Non-significant Levene's value was observed to check the assumption that variance of the outcome variable should be equal in each group. After positive fulfillment of these assumptions, analysis of Independent Sample t-test was conducted.

Three assumptions of independent sample t-test were met, observation were independent, the data were normally distributed, and variance are equally assumed. Conclusively Men (M= 20.78, SD= 7.399) and Women (M= 23.22, SD= 5.59) t= -2.63(198), p= (.00) <.01 are significantly different on Life Satisfaction of Subjective well-being, where women are high in life satisfaction compared to men.

Table 4.7

Independent Sample test (200) Variable	Government n=100 T- N =	Government n=100		Private n=100		t(df)	p	95%CL		Cohen's d
		M	SD	M	SD			LL	UP	
Social Ostracism		48.30	10.68	49.65	11.37	-.88(198)	.37	-4.71	1.78	0.12
Social Interaction Anxiety		33.53	15.59	33.98	12.63	-.20(198)	.83	-4.82	3.92	0.03
SWB Whole Life Satisfaction		51.36	13.38	54.35	12.69	-1.50(198)	.13	-6.91	.92	0.22
Affect Balance Flourish		21.72	6.55	22.58	6.86	-.86(198)	.39	-2.84	1.11	0.12
		9.04	7.00	9.95	7.39	-.84(198)	.39	-3.03	1.21	0.12
		20.59	6.98	21.82	7.29	-1.14(198)	.25	-3.33	.88	0.17

Note: CI= *Confident Interval*, LL= *Lower limit*, UL= *Upper limit*, (M)= *Mother*, (F)= *Father*, (M) *Mean* and (SD) *Standard deviation* for each group, (t) *t value*, (df) *degree of freedom*, and (p) *significance value*

Three assumptions of independent sample t-test were met, observation were independent, the data were normally distributed, and variance are equally assumed. Conclusively Government and Private institutes have no significant difference with any of the research variable.

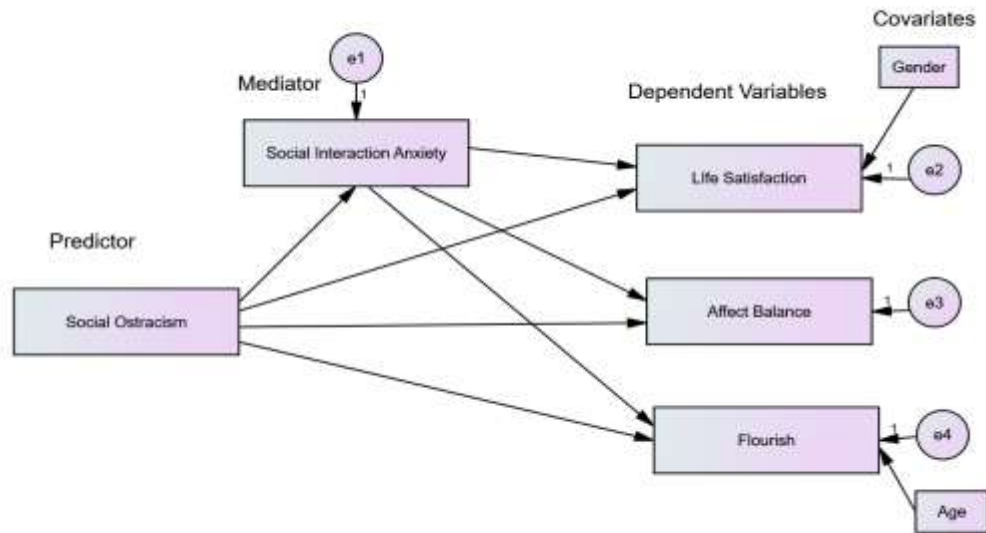


Figure 4.4. A mediation model of four endogenous variables and three exogenous variables. Completely standardized maximum likelihood parameter estimates. The residual variance (e1, e2, e3 and e4) components (error variance) indicate the amount of unexplained variance. Thus, for each observed variable $R = (1 - \text{error variance})$.

It was hypothesized that Social Interaction Anxiety would mediate the relation between Social Ostracism and Subjective Well-Being (Life satisfaction, Affect balance and Flourish). To test this model, Structural equation model (SEM) with AMOS 18 was used to test. The initial model was constructed on the bases of theoretical background.

The initial model as shown in Figure 4.4 shown, included 3 exogenous variables (social ostracism, age and gender) and 4 endogenous variables (social interaction anxiety, life satisfaction, affect balance and flourish). The fit indices are considered to provide an indication of fit of the data with the tested model. For a good model fit Chi-square has to be non-significant.

Table 4.8

Fit indices for Mediation model of Social Ostracism, Social interaction Anxiety and Subjective Well-Being (Life satisfaction, Affect balance and Flourish (N= 200)

Model	χ^2	P	df	TLI	CFI	RMSEA	$\Delta\chi^2$
Initial Model	29.158	.00	12	.22	.55	.08	-
Final Model	11.487	.40	11	.97	.98	.01	17.67

Note N= 200, All changes in chi-square values are computed relative model. $X^2 > .05$. CFI= comparative fit index, TLI= Tucker-Lewis Index, RMSEA= root mean square error of approximation, $\Delta\chi^2 = \text{chi-square change}$.

This initial model did not show an adequate fit to the data with the fit indices below the desired cut-off levels. Although many of the path estimates of the hypothesized relationships were supported and interpretable. But to obtain model fit, the model modification process started as suggested by the modification indices, and paths

(Covariance) was added relevant to theory and researches. The examination of modification index suggested adding of covariance between e2 (life satisfaction) and e4 (flourish) exogenous variables, which were added where theoretical bases supported to add covariance. One modification was made on the bases of theoretical guidelines and statistical indication from modification indices.

In each step the indices of absolute and relative fit (CFI, TLI, and RMSEA) were compared. Because the chi-square test of absolute model fit is sensitive to sample size and non-normality in the underlying distribution of the input variables, investigators often turn to various descriptive fit statistics to assess the overall model fit to the data. Bentler (1999) recommended RMSEA values below .08 and Comparative Fit Index (CFI) and Tucker Lewis Index (TLI) value of .9 or higher. Since the Root Mean square Error of approximation (RMSEA) for the initial model was .08 and the TLI rho2, CFI values are .22, .55. The model did not fit well according to the baseline measures of fit. Yet after the adding number of covariance s as specified in the table 4.6, the fit indices for both absolute and relative fit were according to the range of excellent model, Chi-square of 11.48 was non-significant with $p = .40$ and CFI, TLI rho2 were .98, .97 respectively with RMSEA of .01. At the end, the chi-square and change was calculated which yielded to be significant revealing the model modification process resulting in an excellent fit model.

As shown in table 4.8 mediation model $\chi^2 (N= 200) = 17.67, p = .40$ shown is found fit. Next the paths of the results were observed and interpreted. It was hypothesized that social interaction anxiety would mediate the relations of subjective well-being (life satisfaction, affect balance and flourish). For the estimates to be analyzed for a mediation model, direct and indirect path coefficients were reported.

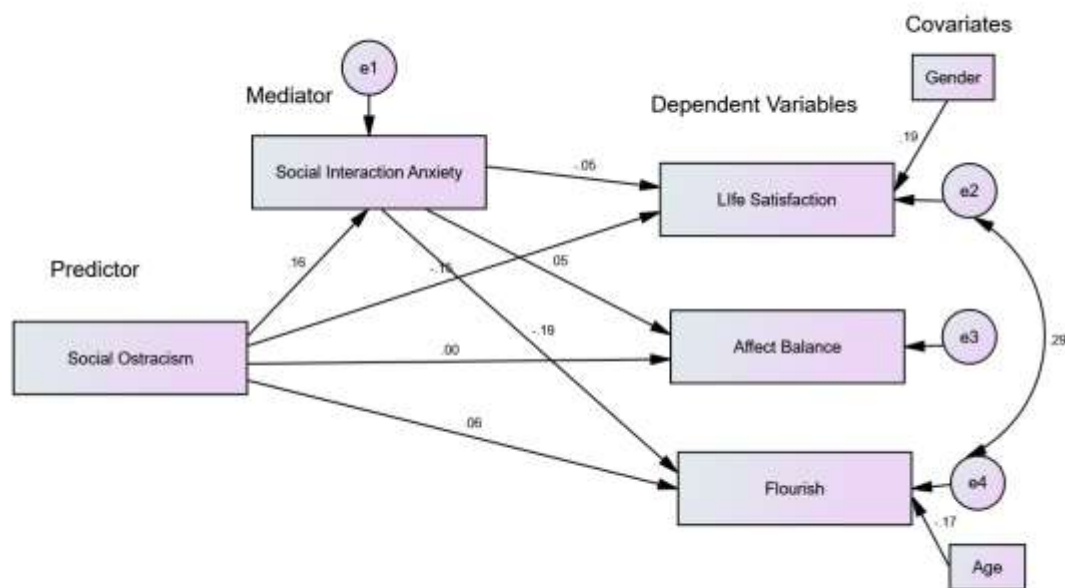


Figure 4.5 Empirical Results from Final Complex Multivariate model representing Standardized Regression Coefficient's displaying the Life satisfaction, affect balance and flourish mediate to Social Interaction Anxiety. A final complex multivariate model of 4 endogenous variables, 6 exogenous variables. Completely standardized maximum likelihood parameter estimates. The residual variance (e1, e2, e3, e4) components (error variance) indicate the amount of unexplained variance. Thus, for each observed variable $R = (1 - \text{error variance})$.

Table 4.9

<i>Effect</i>	<i>Estimates,</i>	<i>Standardized</i>	<i>Direct</i>		<i>Indirect</i>		<i>95% CI</i>	
			<i>Effects</i>	<i>p</i>	<i>effects</i>	<i>p</i>	<i>LB</i>	<i>UB</i>
<i>Direct and Indirect effects from Structural Equation for Social Ostracism, Social interaction Anxiety and Subjective Well-Being (Life satisfaction, Affect balance and Flourish) (N=200) Effect</i>								
Age → Flourish			-.16	.00	–	–	–	–
Gender → Life Satisfaction			.18	.00	–	–	–	–
Social ostracism → Social interaction anxiety			.16	.02	–	–	–	–
Social ostracism → Affect balance			-.00	.99	.00	.40	–	–
Social ostracism → Flourish			.06	.40	-.03	.02	–	–
Social ostracism → Life Satisfaction			-.14	.08	-.00	.43	–	–
Social interaction anxiety → Affect balance			.05	.38	–	–	–	–
Social interaction anxiety → Flourish			-.18	.00	–	–	–	–
Social interaction anxiety → Life Satisfaction			-.05	.42	–	–	–	–

Note. * $p < .05$, ** $p < .01$, *** $p < .00$.

Table 4.9 and figure 4.5 show the direct effect and the significance of age toward flourish, gender toward life satisfaction, social ostracism toward social interaction anxiety and social interaction anxiety toward flourish in the absence of mediator. All independent variables are identified to have significant influence toward the dependent variable subjective well-being (life satisfaction, affect balance and flourish). It has been also found that age and social interaction anxiety have negative estimates values.

It was hypothesized that social interaction anxiety is likely to mediate the relationship between social ostracism and subjective well-being. From the table 4.9, it is found that social ostracism has significant influence toward flourish ($p = .02$) in the presence of mediator social interaction anxiety. Thus, the hypothesis is accepted.

It was hypothesized that the different class groups are likely to be different across social ostracism, social interaction anxiety and Subjective well-being. ANOVA was conducted to find this mean difference in class groups. Table 4.10 indicates that no significant mean difference is found between social ostracism, Social interaction anxiety and Subjective well-being on the basis of class. These findings reject research hypothesis.

Table 4.10

One-Way Analysis of Variance of Social ostracism, social interaction Anxiety and Subjective Well-being (Life Satisfaction, Affect Balance and Flourish).

Variables	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Social Ostracism					
Between group	4	1030.56	257.64	2.21	.06
Within group	195	22646.31	116.13		
Total	199	23676.88			
Social Interaction Anxiety					
Between group	4	678.26	169.56	.78	.53

Within group	195	42127.25	216.03		
Total	199	42805.52			
Subjective Well-being whole					
Between group	4	489.19	122.29	.69	.59
Within group	195	34217.02	175.47		
Total	199	34706.22			
Life Satisfaction					
Between group	4	75.61	18.90	.43	.78
Within group	195	8578.20	43.99		
Total	199	8653.82			
Affect Balance					
Between group	4	108.27	27.06	.52	.71
Within group	195	9998.61	51.27		
Total	199	10106.88			
Flourish					
Between group	4	79.97	19.99	.39	.81
Within group	195	9932	50.93		
Total	199	10011.97			

Note, Cut off = Percentile

Summary of Research Findings

All the scales and sub-scales meet adequate value of internal consistency (more than .70) which found the scales are reliable for current sample.

Social ostracism and social interaction anxiety are found positively correlated. Gender and Life satisfaction are found positively correlated.

Social ostracism and Life satisfaction; Social interaction anxiety and Flourish are found negatively correlated. Age and Flourish are found negatively correlated.

Gender is positively predicting life satisfaction whereas social ostracism is negatively predicting life satisfaction. Age is negatively predicting flourish; Social interaction anxiety is negatively predicting flourish.

Result of t-test indicates that gender differences were found in Life satisfaction which is the subscale of Subjective well-being.

Results of mediation analysis revealed social interaction anxiety mediated the relations between social ostracism and Flourish (subscale of Subjective well-being).

Discussion

The current study aimed to investigate the relation between Social Ostracism, Social Interaction Anxiety and Subjective Well-being (Life satisfaction, Affect balance and Flourish) in university students.

It was hypothesized that there would be a positive relationship between social ostracism and Social Interaction Anxiety. Results showed that magnitude of relationship is strongly positive between social ostracism and Social Interaction Anxiety. These findings are consistent with previous literature.

Heeren *et al.*, (2017) correlates Social Exclusion in Social Anxiety. 23 patients with SAD played a virtual game (“Cyberball”) during fMRI recording. Participants were first included by other players, then excluded, and finally re-included. At the behavioral level, patients with SAD exhibited significantly higher levels of social exclusion feelings. Moreover, self-report of social exclusion correlates with the activity of this cluster among individuals qualifying for SAD diagnosis. These finding

indicated that the task worked as intended to induce genuine self-report feelings of social exclusion. Moreover, SAD exhibited significantly higher scores.

It was also hypothesized that there is likely to be negative relation between Social Ostracism and Subjective Wellbeing; Social Interaction Anxiety and Subjective Well-being. These findings are consistent with previous literature. Social ostracism is negatively correlated with Life Satisfaction which is the subscale of Subjective Well-being and Social Interaction Anxiety is negatively correlated with Flourish which is the subscale of Subjective Well-being.

Kiran and Thiruchelvi (2020) find the relationship between experience of isolation and life satisfaction. This study assesses the role of the big five personality traits on Social Ostracism and the relationship between social ostracism and life satisfaction. This study uses a convenient sampling of data of 113 individuals, both male and female. The study finds that there exists a significant relationship between personality traits and social ostracism. Also, there exists a relation between personality traits and life satisfaction. Social Ostracism hurts life satisfaction.

Ahmad *et al.*, (2015) investigated the relationship between social anxiety and life satisfaction in Adolescence of Karachi. It was hypothesized that there would be significant negative correlation between social anxiety & life satisfaction score.

Result shows significant negative correlation between Social Anxiety & Life Satisfaction. It is concluded that Social Anxiety has significant negative impact on Life Satisfaction among adolescence.

Maričić *et al.*, (2015) intensively researched the Role of Loneliness in the Relationship between Social Anxiety and Subjective Well-Being. The effects of social anxiety in everyday functioning warrant research attention, therefore we tested how different SA dimensions are interrelated with loneliness and SWB. The purpose of this study was to test the mediating role of loneliness in the relationship between social anxiety and subjective well-being. The symptoms of social anxiety that contribute to its relation with subjective well-being through loneliness are those related to the concerns of being negatively evaluated or merely observed by others when experiencing or doing something.

In the second hypothesis we hypothesized that Subjective Well-being is likely to be negatively predicted by Social Interaction Anxiety and Social Ostracism. These findings are consistent with our previous literature. Zhang *et al.*, (2017) examined the relationship between subjective well-being and workplace ostracism and the moderating role of emotional intelligence. They find that ostracism has negative impact on subjective well-being.

Social interaction anxiety also negatively predicts Subjective well-being. A pilot study by Malone and Wachholtz (2018) examines anxiety, depression, and well-being in a mainland Chinese sample and discusses the implications for mental healthcare administered to 60 mainland China residents. Levels of depression and anxiety are inversely related to levels of well-being in a mainland Chinese sample.

In third hypothesis we hypothesized that social interaction anxiety is likely to mediate the relation between Social Ostracism and Subjective Well-being. Results showed that Social Ostracism and Subjective Well-being is likely to mediate Social Interaction Anxiety. These findings are consistent with our previous literature. Mediation analyses revealed that the negative effects of social ostracism on wellbeing were partially mediated by stress, academic self-efficacy, and school satisfaction. Given its important role in students' social, academic, and psychological development, researchers and practitioners may need to give more attention to social exclusion as a key risk factor for decreased wellbeing (Begum, 2020).

In fourth hypothesis we hypothesized that there are likely to be a gender and university difference across social ostracism, social interaction anxiety and Subjective Well-being. Results showed that Men and Women are significantly different in aspect of Life satisfaction of Subjective well-being, where women are high in life satisfaction

compared to men. University difference across social ostracism, social interaction anxiety and Subjective Well-being. Results showed that Public and Private Universities are not significantly different on social ostracism, social interaction anxiety and Subjective Wellbeing. These findings are inconsistent with previous literature.

Although most surveys of happiness and general life satisfaction find only small differences between men and women, women report slightly higher subjective well-being than men in some countries, and slightly lower subjective well-being in others (Meisenberg & Woodly, 2015)

In fifth hypothesis we hypothesized that there is likely to be at least one mean difference between class groups. Results showed that there is no mean difference across social ostracism, social interaction anxiety and Subjective Well-being in class groups.

References

- Gilman, R., Carter-Sowell, A. R., DeWall, C. N., Adams, R. E., & Carboni, I. (2013). Validation of the Ostracism Experiences Scale for Adolescents. *Psychological Assessment, 25*, 319–330. doi:10.1037/a0030913
- Williams, K. D. (2007). Ostracism: The kiss of social death. *Social and Personality Psychology Compass, 1*, 236–247. doi:10.1111/j.17519004.2007.00004.x
- Scott, K. L., & Duffy, M. K. (2015). Antecedents of workplace ostracism: New directions in research and intervention. In *Mistreatment in organizations* (pp. 137-165). Bingley, UK: Emerald Group. doi:10.1108/S1479355520150000013005
- Zheng, X., Yang, J., Ngo, H. Y., Liu, X. Y., & Jiao, W. (2016). Workplace ostracism and its negative outcomes. *Journal of Personnel Psychology, 15*, 143–151. doi:10.1027/1866-5888/a000147.
- Riva, P., Wesselmann, E. D., Wirth, J. H., Carter-Sowell, A. R., & Williams, K. D. (2014). When pain does not heal: The common antecedents and consequences of chronic social and physical pain. *Basic and Applied Social Psychology, 36*, 329– 346. doi:10.1080/01973533.2014.917975
- Riva, P., Williams, K. D., Torstrick, A. M., & Montali, L. (2014). Orders to shoot (a camera): Effects of ostracism on obedience. *Journal of Social Psychology, 154*, 208–216.
- Wesselmann, E. D., VanderDrift, L. E., & Agnew, C. R. (2016). Religious commitment: An interdependence approach. *Psychology of Religion and Spirituality, 8*, 35-45.
- Williams, K. D. (2009). Ostracism: A Temporal Need Threat Model. *Advances in Experimental Social Psychology, 41*, 275-314.
- Williams, K. D. (2009). Ostracism: Effects of being excluded and ignored. In M. P. Zanna (Ed.), *Advances in experimental social psychology (Vol. 41)*, pp. 275-314). New York: Academic Press.
- Laursen, B., & Hafen, C. A. (2010). Future directions in the study of close relationships: Conflict is bad (except when it's not). *Social Development, 19*, 858 – 872. doi:10.1111/j.1467-9507. 2009.00546.x
- Witvliet, M., Brendgen, M., Van Lier, P. A. C., Koot, H. M., & Vitaro, F. (2010). Early adolescent depressive symptoms: Prediction from clique isolation, loneliness, and perceived social acceptance. *Journal of Abnormal Child Psychology, 38*, 1045–1056. doi:10.1007/s10802-010-9426-x
- Williams, K. D., & Nida, S. A. (2011). Ostracism: Consequences and coping. *Current Directions in Psychological Science, 20*, 71–75.
- Richman, L. S., & Leary, M. R. (2009). Reactions to discrimination, stigmatization, ostracism, and other forms of interpersonal rejection: A multimotive model. *Psychological Review, 116*, 365–383.

- Baumeister, R. F., DeWall, C. N., Ciarocco, N. J., & Twenge, J. M. (2006). Social exclusion impairs self-regulation. *Journal of Personality and Social Psychology*, 88, 589–604.
- Baumeister, R. F., DeWall, C. N., Ciarocco, N. J., & Twenge, J. M. (2005). Social exclusion impairs self-regulation. *Journal of Personality and Social Psychology*, 88, 589–604
- Bernstein, M. J., Sacco, D. F., Brown, C. M., Young, S. G., & Claypool, H. M. (2010). A preference for genuine smiles following social exclusion. *Journal of Experimental Social Psychology*, 46, 196–199.
- Kashdan, T. B. (2004). The neglected relationship between social interaction anxiety and hedonic deficits: Differentiation from depressive symptoms. *Journal of Anxiety Disorders*, 18(5), 719-730.
- Schneier FR, Johnson J, Hornig CD, Liebowitz MR, Weiss-man MM. Social phobia: Comorbidity and morbidity in an epidemiologic sample. *Archives of General Psychiatry*. 1992;49:282–288.
- Schneier FR. Social anxiety disorder in adults: Epidemiology, clinical manifestations, and diagnosis. <https://www.uptodate.com/contents/search>.
- Kashdan, T. B., Adams, L., Savostyanova, A., Ferrisizidis, P., McKnight, P. E., & Nezlek, J. B. (2011a). Effects of social anxiety and depressive symptoms on the frequency and quality of sexual activity: A daily process approach. *Behaviour Research and Therapy*, 49(5), 352-360.
- Bradshaw, J., Keung, A., Rees, G., & Goswami, H. (2011). Children's subjective well-being: International comparative perspectives. *Children and Youth Services Review*, 33(4), 548–556.
- Heeren, A., Dricot, L., Billieux, J. *et al.* Correlates of Social Exclusion in Social Anxiety Disorder: An fMRI study. *Sci Rep* 7, 260 (2017). <https://doi.org/10.1038/s41598-017-00310-9>.
- P Manoj Kiran & A Thiruchelvi, 2020."A Study on Role of Big 5 Personality Traits on Social Ostracism," Shanlax International Journal of Management, Shanlax Journals, vol. 8(2), pages 103-107, October.<https://ideas.repec.org/a/acg/managt/v8y2020i2p103-107.html>
- Maričić, Antonija, Štambuk, & Marina. (2015). The Role of Loneliness in the Relationship Between Social Anxiety and Subjective Well-Being: Using the Social Phobia Inventory (SPIN) as a Measure. *Društvena Istraživanja / Journal for General Social Issues*. 24. 407-426. 10.5559/di.24.3.05.
- Malone, C., & Wachholtz, A. (2018). The Relationship of Anxiety and Depression to Subjective Well-Being in a Mainland Chinese Sample. *Journal of religion and health*, 57(1), 266–278. <https://doi.org/10.1007/s10943-017-0447-4>
- Begum (2020). Social exclusion and adolescent wellbeing: Stress, school satisfaction, and academic self-efficacy as multiple mediators. *The Educational and Developmental Psychologist*, (), 1–8. doi:10.1017/edp.2020.7
- Meisenberg, G., Woodley, M.A. Gender Differences in Subjective Well-Being and Their Relationships with Gender Equality. *J Happiness Stud* 16, 1539–1555 (2015)