



## GENDER AS A MODERATOR IN THE ASSOCIATION OF SELF-ACCEPTANCE AND AUTONOMY OF IRANIAN UNIVERSITY STUDENTS

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This study revealed findings on the ways in which gender moderates the relationship between self-acceptance and autonomy. Data for this study was collected from 1181 university students of different faculties (584 of them were males and the rest were females, in the age range between 18-50). Performing SPSS version 18, descriptive statistics, independent T-Test, correlation, and multiple regression analysis were used to analyse the data. Findings revealed that male students scored significantly higher than female students on self acceptance but not in autonomy. Furthermore, findings indicated that the correlation between autonomy and self acceptance is high with a large effect size for all and by gender. Moreover, it was revealed that the autonomy factor explained about 15%, 13 %, and 16 % of the variance in self acceptance for all, for men, and women, respectively. In addition, it was found that gender did not significantly mediate the influence of autonomy on self acceptance.

**Keywords:** Self-acceptance, Autonomy, Gender, University students.

### 1. Introduction

Gender difference is one of the matters was discussed in a variety of realms. Religious studies emphasized that there are differences as well as similarities based on gender; this is Quran powerfully stated that "*Indeed, the most noble of you [men or women] in the sight of Allah is the most righteous of you*" (Q.49:13) and in another Quranic verse stated that "*Men are in charge of women by [right of] what Allah has given one over the other and what they spend [for maintenance] from their wealth*"(Q.4:34).

Further, physiological studies indicated that gender difference is not deniable. In a longitudinal study, as an example, found that areas of the brain related with language work harder in girls than in boys and each of the boys and girls relies on different parts of the brain when performing these tasks(ScienceDaily, 2008), showing that gender differences are evidence in that kind of study.

Moreover, psychological studies assert on gender differences in different domains. Indeed, a number of research argued that females and males have differences in both quantity and quality of psychosocial health problems (See: Piko, 2011). in a study about differences in personality by Feingold (1994) stated that men were more assertive and had slightly higher self-esteem than women. Females were higher than males in extraversion, anxiety, trust, and, especially, tender-mindedness.

Ryff and her coworkers (Ryff & Singer, 2008; Ryff & Singer, 2006) developed a successful model of psychological well-being questionnaire (PWBQ) which is regarded as the measurement of positive mental health. The model integrated six functioning factors including positive relations with others,

environmental mastery, autonomy, personal growth, purpose in life, and self-acceptance. Some studies have been conducted showing that there are statistically significant different outcomes of some subscales of SPWB based on gender (Cheng & Chan, 2005; Lindfors, Berntsson & Lundberg, 2006; Maier & Lachman, 2000) Maier and Lachman (2000), for instance, in a research evaluated the effect of parental death and divorce on well-being of those under 17 years of age. The findings showed that parental divorce was related to less self-acceptance, less positive relations with others, lower environmental mastery, and more autonomy for men compared to women. These kinds of findings improve the role of gender as a moderator variable among subscales of well being questionnaire. Therefore, this study aimed evaluating moderating influence of gender in the association of self-acceptance and autonomy among university students.

### **1.1 Measurement**

A biographical questionnaire including age, gender and realm of study was used to obtain demographic information.

Both Autonomy and Self acceptance were measured by two subscales of psychological well being scale (Ryff & Keyes, 1995). Psychological well being has six dimensions ( environmental mastery, positive relations with others, personal growth, purpose in life, autonomy and self acceptance) with different versions in terms of the number of items for each subscale. The six subscales of the scale were used together and separately in several studies with different findings (See: Ryff et al., 2006). Further, in a study by Kalantarkousheh and Navarbafi (2012) a good reliability of Persian version of psychological well being has been reported- for all and each subscale from .65 to .81.

In the present research, autonomy and self acceptance subscales were used independently to examine association between autonomy and self acceptance for all sample and by gender in each scale. The impact of gender as a moderating influence on the association between autonomy and self acceptance was explored.

The items of autonomy and self acceptance scales which utilized in the present study have six –point Likert scale from strongly disagree (1) to strongly agree (6), with a potential range of 14 -84 for each scale. Cronbach's alphas in part of autonomy for the overall sample, for men and women were  $\alpha = 0.66$ , .651, .675, respectively. Cronbach's alphas in part of self acceptance for the overall sample, for men and women were  $\alpha = .783$ , .764, 0.80, respectively.

### **1.2 Data Collection and Statistical Analysis**

The questionnaires were administered among university students in Iran. They were ensured of the confidentiality of information. The measures were self report questionnaires and were completed individually by the participants. The questionnaires were distributed to university students from Islamic Azad University, Karaj Branch, from different faculties (see: Table 1). They were selected through a simple random sampling 49.4% of respondents ( $n = 584$ , aged 18–50 years) are males and 50.6% of them ( $n = 597$ , aged 20–50 years) are female.

Beside some descriptive statistics, independent sample t-Test was calculated to examine gender differences among the variables. Additionally, Pearson's correlations were calculated to estimate the relationship between the variables. multiple regression analysis was another statistical activity to examine accurately prediction of a predictor. Furthermore, to determine the role of gender differences in the association of autonomy and self acceptance, Fisher's  $r$ - to  $Z$ -transformation which suggested by Howell (2009) was performed. In the last part of the statistical analysis, in order to examine the potential of moderating effect of gender on the association of autonomy and self acceptance, ANOVA was used.

**Table 1.** Percentage of students from different faculty.

Faculty	Percent		
	All	Men	Women
Theology	.9	1.2	.7
Foreign language	9.7	2.4	16.8
Nursing	1.9	.5	3.4
Physical education	5.6	3.9	7.2
Veterinary studies	5.7	8.0	3.4
Psychology	16.6	2.6	30.3
Law	3.6	2.6	4.7
Science	17.4	16.6	18.3
Engineering	34.4	56.7	12.6
Agriculture	.1	0	.2
Management	4.1	5.5	2.7
Total	100.0	100.0	100.0

## 2. Results

### 2.1 Descriptive Analyze

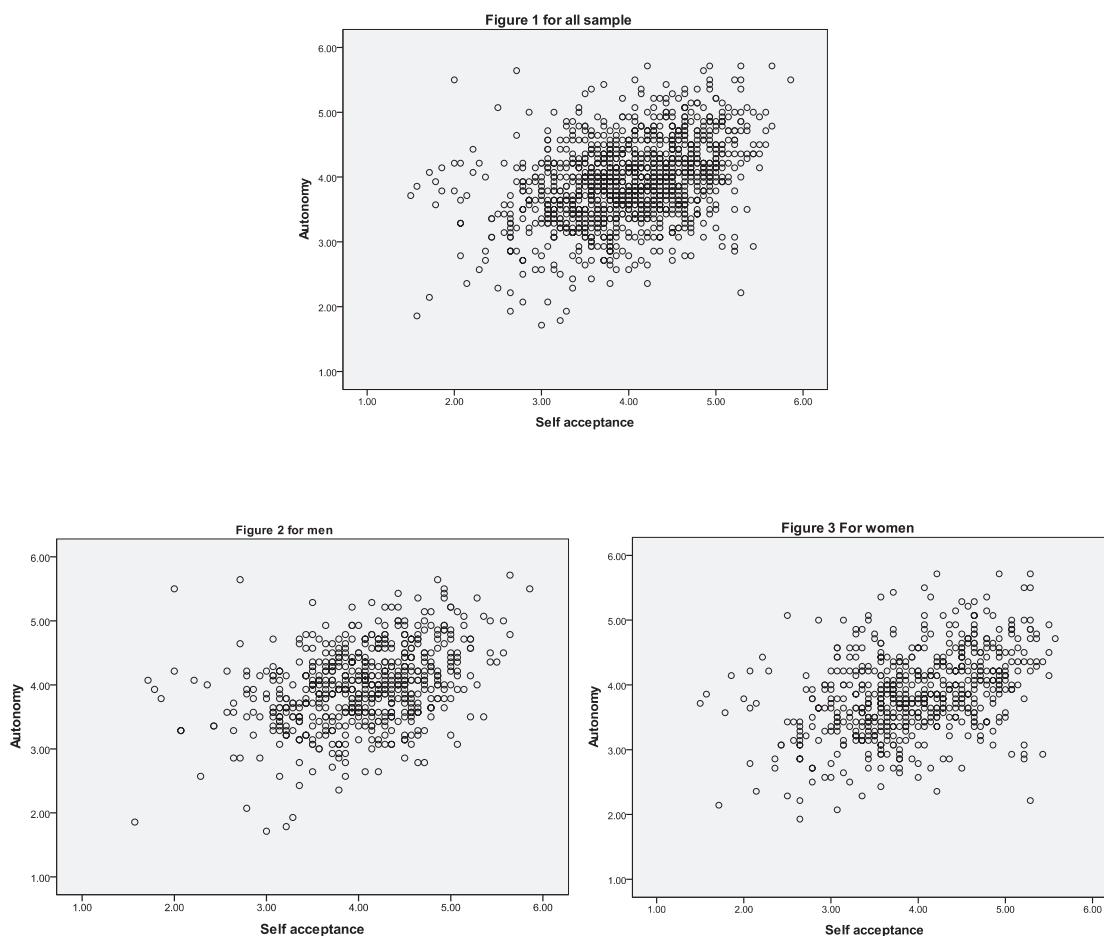
Table 2 shows the distribution of the variables for the whole sample and for each gender. Over half (51.7%, 56%) of males earned more than 55 scores in both Autonomy and Self acceptance scales. Only, around one percent of both men and women earned less than 28 scores in autonomy and self acceptance scales. Therefore, the average autonomy scores for men and women indicate moderate to high levels of autonomy within the sample. In addition, it appears that functioning in terms of self acceptance factor is good, given that only 1% for both men and women earned minimum score (between 14 to 28). Overall, it can be concluded that both men and women in terms of autonomy functioning and self-acceptance functioning are in good conditions.

**Table 2.** Descriptive Statistics.

Variable		Total Sample (n=1181)	Men (n = 584)	Women (n = 597)
	Minimum Score (from 14 through 28)	4%	.7%	.2%
	Moderate Score (from 28 through 55)	51.7%	47.6%	56.1%
Autonomy	Maximum Score (from 55 through 84)	47.9%	51.7%	43.7%
	Mean & SD	54.96±8.91	55.70±8.73	54.25±9.046
	Minimum score (from 14 through 28)	1%	1%	1%
	Moderate Score (from 28 through 55)	46.3%	43%	49.6%
Self acceptance	Maximum Score (from 55 through 84)	52.7%	56%	49.4%
	M ± SD	55.88±10.19	56.45±9.66	55.31±10.67

## 2.2 Statistical Assumptions

To ensure that the results obtained from the analysis are truly valid and accurate requirement for statistical assumptions is met. Ho (2006) indicated that linearity and homoscedasticity are two statistical assumptions for correlation analysis. SPSS version 18 was performed to estimate the statistical assumptions separately for all and by gender. As can be seen from Figure 1 ,2 and 3, there is a linear relationship between the variables, namely autonomy and self acceptance, for all and by gender, such that as the self-acceptance increases, so does autonomy. The figures also show that the homoscedasticity assumption is met, because the variability of the Autonomy score remains relatively constant from one self acceptance score to the next.



**Figure 1.** Gender Differences in Autonomy and Self acceptance.

Finding gender differences among variables was one of the aims of the present research. In order to test whether there is a significant difference between the mean scores of each scale namely autonomy and self acceptance in terms of gender, independent sample t-Test was conducted.

It hypothesized that (1) "there is a significant mean difference between autonomy of men and women of Iranian university students" and (2) "there is a significant mean difference between self acceptance of men and women of Iranian university students". To examine the two hypotheses we utilized independent sample T- Test. Table 3 presents the results of the test. As it can be inferred from this table, there was no

significance differences in the autonomy between the males and females students [ $t(1179) = 2.80, p > .05$ ]. Therefore, the first hypothesis was rejected. However, the second hypothesis namely "there is a significant mean difference between self acceptance of men and women of Iranian university students" was retained [ $t(1179) = 1.92, p < .05$ ]. The results indicated that even though women and men are same in autonomy, women were earned fewer score than men for self acceptance showing that the men have high degree of self acceptance.

**Table 3.** Independent Sample T-Test for Autonomy and Self acceptance.

Variable	Gender	N	Mean	SD	t	Sig.p*
Autonomy	Men	584	3.97	.623	2.807	.253
	Women	597	3.87	.646		
Self acceptance	Men	584	4.03	.690	1.924	.002*
	Women	597	3.95	.762		

\*Sig.p<.05

### 2.3 Bivariate Analyses

Since examining a moderator needs the existence of correlation between the two variables, the association between autonomy and self acceptance was examined for the whole sample and for each gender separately in bivariate analyses. It hypothesized that (1) "there is a significant association between autonomy and self acceptance among Iranian university students", (2) "there is a significant association between autonomy and self acceptance among men of Iranian university students" and (3) "there is a significant association between autonomy and self acceptance among women Iranian university students".

As can be inferred from Table 4, the autonomy and self acceptance in the whole sample [Pearson's  $r(1181) = .39, p < .05$ ], in men [Pearson's  $r(584) = .37, p < .05$ ] and women [Pearson's  $r(597) = .40, p < .05$ ] were significant correlated and therefore, all three above mentioned hypothesis were retained. Interestingly, correlation between autonomy and self acceptance is higher among women in comparison to men and whole sample. The coefficients were positive; therefore, the more autonomy defined the higher level of self acceptance the person, whether men and women, experienced and vice versa. Surprisingly, on assessment of the effect sizes of these correlations, it appears that they have large effects.

**Table 4.** Correlation Coefficient.

Variable	All (n = 1181)			Males (n = 584)			Females (n = 597)		
	r	p	Effect Size	r	p	Effect Size	r	p	Effect Size
Autonomy	.392*	.000	0.62	.371	.000	0.60	.405	.000*	0.63
Self acceptance									

\*Sig.p<.05

### 2.4 Gender Differences in the Relationship Between Men and Women

Now that the correlation between autonomy and self-acceptance for all and by gender is evidence, to find significant differences based on gender Z- values was calculated as recommended by Howell (2009). In this study, calculated p-value (Table 5) indicated that gender differences does not lead to significant effect on the association between self acceptance and autonomy (p-value = 0.49,  $p > .05$ ). Therefore, the

hypothesis, namely, " there is a significant relationship between autonomy and self acceptance in terms of gender among Iranian university students " was rejected.

**Table 5.** Result of the association between autonomy and self acceptance in terms of gender.

Variable	Males (n = 584)	Females (n = 597)	Z	Sig.p
	r	r		
Autonomy Self acceptance	.371	.405	0.69	0.490

## 2.5 Multiple Regression Analysis

When two variables were correlated perfectly, multiple regression analysis performed to provide an opportunity to assess the importance of each of the predictors to the overall relationship (Ho, 2006). Therefore, in this section, multiple regression analysis was performed to evaluate the extent to which autonomy factor accurately predicts self acceptance for the total and by gender. The hypothesizes, in this part, are addressed as follow: (1) "Autonomy is a significant predictor of self acceptance among university Iranian students", (2) "Autonomy is a significant predictor of self acceptance among men of university Iranian students" and (3) "Autonomy is a significant predictor of self acceptance among women of university Iranian students".

The results of regression analysis for autonomy and self acceptance are presented in Table 6.

The  $R^2$  value for the total was 0.153 and is significant on the 5% level [ $F = 213.791$ ,  $P < .05$ ]. Therefore, it can be concluded that 15% of the variance in self-acceptance for the total is accounted for by the autonomy. Further, the multiple regression analysis by gender signifies that for men, autonomy factor accounted for 13% of the variance in self acceptance and the result was statistically significant, as well [ $F = 93.121$ ,  $P < .05$ ]. In terms of women, the  $R^2$  value is 16%; a significant percentage [ $F = 116.512$ ,  $P < .05$ ] of variance in self acceptance is accounted for by autonomy. Therefore, it concluded that all of three hypotheses in this part were retained and autonomy factor significantly predicts and explains self acceptance for all and in terms of gender. Surprisingly F-statistic for all ( $F = 213.80$ ,  $p < .05$ ), for men ( $F = 93.121$ ,  $p < .05$ ) and for women ( $F = 116.512$ ,  $p < .05$ ) indicated that the model fits the data and therefore, there was a linear relationship between self acceptance and the predictor variable.

**Table 6.** Results of the multiple regression analysis for the total group and by gender.

Group	$R^2$	F	P
All	.153	213.80	.000*
Men	.138	93.121	.000*
Women	.164	116.512	.000*

\*Sig.p<.05

## 2.6 Test of Moderation

In order to examine the potential of moderating effect of gender on the association of autonomy and self acceptance, ANOVA was used. For this purpose, autonomy was dichotomized into categories of low or high. Since in the current research, the participants' mean scored is between 1.71 and 5.71 in the autonomy scale, individuals with scores between 1.71 and 3.70 were placed in the low autonomy category, and individuals with scores between 3.71 and 5.71 were placed in the high autonomy category. A 2(gender: male or female)  $\times$  2 (autonomy: low or high) ANOVA with self-acceptance as the dependent variable was conducted. As it was shown in Table 7, there was not an effect of gender,  $F(1, 1180) = 2.27$ ,  $p > .05$ ,  $\eta^2 = .002$ ) on the relationship between autonomy and self acceptance. Consequently, the



hypothesis that "gender is a moderator of the association between autonomy and self-acceptance among university students" was not retained.

**Table 7.** The moderated effect of gender on the association between autonomy and self acceptance.

Variable	N	Mean Square	F	Sig.	Partial Eta Squared
Self-acceptance	1181	1.342		.096	.002
Autonomy	1181	50.467		.000	.082
Gender * Autonomy	1181	1.095	2.270	.132	.002

\*Predictors: Autonomy and Gender. Dependent Variable: Self-acceptance

### 3. Discussion and Conclusion

The current research has built on the effort of researchers who are interested in gender differences in autonomy and self acceptance among Iranian university students. The existing study had two goals. The first goal was evaluating the association between autonomy and self acceptance among Iranian students. The second and the main goal was to estimate the degree to which gender moderated the association of autonomy and intimacy. Findings maintain the hypothesis that there is a significant relationship between self acceptance and autonomy. However, the results of the analyses did not support the moderational hypothesis. Autonomy as a predictor accounted for a more variance for men rather than for women, nevertheless, the different accounting of variance in men and women did not result in gender moderating on the association between autonomy and self-acceptance. The results of this study are promising in developing further insight into factors that affect association between autonomy and self acceptance.

The limitation of this study that lies in the Iranian sample population implies that the results of this study may not be widely generalizable to populations in other countries and cultures. Consequently, the scope of future work would require the application of this kind of research in a larger and broadly stratified sample and in a longitudinal study.

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