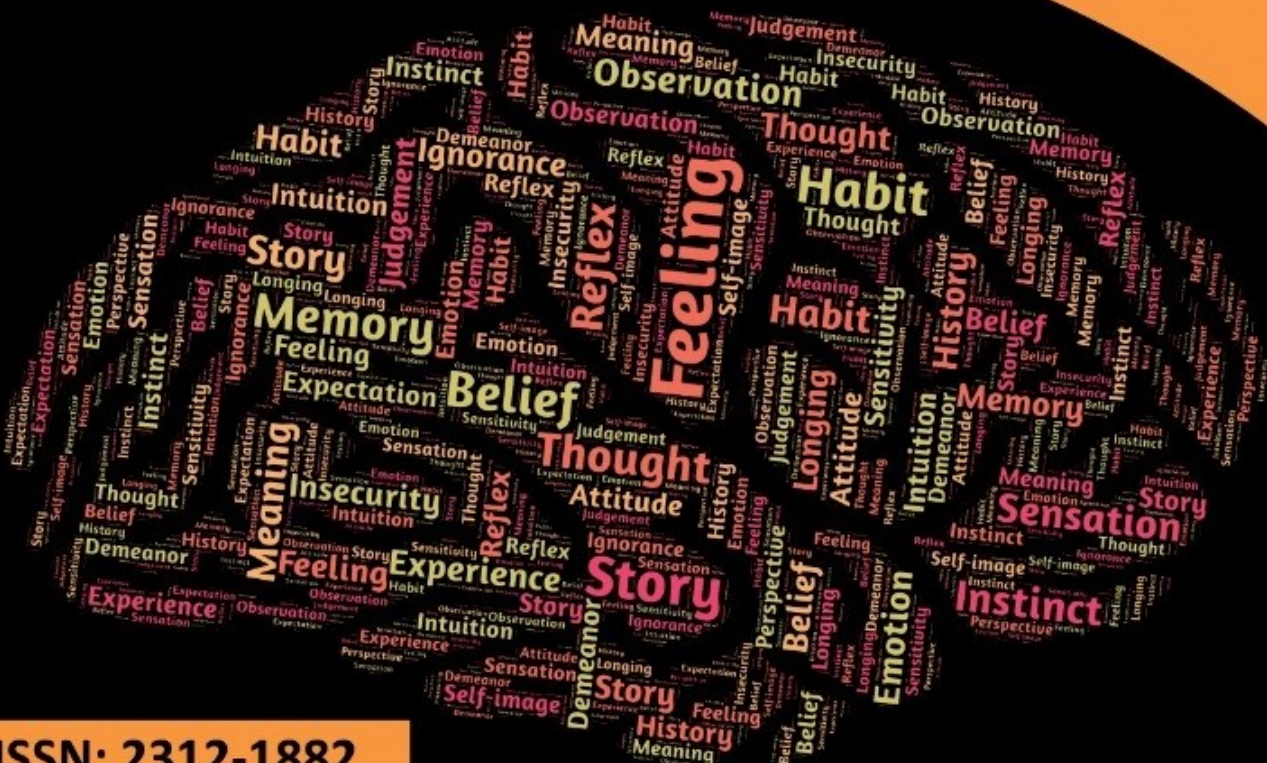
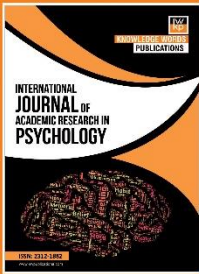


# INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN PSYCHOLOGY

VOLUME 3  
ISSUE 1





# INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN PSYCHOLOGY



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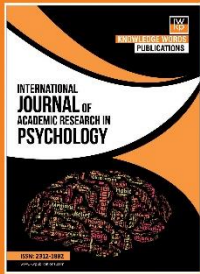
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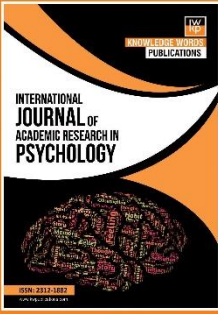


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## Role of Leadership Styles and Self Efficacy on Employees' Job Involvement in Enugu State

Obinna Osita Ike, Ifeanyichukwu Chukwudi Eze, Moses Ichongo Ukeh

To Link this Article: <http://dx.doi.org/10.46886/IJARP/v3-i1/2102>

DOI:10.46886/IJARP/v3-i1/2102

**Received:** 19 January 2016, **Revised:** 21 February 2016, **Accepted:** 10 March 2016

**Published Online:** 29 March 2016

**In-Text Citation:** (Ike et al., 2016).

**To Cite this Article:** Ike, O. O., Eze, I. C., & Ukeh, M. I. (2016). Role of Leadership Styles and Self Efficacy on Employees' Job Involvement in Enugu State. *International Journal of Academic Research in Psychology*. 3(1), 1-10.

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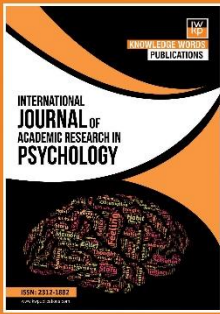
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# INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN PSYCHOLOGY



## Role of Leadership Styles and Self Efficacy on Employees' Job Involvement in Enugu State

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### Abstract

The study investigated the role of leadership styles and self efficacy on employees' job involvement. Two hundred and eighty participants took part in the study. Three instruments were used for data collection. They were Leadership Behavior Description Questionnaire (LBDQ), Self-efficacy Scale (SES) and Job Involvement Scale (JIS). Two hypotheses were tested. Two-way analysis of variance (ANOVA) was used to analyze the data. Result shows that there is a significant difference between different types of leadership styles on job involvement as well as self efficacy and job involvement. The results were discussed in terms of their relevance in work setting and suggestions for further research made.

**Keywords:** Leadership Style, Self Efficacy, Job Involvement, Category of Employees.

### Introduction

Research on work behavior have taken a step forward by recognizing the role of leadership style and self efficacy in the job involvement of employees in an industrial setting (Compeau & Higgins 2001; Schwarzer, 1997; Schyns 2001). This is because no meaningful economic development could take place in any organization without first improving the productivity index which is a derivative of proper job involvement (Osoba, 1983).

Job involvement is a necessary condition if the employee is to accept fully the organizational demands placed upon him/her by his/her membership in the organization. It represents a cognitive or belief state of psychological identification with ones present job (Kanungo, 1982). The process of job involvement in work has been the concern of the psychologists as they have tended to focus on organizational conditions that lead to job involvement such as meaningfulness of work, adequacy of supervision etc. Hence, it is viewed as behaviour rather than merely an internal process which implies that when workers are committed to a course, a person or activity, they express this by an overt act. A relationship process without an overt behavioural component cannot be considered as involvement (Winner & Gechman, 1977). This goes a long way in portraying that behaviour which are considered important for achieving performance in workers encompasses a total work behaviour

of the individuals in relation to the job such as committing his total energy to the job, minimizing waste and helping co-workers (Saleh, 1981). This stresses the internalization of values about the goodness of work, or the importance of work in the worth of the person and perhaps it thus, measures the ease with which the person can be further socialized by an organization. However, this internalization implies the degree to which a person identifies psychologically with his work (that is the extent to which the total work situation is an important part of life) and effect of work on the individual self concept (i.e. the extent to which perceived job success affect self esteem). Thus, job involvement can be considered as an important measure of organizational effectiveness that may be at least in part influenced by leadership style and self efficacy (Kristsonis, 2004).

In conceptualizing the level of job involvement of workers in Nigerian industries today, one needs to consider proper leadership style and self efficacy as factors that play a great role in the level of workers job involvement. Thus, in the world of human being, one principal factor which makes societies move forward, develop or improve their living condition is leadership. Leaders' behavior affects employees' satisfaction and involvement towards organizational goals and objectives (Xirasagar, 2008). Leadership is an influence process where the ease or difficulty of exerting influence is a function of the favourableness of the group, task, situation and the leader (Yahchouchi, 2009). Although it has been recognized that the favourableness of the leadership style to be adopted is dependent on different variables such as task structure, group and the leader member relations as well as power position (Ofordu, 2005). One of the basic problems of organization is how to reconcile, coordinate or integrate member needs or goals with organizational requirements and objectives. Hence, the imperativeness of a good leadership style is inevitable in a dynamic and complex organizational climate where motivational problem of relating man and system is a major concern (Shamir et al., 2002). However, the most perplexing problems controlling managers and supervisors have been to determine the leadership style most conducive to promoting effective work group. Empirically studies directed towards finding that style which is most effective have yielded inconclusive and often contradictory results (Bartolo & Furlonger, 2002; Katerberg & Home, 1981; Walder, 1995).

There have been many leadership styles put forward and researchers have approached the problem of clarifying these leadership style from different dimensions (Bass & Avolio 1990; Macallister, 2004). Flamholtz (1986, 1990) indentified six leadership styles which falls under three categories as in the table below:-

**Table 1: The Leadership Styles and Categories**

Category	Style	Definition
Directive	Autocratic	Declares what is to be done without explanation.
	Benevolent Autocratic	Declares what is to be done with an explanation.
Interactive	Consultative	Gets opinions before deciding on the plan presented.
	Participative	Formulates alternatives with group, then decides.
Nondirective	Consensus	All in group have equal voice in making decisions.
	Laissez-Faire	Leaves it up to group to decide what to do.

However, in the course of this study, the leadership styles that the researchers have focused on are categorized under two dimensions, namely task oriented or initiating leadership style and considerate or employees centered leadership style (Lawrence, 2007).

Few studies have confirmed the importance of leadership styles and self efficacy on job involvement of workers (Compeau & Higgins, 2001; Kohn, 1994; Schyns, 2001). Self efficacy influences the job involvement of workers (Schyns, 2001). It relates to a person's perception of their ability to reach a goal. It is the belief that one has the capabilities to execute the course of action required to manage prospective situation (Bandura, 1997). Most researchers have confirmed a positive correlation between self-efficacy and job involvement (Kohn, 1994; Schyns, 2001). A study conducted by Compeau and Higgins (2001) was done to determine the role of individuals' belief about their abilities to competently use computers in the determination of computer use. The researcher found out that an individual's level of involvement in the computer task depends to a great extent on the level of the individual's self-efficacy.

Shamir et al, (1993) proposed that leadership style enhances self-efficacy of employees. . However, self-efficacy and leadership style act as a catalysts in propelling people to be involved or not in a work and that job involvement could be seen as a moderating variable between leadership style and self efficacy and it is only on 'involved employees' does a positive relationship between satisfaction and performance becomes evident (Williams, 1996).

Previous studies suggested that leadership styles and self-efficacy influence employees' job involvement (Fu et al., 2006; Schyn, 2001). Based on the above researchs and findings, these hypotheses were formulated;

H<sub>1</sub>: There will be no statistically significant difference in job involvement between employees experiencing initiating structure leadership style and those experiencing considerate leadership styles.

H<sub>2</sub>: There will be no statistically significant difference in job involvement between employees with high self-efficacy and those with low self-efficacy.

Therefore, the authors aim to find out the role of leadership styles and self-efficacy on employees' job involvement. The findings will add to existing literature and guide captains of industries/policy makers on the dynamics of work attitude and its implications for a holistic organizational functioning.

## **Method**

### **Design**

The design of the study is 2 x 2 factorial design based on the structure of the study.

### **Participants**

The participants comprised of the entire staff strength of Wilson Nigeria Limited, Nsukka, Enugu State totaling three hundred and thirteen (313) employees of Wilson Nigeria Limited Nsukka. The participants consisted of one hundred and forty-nine (149) males and one hundred and thirty-one (131) females. The participants' age ranged from twenty (20) to fifty (50) years with mean age of thirty eight (38) years.

### **Instruments**

The research involves three instruments, leadership style scale, self-efficacy scale and job involvement scale. The instruments were put into one questionnaire that has four sections. Section A contains questions on demographic information like gender, age, marital status, years of service, educational qualification.

Section B, contains questions about leadership style. The scale was developed by Fleishman (1953) and it consists of 48 items. The response format range from strongly agree (5 points) to strongly disagree (1 point). Fleishman (1953) reported reliability co-efficient of the scale to be .92 for consideration and .68 for initiating structure items. In order to adopt it for Nigeria context, Oforde (2005) validated the scale using 35 items with a Cronbach alpha of .89 for consideration and .75 for initiating structure items. From the instrument on leadership scale administered, the highest score was one hundred and seventy five (175) and the lowest thirty five (35). To categorise considering and initiating structure leadership styles is from the average score of participants on the leadership questionnaire, 83 and above were considered as considering leadership style while 82 and below were considered as initiating structure leadership style. Average score represents the total responses on items on LBDQ divided by the total number of participant. Therefore, one hundred and thirty six (136), participants scored 83 and above and were considered as considering leadership style while one hundred and forty four (144) scored 82 and below and were considered as having initiating leadership style.

Section C contains on questions on self-efficacy. The scale was developed by Schwarzer and Jerusalem (1993) and it consists of 10 items with reliability co-efficient of .75. The possible responses to the scale range from not at all "true" to exactly "true". The coding also ranged from 1 to 4 respectively. In order to adopt this scale for Nigeria context, the instrument was subjected to validity and reliability tests by the author with a reliability coefficient of .74 and a validity index of .57. From the average score of participants on self-efficacy scale, 29 and above were considered as high self-efficacy while 28 and below were considered as low self-efficacy.

Section D contains questions on job involvement. The scale was developed by Lodahl and Kejner (1965), reporting a split half reliability .57 for nurses, .67 for engineers and .80 for students. Ejiogu (1986) adopted and validated the scale with a split half reliability of .76. It consists of 20-items, the response format range from "strongly agree" to "strongly disagree". The coding also ranged from 1 to 5 respectively.



### Procedure

The researchers introduced themselves to the manager of the company and intimidated him of the research they were conducting. They informed him about the confidentiality of the employees responses to the questionnaire and he gave his approval. The administrative manager was directed to guide the researchers in meeting the employees through their sectional heads from where the questionnaires were administered. The researchers conducted the study in Wilson Nigeria Limited, Nsukka, Enugu state. There was no sampling technique used since the researchers made use of the whole staff of the company totaling three hundred and thirteen (313). The employees completed the questionnaires on leadership style, self-efficacy and job involvement. All data were collected at one point through their sectional heads.

From the three hundred and thirteen (313) copies of questionnaire distributed to the entire three hundred and thirteen staff of Wilson Nigeria Limited Nsukka, twenty (20) copies were wrongly filled while another thirteen (13) copies were returned blank. Thirty three (33) copies of the questionnaire which were wrongly filled and the blank ones were discarded and were left with two hundred and eighty (280) copies of the participants' questionnaire for statistical analysis of the data.

### Method of Data Analysis

Two-way ANOVA was employed for statistical analysis because the two independent variables operated under two levels.

### Results

Table 2: Mean scores and Standard deviations of the various groups of leadership styles (considerate or initiative) and staff efficiency (high or low) on job involvement.

Variable	Level	Mean scores	Standard deviation	Number
Leadership Style	Considerate	58.62	11.95	136
	Initiative	54.58	13.31	144
Self Efficacy	High	58.55	12.63	143
	Low	54.44	12.70	137

Table 2 shows that there is a significant difference in the mean scores and standard deviation of the different levels of leadership styles and self efficacy on job involvement.

Table 3: Summary table of two-way ANOVA for the role of leadership styles and self efficacy on the job involvement of the employees.

Source	Sum of squares	df	Mean square	F	Significance
Leadership style (A)	899.409	1	899.409	5.77	*
Self- efficacy (B)	1031.873	1	1031.893	6.62	*
A X B	587.723	1	587.723	3.77	NS
ERROR	43037.382	76	155.933		
TOTAL	940932.00	280			
CORRECTED	45745.486	279			

Significant difference was found between leadership styles on employees' job involvement ( $F = 5.77$ ;  $P < .05$ ). Employees with considerate leadership style reported more involvement in their job than those employees with initiating structure. Their means as shown in table two were (mean = 58.62;  $SD = 11.95$ ), while Mean = 54.58;  $SD = 13.31$  was for employees with initiating leadership style. This suggests that employees with considerate leadership style are more involved in their job. Also, a significant difference was found on self-efficacy and employees job involvement ( $F = 6.62$ ;  $P < .05$ ). This shows that employees with high self efficacy (mean = 58.55;  $SD = 12.63$ ) are more involved in their job more than those with low self-efficacy (mean = 54.44;  $SD = 12.67$ ). This shows that leadership style and self-efficacy are undeniably imperative in job involvement.

### Discussion

In this study, there is a significant difference between the two categories of leadership styles (considerate and initiative) on employees' job involvement. The results are consistent with Rukmani et al., (2010) finding which shows that employee(s) who were given more autonomy (freedom to operate i.e., considerate) were more likely to have higher job involvement than those not given autonomy to operate (initiative). The finding further agreed with Fielder's (1976) contingency model of leadership which proposed that effective leader is a joint function of leader characteristics and situational characteristics and those effective leaders are those who see their followers as similar to themselves. In addition, considering leadership styles have strong and superior influence on employee job involvement (Krause, 2004). The result equally agreed with Likert (1967) finding where he hypothesized that leaders who obtain the highest productivity are supportive, friendly and helpful rather than hostile and tries to treat people in a sensitive and considerate way. Other studies which showed that considerate leadership style significantly influence job involvement of employees includes (Ofordu, 2005; Bass & Avolio, 1990 & 1995; Koztonshi & Doherty, 1986; Rukmani et.al 2010). Furthermore, there is a significant difference in job involvement between employees with high self-efficacy and those with low self-efficacy (Compeau & Higgins, 2001). The finding agreed with Bandura (1987) concept of self-determinism which shows that employees with high self-efficacy were associated with high job involvement and the zeal to accomplish, which breeds strong sense of competence that helps cognitive processes in commitment towards one's work. He further stated that employees with low self-efficacy have pessimistic thoughts about their accomplishment and personal development and are bound to be less involved in their job. The finding is in consonance with the study by Sims (1997) where he found out that people who have high self-efficacy in their domain of operation adapt better socially, makes friends easier and are more willing to work with others as well as committing themselves to their work while those with low efficacy have difficulty making friends and working with others as well not showing much commitment to their work. However, this study has some limitations. The study restricted only on initiative (task) and considerate (employee centered) leadership styles. Further studies can investigate other types of leadership style. The participants were only workers of Wilson Nigeria Limited Nsukka, Enugu State. A wider population would have added more credence to the external validity of the findings. Thus, further research with a wider population is recommended.

## Conclusion

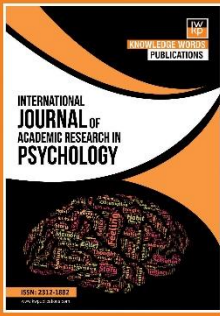
In organizational framework, the above findings call for the need for proper leadership style and a high self-efficacy to be put in place since they are catalyst that binds other factors together. Thus, a cordial industrial harmony exists only when there is compatibility between the employees need and organizational goals, which is only exemplified through good leadership structure and a high self-efficacy. This will undeniably enhance workers commitment towards their work which in return helps in actualizing the organizational stated goals and objectives. Human existence is justified when all the input to enhance, co-ordinate and better life is observed in people's performance in their various areas of endeavor. This is made possible in work setting through good leadership style and self-efficacy since it is evident that it can significantly influence job involvement of employees (Ofordu, 2005; Compeau & Hyggins, 2001; Bass & Avolio, 1990; 1995; Watson, 1994; Bandura, 1987; Mehmet et.al, 2014; Rukmani et al., 2010). Therefore leadership style and self-efficacy as a hall mark of any organization is no longer perceived as performance which connotes efficient utilization of industrial resources by a worker or group of workers. Rather they are factors which uplift the total outcome of goal performance as it contributes to the realization of desired organizational objectives. However, the imperativeness of leadership style and self-efficacy on employees' job involvement in work setting cannot be overlooked or ignored since its understanding is essential for a healthy work behavior.

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# INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN PSYCHOLOGY



## Preferred Learning Method and Performance among Accounting Students: Does Personality Type Matter?

Erlane K Ghani, Suria Majdi and Norbijan Abu Bakar

To Link this Article: <http://dx.doi.org/10.46886/IJARP/v3-i1/2227>

DOI:10.46886/IJARP/v3-i1/2227

**Received:** 02 February 2016, **Revised:** 18 April 2016, **Accepted:** 19 May 2016

**Published Online:** 28 May 2016

**In-Text Citation:** (Ghani et al., 2016)

**To Cite this Article:** Ghani, E. K., Majdi, S., & Abu Bakar, N. (2016). Preferred Learning Method and Performance among Accounting Students: Does Personality Type Matter? *International Journal of Academic Research in Psychology*. 3(1), 11-25.

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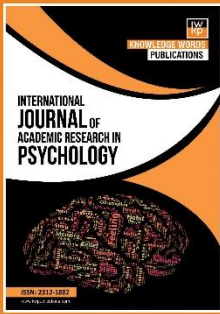
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# INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN PSYCHOLOGY



## Preferred Learning Method and Performance among Accounting Students: Does Personality Type Matter?

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### Abstract

This study examines the personality profile of accounting students in a public university in Malaysia. Specifically, this study determines whether students' personality influence their preferred learning method. This study follows Jung and Myer Briggs' study that provides 16 personality types which subsequently theme up into four types of personality. The four types of personality are Extroverts versus Introverts, sensing versus Intuitive, thinking versus Feeling and Judging versus Perceiving. The focus of this study is on two types of personality namely, Extrovert versus Introvert and Sensing versus Intuitive. Using questionnaire survey on 266 students, this study found students' personality type influence their preferred learning method. Further analysis shows that students possessing Extrovert Intuition has the most different preference learning method as compared to students with other personality type. The results also show that students' personality type also influence their performance. Further analysis shows that students possessing Extrovert Intuition performed much better compared to the students with other personality type. The findings in this study provide further understanding to the academics, faculties and university on the type of personality of the accounting students and their preferred learning method. Such understanding provides these parties guidelines on the factors to be concentrated in improving teaching and learning in accounting education.

**Keywords:** Personality, Personality Type, Students, Accounting, University, Malaysia.

### Introduction

Students are different with respect to their profile and the way they assess meaning and acquiring information (Mattar and El Khoury, 2012). The importance of understanding students' profile is not only evident to students but also to the faculties and universities as it can become a contributing factor to their educational success. Personality type refers to the psychological classification of different types of individuals. Many universities generate students' profile for recordkeeping purposes as these profiles are focused on the interests of the students and their courses of study. The recordkeeping of the students profile assist the universities to gather information in order to

make better educational decisions that will enhance the students' development. However, most of the students' profile is related to extrinsic information such as their origin and previous course taken, leaving the inclusion of intrinsic information such as personality type.

The psychology literature defines personality type as psychological of different types of individuals. A large body of the psychology literature examined personality because studies have shown that students have different ways of responding and preference to learning method. The mismatch between personality type and learning method would result to negative impact on their performance. However, examining such issue in the context of accounting is still under-examined. It is undeniable that the psychology research needs to be relied upon in studying human information processing (Nourayi and Cherry, 1993). Nourayi and Cheery argued that accounting researchers need to look into the psychology perspective and learned from that discipline.

This study examines the personality profile of the accounting students in a public university in Malaysia. Specifically, this study identifies the type of personality possess by the final year undergraduate accounting. This study subsequently examined the effect of the students' personality on their preferred learning method. The findings in this study provide further understanding to the academics, faculties and university on the type of personality of the accounting students and their preferred learning method. The remainder of this paper is structured as follows. The next section provides a review of relevant literature. Section 3 discusses the hypotheses underpinning this study and section 4 outlines the research design. The results are presented in section 5. A summary and conclusion are provided in the last section.

### **Literature Review**

One of the most eminent areas being examined in the education literature is examining the factors that could influence students' performance. Most studies supported the notion that students' performance could be affected by different socio-economic, psychological and environmental factors (Hijazi and Naqvi, 2006). These factors include gender (Anderson et al. 1994; Horne, 2000), similar learning styles between the students and instructors (Borg and Shapiro, 1996), sitting location in the class (Topping, 1994), attendance (Park and Kerr, 1990; Durden and Ellis, 1995) and their previous results (Nordstrom, 1990). Although there are studies that have examined psychological factors, the issue of personality type however, is still under-researched.

Personality refers to "similar responses" to internal or external stimuli, where certain persons with similar traits would respond to the stimuli in a similar manner (Meisgeier et al., 1989; Rogers, 1993). Proponents of the personality theory strongly hold the belief that an environment in which learning occurs positively influences the students' performance if the environment favors their personality type (Rogers, 1993). Several studies have supported the arguments of the proponents in the context of organizational environments such as the workplace (Rorer, 1992; Kummerow et al., 1997). The findings of these studies have led few researchers to suggest that structuring the classroom based on the students' personality would assist the students to achieve targeted results (Meisgeier et al., 1989; Rogers, 1993). However, most studies that have examined the impact of personality type within the classroom were not in quantifiable manner.



Studies have also shown that students that have different personality style influence them to have different learning styles, that consequently reflected in different academic strengths, skills, and interests (Borg and Stranahan, 2002; Felder et al., 2002; Russo and Kaynama, 2012). Arguably, the students particularly the accounting students are not an exception to this. Since there is a variety of job description within the accounting field, the students may have equal chance and potential to become successful accountants. However, their chance and potential to become successful accountants may be deterred by their different ways of responding and preference to the different type of learning methods due to their personality type. Therefore, identifying the personality type of students seems necessary in order to provide and design a more balanced teaching and learning methodologies that is effective for all students.

In the accounting discipline, there are studies that have examined personality type of the accounting students (Nourayi and Cherry, 1993; Bealing et al., 2006; Bealing et al., 2007; Bealing et al., 2008; Swain and Olsen, 2012; Fallan and Opstad, 2013). However, only few of these studies have examined the effect of personality type on students' performance. For example: Nourayi and Cherry (1993) examined the effect of link between accounting students' performance and personality types on 103 students. They used questionnaire survey to identify the personality type of the students and their sample was dichotomised based on gender. They found that there is no significant difference between the two groups of students. They also found no significant difference between Sensing versus Intuitive students in terms of performance. Their results indicate that the future accountants do not possess a dominant personality type. However, their sample focused on first intermediate accounting course. On the other hand, Bealing et al (2007) examined six specific questions that are related to Sensing and Intuitive dimensions of Jungian personality type. They examined whether there is a correlation between the strength of a student's specific personality preferences and their result in their introductory accounting course. They found students with Sensing dimension performed better than students with Intuitive dimension. Although both Nourayi and Cherry's study and Bealing et al.'s study have relied on students in the introductory accounting course, their findings may not be generalised to final year accounting students. Both studies however, have relied on Jung and Myers-Briggs Personality Type Indicator.

### **Jung and Myers-Briggs Personality Type Indicators**

Jung (1923) suggested that individuals possess specific personality types. He described a set of dichotomous differences in individuals in which he defined as Extrovert and Introvert. Extrovert and Introvert refer to the way individuals prefer to "focus their attention" and "gain their energy" (Myers, 1998). Extroverts focus their attention and gain energy through interaction with the external world of people, activities and things. Introverts on the other hand, focus their attention and gain energy through the inner world of ideas, impressions, and emotions. Extroverts prefer communicating using discussion and interacting whilst Introverts prefer written communication. Felder et al (2002) noted that students with different personality type tend to respond differently to different teaching and learning instruction. Extraverts prefer to work in settings that provide for activity and group work whilst Introverts prefer to work in settings that provide opportunities for internal processing.

Jung later expanded his concepts to include another dichotomous set of personality types namely, Sensing and Intuition (Storr, 1983). Sensing and Intuition involve how individuals gather and process information (Schloemer and Schloemer, 1997). Sensing individuals tend to organise input sequentially and prefer detailed instructions with concrete information. Intuitive individuals on the other hand start with broad concepts seeing patterns, connections and trends organizing them as a more workable general framework. Intuitive type may not prefer detailed oriented activities, preferring to process information in a top down format as opposed to the Sensing type that prefer detailed, fact based bottom up approach. Jung has also introduced Thinking versus Feeling which deal with the way individuals make decisions (Schloemer and Schloemer, 1997).

Myers and Briggs extended Jung's concept to include another set of psychological type known as Judging versus Perceiving (Myers, 1976). Myers (1998) described the Judging type as those who prefer to be planned, organised, and prefer closure and the settling of things. On the other hand, the Perceiving type is those who is less planned and may prefer to keep his options open. The Judging type may be more organized whilst the Perceiving type may be more spontaneous based on their reliance on their ability to adapt to a changing situation. They then developed a personality type indicator to determine the personality type of an individual. The personality type indicator would determine whether an individual is an Extrovert or Introvert, Sensing or Intuitive, Feeling or Thinking and Judging or Perceiving.

This study focuses on two types of personality namely, Extroverts versus Introverts and Sensing versus Intuitive due to their dominancy in the psychological literature when examining students' personality but under-researched in the accounting discipline. Felder et al. (2002) noted that students with different personality type tend to respond differently to different teaching and learning instruction.

## **Research Question and Hypotheses Development**

### **Objectives of Study**

This study attempts to determine the personality type of the accounting students in a public university in Malaysia. Specifically, this study examines:

- i. The personality profile of the final year accounting students.
- ii. The effect of the final year students' personality type on their preferred learning method.
- iii. The effect of the final year students' personality type on their performance.

The objectives of this study are achieved by way of a questionnaire survey.

### **Development of Research Question**

Studies have suggested that accounting students are likely to be successful accountants if they not only possess extrinsic factors such as previous educational background but also intrinsic factors such as personality. These studies suggested the need to look into psychology discipline and learned from this discipline in order to obtain further understanding on the factors that influence students' performance. In particular, studies need to look at Jung's theory that has proposed three types of

personality namely, Extroverts versus Introverts, Sensing versus Intuitive and Thinking versus Feeling. Myers-Briggs then extended Jung's concepts by introducing Judging versus Perceiving and developed the Myers-Briggs Personality Type Indicator in measuring or determining the personality of individuals.

Within the accounting education, a group of studies have examined students' personality in accounting discipline such as Bealing et al (2006); Swain and Olsen (2012); Fallan and Opstad (2013). These studies found that accounting students possess different personality. For example: Swain and Olsen (2012) examined the pattern of personality types of students that come into introductory accounting classes. Their study examines both the accounting education decision, and the decision to pursue and remain with an accounting career. They demonstrated most of the students are Sensing individuals in which they prefer to gather information based on observations of concrete data rather than gathering insight based on an intuitive exploration of meanings and relationships (Intuitive). However, their study focused on junior accounting students and on one of the personality type namely, Sensing versus Intuitive. Following Swain and Olsen, this study aims to examine the personality type of the final year accounting students in terms of Extroverts versus Introverts and Sensing versus Intuitive. Therefore, the following research question is developed:

*RQ1: What is the personality profile of the final year accounting student?*

### **Development of Research Hypotheses**

Studies have shown that students that have different personality style influence their learning styles that consequently reflected in different academic strengths, skills, and interests (Borg and Stranahan, 2002; Felder et al., 2002; Bisping and Eells, 2006; Swope and Schmitt, 2006; Russo and Kaynama, 2012). These studies however were conducted in a non-accounting discipline. It is likely that accounting students would also portray similar behavior in which different personality would prefer different preference in learning method. Therefore, this study develops the following hypothesis:

*H1: There is a significant difference on the preferred learning method among the students with different personality.*

One of the factors that have also been suggested in the literature that could influence students' performance is their personality style (Nourayi and Cherry, 1993; Felder et al., 2002; Bealing et al., 2007). These studies suggested that students that have different personality style that leads them to have different learning styles that consequently reflected in their performance (Felder et al., 2002). However, the findings shown in the accounting discipline are mixed. Nourayi and Cherry (1993) found no significant difference between Sensing versus Intuitive students in terms of performance. Their results indicate that the future accountants do not possess a dominant personality type. On the other hand, Bealing et al., (2007) found students with Sensing dimension performed better than students with Intuitive dimension. Although both Nourayi and Cherry's study and Bealing et al.'s study have relied on students in the introductory accounting course, their findings may not be able to be generalised to final year accounting students. Their contrasting findings led this study to further examine this issue. Therefore, the following alternate hypothesis is developed:

*H2: There is a significant difference on the performance among the students with different personality.*

## **Research Design**

### **The Respondents**

The final year accounting students who were enrolled in two different semesters over a period of one year in a public university are chosen as the respondents in this study. These students are chosen to become the respondents in this study because they are towards graduation and therefore, have gone through rigorous courses that have to be completed to be entitled for a Bachelor of Accountancy.

### **Research Instrument**

This study uses questionnaire survey as the research instrument. The questionnaire was developed based on Bealing et al. (2006); Swain and Olsen (2012). The questionnaire is divided into two sections. Section A requests the respondents to provide their opinion related to their personality type. There are 20 questions related to personality type. The questions include whether they prefer pre-arranged schedules or they describes themselves as analytical or free-spirited and their interest in doing things the most logical way or in the traditional way. The respondents are also requested to identify whether they are methodical or spontaneous, their preference in class projects, how their friends describe them and whether they are conventional or creative. Other questions include their preference when waiting in a long line on whether they prefer to chat with the person next to them or keeping their eyes on the phone, and also whether they find it common that often they are ruled by their heart or vice versa. The results in this section would determine the personality type of the respondents. The respondents are required to complete this section based on categorical scale. Subsequently, personality type of the final year accounting students becomes the independent variable of this study.

Section B requests the respondents to complete their demographic profile. There are 5 questions divided into 2 parts in this section. Part A requests the respondents to identify their gender and origin. Part B requests the respondents to identify their preferred learning method and CGPA to date. The respondents are required to choose their preferred learning method of either academics providing the lecture only, students presenting using the PowerPoint or Students performing role play or discussion. The respondents are required to complete all the questions in this section based on categorical scale except for CGPA to date. For this question, the respondents are requested to state their exact CGPA score. Preferred learning method and performance are the dependent variables in this study.

### **Data Collection and Analyses**

The data collection was performed over a six months period from 1 January 2016 to 30 June 2016. The questionnaires were distributed during class hours with the assistance of the teaching academics. The respondents were requested to complete and return the questionnaire to their teaching academics. The data was collected in this manner to reduce the possibility of low response. In total, 350 questionnaires were distributed to the students. Out of the 350 questionnaires distributed, 326

respondents returned the questionnaire. However, only 266 returned questionnaires were completed, resulting in a response rate of 76.0% percent. The data was then analysed using SPSS.

## Results

### Demographic Attribute

This section presents the results of answering the research question in this study. The research question in this study poses the question “*What is the personality profile of the final year accounting student?*” The results of the descriptive analysis of the demographic attribute of the respondents are provided in Table 1. Panel A of Table 1 sets out the results of the descriptive statistics of demographic attribute in terms of gender and origin. Table 1 shows that 201 (75.6 percent) of the total respondents are female and only 65 (24.4 percent) are male students. This is not unusual as most accounting students in the public universities in Malaysia are being dominated by female.

Panel B, Table 1 presents the results of the frequency descriptive statistics of the personality type. The results in panel A, Table 2 show that 31.2 percent are Extrovert Sensing students (83 respondents) compared to 34.2 percent are Extrovert Intuitive students (91 respondents). Only 41 students (15.4 percent) are Introvert Sensing and 51 students (19.2 percent) are Introvert Intuitive. The results indicate that there are more Extroverts compared to Introverts among the final year students, results which are unexpected since previous studies have shown that accounting students are often more quiet and reserve than the students in other disciplines. However, it is surprising to have results that show more Intuitive students than Sensing students since accounting students are often expected to have logical senses rather than following their intuition.

Panel C, Table 2 provides a more detailed insight on the final year accounting students’ personality profile. The results show that there are female Extrovert Intuitive (69 respondents) as compared to female Extrovert Sensing (62 respondents). Similarly, there are more female Introvert Intuitive (37 respondents) as compared to 33 Introvert Sensing. The results show that there are slightly more of male Extrovert Intuitive (22 respondents) compared to 21 male Extrovert Sensing. Similarly, there are more male Introvert Intuitive (14 respondents) as compared to only 8 Introvert Sensing. The results indicate that more of the accounting students possess the personality of Extroverts and more than half of them possess the personality of intuition. Again, this is quite surprising because accounting is a course that requires logical senses and yet more students that possess of the nature of perceiving enrolled for accounting courses.

Table 1: Demographic Attribute

## Panel A: Gender

	Frequency	Percent	Cumulative Percent
Male	65	24.4	24.4
Female	201	75.6	75.6
Total	266	100	100

## Panel B: Personality Type

	Frequency	Percent	Cumulative Percent
Extrovert Sensing	83	31.2	31.2
Extrovert Intuitive	91	34.2	65.4
Introvert Sensing	41	15.4	80.8
Introvert Intuitive	51	19.2	100.0
Total	266	100	

## Panel C: Personality Type and Gender

	Personality				Total
	Extrovert Sensing	Extrovert Intuitive	Introvert Sensing	Introvert Intuitive	
Male	21	22	8	14	65
Female	62	69	33	37	201
Total	83	91	41	51	266

**Effect of Students' Personality Type on Preferred Learning Method**

This section presents the results of testing hypothesis 1. Hypothesis 1 states that *“There is a significant difference on the preferred learning method among the students with different personality”*. Panel A of Table 2 provides some hindsight on the preferred learning methods among the students with different personality. The results show that the students possessing intuitive in nature tends to prefer their academics providing the lecture to them. On the other hand, students with senses prefer to have their learning method to be either presentation or role play or discussion. Surprisingly Extrovert students tend to prefer their academics to lecture rather than them presenting in front of the class, or role play or discussion.

Table 2: Personality Type and Preferred Learning Method

## Panel A: Descriptive Statistics

Personality Type	N	Mean	Std. deviation	Std. error mean
Extravert Sensing	83	2.35	1.017	0.112
Extrovert Intuition	91	1.84	1.014	0.106
Introvert Sensing	41	2.71	1.270	0.198
Introvert Intuition	51	2.35	1.128	0.158
Total	266	2.23	1.118	0.069

Panel B: ANOVA

	Sum of Squares	df	Mean square	F	Sig.
Between groups	25.481	3	8.494	7.284	0.000
Within groups	305.530	262	1.166		
Total	331.011	265			

Panel B of Table 2 presents the results of testing hypothesis 1. Hypothesis 1 states that “*There is a significant difference on the preferred learning method among the students with different personality.*” The ANOVA was used to determine whether personality type influence learning method of students. The results show that there is a difference in the preferred learning method of students with different personality types. The results show a significant difference at  $p=0.000$ , thus supporting Hypothesis 1.

Table 3: Post Hoc Test

Personality	Other Personality	Mean Difference	Standard Error	Sig.	95% Confidence level Lower Bound	Upper Bound
Extrovert Sensing	Extrovert Intuition	.514*	.164	0.002	0.19	0.84
	Introvert Sensing	-.358	.206	0.084	-.76	0.05
	Introvert Intuition	-.004	.192	0.985	0.38	0.37
Extrovert Intuition	Extrovert Sensing	-.514	.164	0.002	-.84	-.19
	Introvert Sensing	-.872	.203	0.000	-1.27	-.47
	Introvert Intuition	-.518	.189	0.007	-.89	-.15
Introvert Sensing	Extrovert Sensing	.358	.206	0.084	-.05	.76
	Extrovert Intuition	.872*	.203	0.000	.47	1.27
	Introvert Intuition	.354	.189	0.119	-.09	.80
Introvert Intuition	Extrovert Sensing	.004	.192	0.985	-.37	.38
	Extrovert Intuition	.518	.189	0.007	.15	.89
	Introvert Sensing	-.354	.227	0.119	-.80	.09

This study then proceeds to examine further on the effect of the students’ different personality type on their learning method. The Post Hoc test was used to examine the personality type on learning method. Table 3 presents the results. The results show that there is a significant difference between the Extrovert Sensing and Extrovert Intuition. The results a mean difference of 0.514 indicating that

students with Extrovert Sensing prefer learning method involving PowerPoint presentation and role play or discussion whereas students with Extrovert Intuition prefer their academics providing lecture to them. The results show a significant difference of  $p=0.002$ . Similarly, there is a marginal significant difference between students with Extrovert Sensing and the students possessing Introvert Sensing ( $p=0.084$ ) but no significant difference with Introvert Intuition ( $p=0.985$ ). When comparing students possessing Extrovert Intuition with students possessing other personality types, the results also show significant difference with students with Introvert Sensing ( $p=0.000$ ) and marginal significant difference with students possessing Introvert Intuition ( $p=0.007$ ). For students possessing Introvert Sensing, the results show no significant different also with Introvert Intuition ( $p=0.119$ ).

### Effect of Students' Personality Type on Performance

This section presents the results of testing hypothesis 2. Hypothesis 2 states that *"There is a significant difference on the performance among the students with different personality"*. Panel A of Table 4 provides some hindsight on the performance among the students with different personality. The results show that the students possessing Extrovert Intuition score higher CGPA with a mean score of 3.1930 compared to the other students possessing different personality. This is followed by the students with Introvert Sensing (mean score=3.0420), Introvert Intuition (mean score=3.0304 and Extrovert Sensing with a mean score of 3.0304. The results indicate that students that have the Extrovert Intuition would have better chance to perform better when enrol in accounting courses.

Table 4: Personality Type and Performance

Panel A: Descriptive Statistics

Personality Type	N	Mean	Std. deviation	Std. error mean
Extrovert Sensing	83	3.0249	0.26454	0.0290
Extrovert Intuition	91	3.1930	0.33797	0.0354
Introvert Sensing	41	3.0420	0.34383	0.0537
Introvert Intuition	51	3.0304	0.22495	0.0315
Total	266	3.0861	0.30632	0.0187

Panel B: ANOVA

	Sum of Squares	df	Mean square	F	Sig.
Between groups	1.588	3	0.529	5.958	0.001
Within groups	23.278	262	0.089		
Total	24.866	265			

Panel B of Table 4 presents the results of testing hypothesis 2. Hypothesis 2 states that *"There is a significant difference on the performance among the students with different personality"*. ANOVA was used to determine whether different students' personality type influences their performance. Table 4 shows that there is a difference in the performance of students with different personality types. The results show a significant difference at  $p=0.001$ , thus supporting Hypothesis 2.



This study then proceeds to examine further on the effect of the students' different personality type on their performance. The Post Hoc test was used to examine the personality type on performance. Table 5 presents the results. The results show that there is a significant difference between the Extrovert Sensing and Extrovert Intuition. The results a mean difference of -1.16803 indicating that students with Extrovert Intuition has a higher CGPA score as compared to students with Extrovert Sensing. The results show a significant difference of  $p=0.000$ . However, there is no significant difference between students with Extrovert Sensing and the students possessing Introvert Sensing ( $p=0.765$ ) and Introvert Intuition ( $p=0.918$ ). When comparing students possessing Extrovert Intuition with students possessing other personality types, the results also show significant difference with students with Introvert Sensing ( $p=0.008$ ) and students possessing Introvert Intuition ( $p=0.002$ ). For students possessing Introvert Sensing, the results show no significant different also with Introvert Intuition ( $p=0.853$ ).

Table 5: Post Hoc Test

Personality	Other Personality	Mean Difference	Standard Error	Sig.	95% Confidence level	
					Lower Bound	Upper Bound
Extrovert Sensing	Extrovert Intuition	-.16803	0.04524.	0.000	-.2571	-0.0789
	Introvert Sensing	-.01701	0.05690	0.765	-.1290	0.0950
	Introvert Intuition	-.00545	0.05303	0.918	-.1099	0.0990
Extrovert Intuition	Extrovert Sensing	.16803	.04524	0.000	.0789	.2571
	Introvert Sensing	.15102*	.05607	0.008	.0406	.2614
	Introvert Intuition	.16257	.05214	0.002	.0599	.2652
Introvert Sensing	Extrovert Sensing	.01701	.05690	0.765	-.0950	.1290
	Extrovert Intuition	-.15102*	.05607	0.008	-.2614	-.0406
	Introvert Intuition	01156	.06252	0.853	-.1116	.1347
Introvert Intuition	Extrovert Sensing	.00545	.05303	0.918	-.0990	.1099
	Extrovert Intuition	-.16257	.05214	0.002	-.2652	-.0599
	Introvert Sensing	-.01156	06252	0.853	-.1347	.1116

### Summary and Conclusion

This study attempts to determine the personality type of the accounting students in a public university in Malaysia. Specifically, this study examines the effect of the final year students' personality type on their preferred learning method and performance. This study follows Jung and

Myer Briggs' study four personality types. However, this study only focuses on two types namely, Extrovert versus Introvert and Sensing versus Intuitive. Using questionnaire survey on 266 students, the results show that that personality type does have a role in influencing their preferred learning method. The results also show that students' personality type does influence their performance.

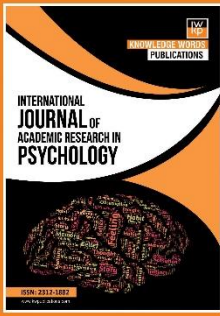
This study is not without limitations. One of the limitations is the sample study. This study relied on the final year accounting students in a public university in Malaysia. The findings in this study may be different if other accounting students are included in the study as well as other universities. Another limitation is the reliance on only one personality type, Extrovert versus Introvert and Sensing versus Intuition as proposed by Jung and Myers-Briggs. There are two other personality types that have not been included in this study. In sum, the findings in this study provide further understanding to the academics, faculties and university on the type of personality of the accounting students.

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To Link this Article: <http://dx.doi.org/10.46886/IJARP/v3-i1/2280>

DOI:10.46886/IJARP/v3-i1/2280

**Received:** 03 March 2016, **Revised:** 07 May 2016, **Accepted:** 10 June 2016

**Published Online:** 27 June 2016

**In-Text Citation:** (Sharifi et al., 2016)

**To Cite this Article:** Sharifi, S. M., Omid, A., & Marzban, B. (2016). The Impact of Instagram Use on Body Image Concerns among Iranian University Female Students: A Phenomenological Approach. *International Journal of Academic Research in Psychology*. 3(1), 26-36.

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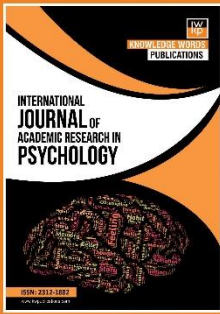
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**Vol. 3, No. 1, 2016, Pg. 26 - 36**

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## The Impact of Instagram Use on Body Image Concerns among Iranian University Female Students: A Phenomenological Approach

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### Abstract

Body image is how we mentally “see” our bodies and has both perceptual and attitudinal components and body image dissatisfaction is acknowledged as a pervasive problem experienced by a large proportion of society. The main scoping of this present work is to investigate the underlying processes between Instagram use and body image concerns. We used a qualitative study with phenomenological approach in this study and purposive sampling to recruit female students (n=12), were aged between 24 and 34. participants were recruited from university of Tehran, Tehran, Iran. Based upon the findings of this article, the studies show that there are three key themes around body image concerns among Iranian female students. These include: (a) changes in body appearance, (b) health and Beauty and (c) Instagram effects. Taken all, it can be concluded that the there is an essential need to promoting critically thinking among Iranian female students.

**Keywords:** Body Image, Instagram, Phenomenological Approach, Iran.

### Introduction

Body image is defined as a multidimensional self-attitude toward one’s body, particularly its size, shape, and aesthetics (Holt & Lyness, 2007). These perceptions, thoughts, feelings, and behaviors can be positive or negative in nature and affect many aspects of psychosocial well-being and quality-of-life (Bailey, Gammage, van Ingen, & Ditor, 2015). Body image is how we mentally “see” our bodies and has both perceptual and attitudinal components (Findler, Taubman-Ben-Ari, & Jacob, 2007) and body image dissatisfaction is acknowledged as a pervasive problem experienced by a large proportion of society (Dohnt & Tiggemann, 2006). Concerned with the potential negative effects, much scholarly research, as well as public speculations, has been devoted to investigating the impact of thin-ideal

body image exposure on individuals' eating disorder attitudes and behaviors (Wang, 2010). Body image is part of the self-state of one's physical appearance. Thus, individuals may experience negative emotional feelings when they perceive discrepancies between their ideal-body, ought-body, and actual-body image (Kim & Aubrey, 2015). Although the literature on the prevalence of body image concerns is increasing, researchers have yet to systematically explore the relationships between body image and broad aspects of young people's lives, such as emotional and interpersonal functioning (Davison & McCabe, 2006).

Body image issues are of global relevance and importance because abundant evidence has shown that women suffer from body image dissatisfaction in numerous countries and regions around the world (Zhang, 2012). Negative body image in particular is now widely recognized as an important public health concern because its high prevalence worldwide (Swami & Knowles, 2014). Negative body image is a risk factor for numerous unhealthy behaviors including fasting, self-induced vomiting, laxative misuse, and excessive exercise (Alleva, Martijn, Van Breukelen, Jansen, & Karos, 2015). A historical perspective of the media's portrayal of the ideal body size and shape demonstrates change over the last century (Lawrie et al., 2006) and media exposure in our daily lives illustrates how greatly our culture values appearance (Wagenbach, 2004). There is increasing pressure during adolescence for males and females to desire a body shape that conforms to the "ideal", i.e. a thin shape for women and a lean, muscular shape for men. These perceived ideal body shapes are reinforced by the mass media and popular cultural icons. Internalization of body ideals that are perpetuated by the media can be a strong influence on body dissatisfaction, especially among females (Hawkins et al., 2004; Khan et al., 2011; Sharp & Tiggemann, 2016). As a result, females may have negative body image and experience serious eating disturbances and psychological problems (Frederick et. al., 2016; Schleien & Bardone-Cone, 2016). For better understanding the influence of media on negative body image perception and subsequent negative health behaviors (e.g., disordered eating, substance abuse, and surgical fat reduction), it is essential to analyze the processes and examine how thin-ideal media use is associated with body image disturbance (Kim & Aubrey, 2015).

Increasingly, however, researchers have begun exploring media effects on body images of young women from different racial and ethnic groups (Perloff, 2014). In many ways, the research on media effects on body image has followed the course of any new field of inquiry in psychology. The earliest studies tend to be straight-forward analyses, interviews, or simple surveys that seek to identify, document, or describe a phenomenon (Tiggemann, 2014). Media researchers have focused on illustrating the direct effects of media use on negative body image and eating disorders over the past two decades. Most studies have agreed with the idea that thin-ideal media use is one of the primary sociocultural factors that directly affects negative body image, which leads to negative behavioral outcomes such as disordered eating (Dohnt & Tiggemann, 2006; Kennett, Humphreys, & Schultz, 2011; Kim & Aubrey, 2015; López-Guimerà, Levine, Sánchez-carracedo, & Fauquet, 2010; Rabak-Wagener, Eickhoff-Shemek, & Kelly-Vance, 1998). Decades of research has documented the negative impact that traditional media (such as magazines and television) has on people's body image concerns. However, given the increasing popularity of social media, researchers are beginning to investigate the possible consequences that these new media formats have on body image (Fardouly & Vartanian, 2016). Images of idealized bodies and how individuals consume them has been extensively studied in terms of traditional media such as magazines, television, advertising, etc. Little

published research to date, however, has examined whether and how social media use, specifically, may influence perceptions of physical ideals (Andsager, 2014).

In addition to traditional media, there has been an explosive increase in social media use, particularly among young people. Social media refers to “a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user-generated content” (Lee, Lee, Choi, Kim, & Han, 2014). One study, identified participants who spent time on Facebook reported being in a more negative mood than those who spent time on the control website (Fardouly, Diedrichs, Vartanian, & Halliwell, 2015).

We selected Instagram based on its popularity among Iranian people. Although some effects of social media use may be universal, the degree to which individuals are affected by social media use may vary across cultures (Lee et al., 2014). Indeed, studying positive body image is “essential to the future of the field” (Tylka & Iannantuono, 2016). The main scoping of this present work is to investigate the underlying processes between Instagram use and body image concerns and contribute to the emerging literature on the relationship between social media and the psychological well-being of Iranian university female students. To the researchers’ knowledge, this is one of the first studies exploring effects of social media on body image concerns among Iranian female students through a qualitative method.

## **Method**

### **Research Design**

A qualitative study with phenomenological approach was employed in this study. It contributes to an understanding of the human condition in different contexts and of a perceived situation (Bengtsson, 2016). In terms of phenomenology as methodological orientation there are different approaches developed by different researchers. These all describe steps that must be taken in a phenomenological study, but they also agree that doing phenomenology is not possible by following a step-wise procedure. More important is the adoption and practice of a certain attitude of sensitivity to the phenomenon under study, the lived experience of the research participants, and the way their experiences are expressed through actions, speech and silences. This attitude must be sustained and cultivated throughout the research process (Standal & Engelsrud, 2013). For the phenomenological methods, focus is on rich description of some aspects of experience, described through language (Davidsen, 2016). Phenomenology is not just a research method; it is a philosophy in origin and has epistemological and methodological implications for empirical research (Eberle, 2015). The primary objective of phenomenological research is to undertake the “meaningful concrete relations implicit in the original description of experience in the context of a particular situation” (Carter & Carter, 2010).

### **Participants**

We used purposive sampling to recruit female students (n=12), were aged between 24 and 34. Participants were recruited from university of Tehran, Tehran, Iran. During the recruitment, some snowball sampling naturally occurred. We did not encounter any major ethical dilemmas throughout the research process. Participants signed a consent form prior to a face-to-face interview which was audio recorded. All names are presented as pseudonyms to ensure their privacy will be fully



preserved. They were assured that they could withdraw from the study at any time without recrimination.

### Procedure

A total of 12 interviews were conducted with female students. Face-to-face semi-structured interviews were undertaken. Data collection and analysis were conducted simultaneously. Data collection continued until no new issues emerged. Each participant interviewed chose a time and location that was convenient for them. Interviews lasted between 45 and 60 minutes and were audio recorded and also transcribed verbatim. Many themes were coded using the constant comparative method. Constant comparison was used as a way of maintaining a connection between the codes and a constant re-examining of the text to ensure consistency of the application of that particular code and to ensure that codes and categories developed to fit the data (Abdu, Stenner, & Vydellingum, 2015). The participants were interviewed individually by the researcher at a private location of their choice. Some examples of the questions asked were “What do you think about Instagram’s representation of the female body?” “Do you know anyone in real life who has had cosmetic surgery” “What do you think about it?” “Do your Instagram tend to glamorise a specific body type? Why does it matter?” and “How do you want to connect the three concepts, health, female body and beauty?” When no new properties of the categories could be identified, the data were considered to be saturated.

For the first step, we identified all data that were related to pre-classified patterns. The patterns include: (1) increasing confidence, (2) attitude toward cosmetic surgery, (3) achieving health, (4) attracting attention, (5) social comparisons, (6) the nature of beauty, (7) health risk for beauty, (8) Instagram opportunities and (9) Instagram threats. In the next step, we aimed to combine and catalogue related patterns into themes according to the table1. Three main themes emerged during the research that each of them individually explained.

**Table1.** Key themes in this study

Conceptual codes	Themes
Increasing confidence	Changes in body appearance
Attitude toward cosmetic surgery	
Achieving health	
Attracting attention	
Social comparison	
The nature of beauty	Health and Beauty
Health risk for beauty	
Instagram opportunities	Instagram effects
Instagram threats	

## Results

### Changes in Body Appearance

This study showed that increasing confidence and attracting attention were one of the main motivations of the Iranian participants in order to change their body appearance.

*Sima* said, "I had experience in cosmetic surgery and diet... because of the increasing my confidence." Also *Roya* pointed out that, "Anyone who has low confidence, will try to have a better face." *Lili* noted that "I feel that people through a diet and cosmetic surgery can achieve the desired confidence." Also *Mary* said, "In any case people who are looking for beauty, Want to attract attention" and "Women are trying to show off themselves to attract attention" (*Ziba*).

On the other side, in this study, social comparison was an important factor for change body appearance among Iranian female students. Of course, such comparisons can also have positive results and negative results. For example *Sara* said, "The weight of my most intimate friend was exactly half my weight. This was the motivation for me to exercise."

It is necessary here to point out the attitudes towards cosmetic surgery among the participants. "I partly agree with cosmetic surgery that the person can increase her confidence and through it, the success achieved, but may lose their attractiveness through indulgence" (*Sima*).

However, some participants were not deemed in any way to do it right. "I absolutely disagree with this work (cosmetic surgery)" (*Lida*). *Mary* had a more critical perspective around cosmetic surgery. She pointed out that, "Who can not tolerate her face, will not tolerate another's face."

Fortunately, some participants change their body appearance in order to achieve health. *Lida* said, "I was motivated to diet for the future... maybe now; the extra weight did not cause me trouble, but if I want to have children in the future, extra weight will be a problem for me." Also she said, "Beauty to me is important, but not because draw attention... I think that ten years coming I would love to run in the park."

### Health and Beauty

One of the most important factors in body image concerns was participants' attitudes toward the nature of beauty.

*Roya* said, "if someone speaks well, be regular or has a good character...there exist no reason to have a beautiful face or body." She also pointed out that, "women who are natural, they are more attractive for me rather than have cosmetic surgery."

*Sepid* said, "when you happy and healthy then you are beautiful." *Lida* noted that, "I always see the picture of a woman that I love her...she does not makeup...she is herself...this made me very attracts" and "actually beauty is not in the form of face and body...I think being healthy is enough for beauty."

Dangerous issue is that some people in order to achieve the desired beauty doing high-risk behaviors. *Marjan* said, "A woman who for her, the cosmetic aspects are very important and follow it, Even if her health were be at risk, she will not miss a thing." However, for some people, health is the first priority. "Health is the most important thing in life" (*darya*).

### Instagram Effects

Instagram has exploded over the past few years with the development of smartphone technology, allowing Instagram users to post pictures with edited effects, from their supported smartphone to their Instagram account (Sanvenero, 2013). Each day, many millions of images are posted online

through social media. Some 55 million of them alone are shared daily through Instagram (Thornton, 2014). Instagram users are able to take, process and upload images or short videos via their mobile phones (Olive, 2015). However, visual platforms such as Instagram are becoming increasingly popular, with some industry analysts positing that Instagram is the fastest growing social media platform (Smith & Sanderson, 2015).

Widely, Iranian people use Instagram, and this has caused people to have more attention to photography. *Mina* said, "Wherever I go I want to take a picture and put in Instagram and be seen by others and to be encouraged."

Many women are greatly affected by the images of Instagram. This could be threatened because sometimes encouraged risky behavior. *Tina* said, "In fact, the reason that I went to solariums, was Instagram's fashions. I felt that I can be like them but it did not."

Sometimes, social pressure on Instagram changes the nature of beauty for Iranian people and encourages a certain type of appearance. *Roya* pointed out, "On Instagram when you do a lot of cosmetic surgery and tattoos, you can be pretty and attractive. But behind of those photos is not a healthy personality." Also she said, "If a famous girl be ugly, then all want to be like her."

Many participants believe that Instagram's impact is visible in the real world. Sociocultural theories posit that dissatisfaction with one's body can be caused by ideals constructed by society and disseminated via various media (Cranney, 2015).

*Sara* noted, "Not only in Instagram but also on the street you can see that all people look like each other."

Despite the negative effects of Instagram, for some people there is an opportunity to strengthen their good behavior. *Lili* said, "I build a public page on Instagram to my lose weight. During my diet, I put my photos on Instagram. I was very influential on opinions of people. They gave me positive energy. My motivation increased."

## Conclusion

Media that depict thin women have a strong sociocultural impact by constructing and reinforcing social standards based on thin ideals (Kim, 2014). Correlational, cultural, and experimental evidence indicates that there is a link between exposure to media depicting images representative of the sociocultural ideals of attractiveness and body dissatisfaction and eating (Watson & Vaughn, 2006). The Perloff's model focuses on specific content that can appear on social media and the Internet, such as on Thin-aspiration, the umbrella term for a variety of thinness-inspiring Internet-based blogs and images, and on Web sites that specifically promote eating disorders like anorexia and bulimia. Facebook, Instagram, and Pinterest are social media formats that allow for the creation and exchange of messages on particular body image-related content, exemplified by Thin-aspiration blogs and pro-eating disorder material (Perloff, 2014). Perloff (2014) attempts to broaden the theoretical discussion regarding the effects of media on women's body image concerns by extending it to social media (Prieler & Choi, 2014).

Several researchers investigated the role of social comparison in processing thin media images and how social comparison may influence body image disturbance (Fardouly et al., 2015; Han, 2003). Social comparison theory, originally formulated by Festinger (1954), refers to people's tendency to compare themselves to others with respect to certain attributes, especially when the characteristics (e.g., beauty or sexiness) are important and the relevant standards or criteria for evaluation are

ambiguous sociocultural comparison theory is the perspective most often used, as it operates on the key mechanisms involved in the relationship between body image and media exposure (López-Guimerà et al., 2010). Upward comparison with the thin media characters may function as an opportunity of self-evaluation, and such evaluation may be associated with negative body image of female viewers and with pressure of having a body like the thin media characters. Thus, the more female viewers make upward comparison with thin media characters, the more likely they have body image dissatisfaction (Han, 2003).

Analysis of themes in the narratives revealed that participants have different purposes for weight loss; the differences in goals for dieting uncovered culturally situated meanings of dieting behaviors (Kim, 2014).

Based upon the findings of this article, the studies show that there are three key themes around body image concerns among Iranian female students. These include: (1) changes in body appearance, (2) health and Beauty (3) Instagram effects. Taken all, it can be concluded that there is an essential need to promoting critically thinking among Iranian female students.

Media literacy, particularly high levels of critical thinking, mitigated the negative effects of trait thin-ideal internalization and trait upward appearance comparison on body satisfaction outcomes. These findings provide evidence for the role of media literacy as a protective factor against the negative effects on body satisfaction of exposure to thinideal media images, and also provide evidence to support the development and implementation of media literacybased body image interventions (McLean, Paxton, & Wertheim, 2016).

It would be worthwhile to explore how can media politics help Iranian female students to decrease negative effects of Instagram on body image concern among them.

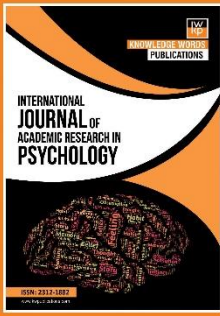
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To Link this Article: <http://dx.doi.org/10.46886/IJARP/v3-i1/2378>

DOI:10.46886/IJARP/v3-i1/2378

*Received: 23 April 2016, Revised: 25 June 2016, Accepted: 06 July 2016*

Published Online: 15 July 2016

**In-Text Citation:** (Sadoughi, & Hesampour, 2016)

**To Cite this Article:** Sadoughi, M., & Hesampour, F. (2016). The Relationship between Mindfulness and Cognitive Emotion Regulation and Depression among University Students. *International Journal of Academic Research in Psychology*. 3(1), 37-47.

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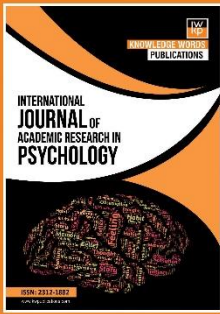
**Vol. 3, No. 1, 2016, Pg. 37 - 47**

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# INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN PSYCHOLOGY



## The Relationship between Mindfulness and Cognitive Emotion Regulation and Depression among University Students

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### Abstract

Admission at university can be considered as a critical phase in life of young students, leading them to enter a greater society and experience a different educational, social, and cultural setting. Generally, these drastic changes in their personal and social lives would be accompanied by intense anxiety and stress, negatively influencing their performance and efficiency; as a result, their mental vulnerability would be intensified. Hence, the present study aimed to investigate the relationship between mindfulness and cognitive emotion regulation, in one hand, and depression, on the other hand. The target population included university students studying in 2015-2016 academic year in University of Kashan, Iran. Using Krejcie & Morgan Table (1970), 355 university students were selected through stratified multi-stage sampling. The respondents completed Freiburg Mindfulness Inventory (2001), Cognitive Emotion Regulation Questionnaire (2001), and Beck Depression Inventory-II (1996). The data were analyzed using Pearson Correlation and Multiple-Regression Analysis in SPSS 18 Software. The results revealed that cognitive emotion regulation components and mindfulness have a statistically significant relationship with depression. Moreover, catastrophizing and self-blame could directly and mindfulness and refocusing on planning indirectly predict depression significantly. The findings imply that university students would suffer less depression by enhancing mindfulness and cognitive emotion regulation.

**Keywords:** Mindfulness, Cognitive Emotion Regulation, Negative Emotions, Depression, Students.

### Introduction

A large number of students move away from their families and stay in dormitories at some point over the course of their studies. Apart from loneliness, new environment, academic demands, peer group

pressure, financial strains, and relationship with new friends are some of the common issues that turn out to be stressors for some students. The students who are unable to cope and lack social support may experience depression or anxiety (Verger et al., 2010; Bouteyre, Maurel, & Bernaud, 2007; Dyson & Renk, 2006).

. The growing number of students referring to university counselling centers indicates many of them suffer mental, social, and educational problems (Keshtiaray, 2005). Students with psychological disorders mostly experience common educational problems including inattentiveness, distraction, inappropriate behavior, lack of social skills, helplessness, impulsivity, and extreme anxiety (Isazaegan, Jenaabadi, & Saadatmand, 2010). Furthermore, students' mental problems might negatively influence their academic performance, resulting in inefficient use of much of their abilities. For example, Price, McLeod, Gleich and Hand. (2006) showed that 19 % of females and 13 % of males experience emotional and psychological problems like depression and anxiety upon entering university. Unfamiliarity with academic and cultural settings, homesickness, lack of interest in one's academic major, and lack of adaptiveness with other people negatively influence students' academic achievement and cause mental problems like depression (Aghakhani & Baghaei, 2000). Depression is characterized by lack of interest, guilty, inattentiveness, etc. which are accompanied by changes in different levels of activities, cognitive abilities, and sleep (Akiskal, 2001).

Students' emotional response and cognitive emotion regulation ability are important factors affecting general health and performance and considered as determining factors in their psychological well-being and efficient performance (Mashhadi, Doroghi, & Hasani, 2011). In contrast, weak emotion regulation leads to mental disorders such as depression and anxiety (Isazadegan et al., 2010). Yousefi (2010) found that students' emotional response to stressful situations and the regulation strategies they employ are important factors in their academic performance and mental health. Garnefski, Kraaij, & Spinhoven (2007) found that most people with depression apply negative cognitive emotion regulation strategies such as rumination and catastrophizing to deal with unpleasant circumstances. Hence, any failure in emotion regulation can cause vulnerability to psychological problems like depression and anxiety (Garnofky, 2003; Sayyah et al., 2014). Based on Gross Model (1999), emotion regulation includes all conscious and unconscious strategies applied to promote, maintain, and reduce cognitive, emotional, and behavioral aspects of an emotional response. Emotional responses provide valuable information about how individuals learn to behave in order to deal with emotions and behave with others based on their emotions (Esmaili et al., 2012). Emotions cannot be classified as either appropriate or inappropriate; however, it can be claimed that by regulating all emotions, they might be considered as helpful and appropriate; otherwise, they would be regarded as inappropriate and harmful (Gross, 1998). Kelly (1999) found that showing inefficient and inappropriate responses like distress and sadness and applying inadequate strategies lead to emotional distress and mental disorders like depression among students. Hence, cognitive emotion regulation could be considered as a fundamental principle in initiating, evaluating, and organizing adaptive behaviors as well as in preventing negative emotions (Mashhadi et al., 2011) and plays a significant role in developing depression symptoms after experiencing negative events (Garnefski et al., 2001). There is also a relationship between emotion regulation strategies and negative emotion reduction, emotions management, and well-being: less adaptive emotion regulation strategies like self-blame, catastrophizing, and rumination have a significant relationship with some negative emotions like stress, depression, and anxiety (Yousefi, 2006).

Also, in line with metacognitive discussion about emotional disorders, Teasdale introduced a new therapeutic approach called Mindfulness-Based Cognitive Therapy. Metacognitive awareness refers to negative tendencies, thoughts, and emotions as well as stressful feelings, all of which are about temporal, cognitive events in contrast with real, concrete events. Mindfulness is defined as “the awareness that emerges through non-judgmental, purposeful attention in the present moment” (Kabat-Zinn, 2003). It is a skill helpful in perceiving stressful events less unfavorable than what they actually are. When individuals become aware of the present time, they do not pay attention to the past or future any longer. Most mental problems are generally related to events happening in the past or those which might happen in the future. For instance, depressed people mostly feel guilty and regret about the past and future, and the individuals with high anxiety show higher levels of stress and fear for future problems (Baer, 2003; Borkook, 2003; Kabat-Zinn, 2003; Robins, 2002). Mindfulness helps depressed individuals observe their thoughts and emotions non-judgmentally and consider their thoughts as passing events in the mind rather than inherent aspects of self or necessarily valid reflections of reality. This approach helps individuals with depression prevent intensification of their negative thoughts and emotions in rumination (Teasdale, Segal, & Williams, 2000).

Considering previous research, it can be claimed that cognitive emotion regulation and mindfulness strategies seem important factors in developing depression. Higher mindfulness could help students know their abilities better, learn to encounter with negative emotions and thoughts, and experience their mental events positively (Bohlmeijer, Prenger, Taal, & Cuijpers, 2010). Considering the increasing prevalence of depression among students (Kaviani, 2005), further research should address preventive which prevent depression. Given the impact of depression on education quality and students' life, the present study aims to investigate necessary strategies students need to apply to successfully regulate their negative, unpleasant thoughts and emotions. More specifically, the relationship between emotion regulation and mindfulness, in one hand, and depression, in the other, will be explored. Moreover, the present study will explore the extent to which cognitive emotion regulation strategies and mindfulness could predict depression among students.

## Method

### Instruments

#### Cognitive Emotion Regulation Questionnaire (CERQ)

Originally developed by Garnefski et al. (2001), CERQ was used to measure cognitive emotion regulation. This questionnaire consists of the following nine conceptually distinct subscales, each having four items and referring to what someone thinks after experiencing threatening or stressful events: *Self-blame*, referring to thoughts of putting the blame of what you have experienced on yourself; *Other-blame*, referring to thoughts of putting the blame of what you have experienced on the environment or another person; *Rumination* or focus on thought, referring to thinking about the feelings and thoughts associated with the negative event; *Catastrophizing*, referring to thoughts of explicitly emphasizing the terror of what you have experienced; *Putting into Perspective*, referring to thoughts of brushing aside the seriousness of the event/emphasizing the relativity when comparing it to other events; *Positive Refocusing*, referring to thinking about joyful and pleasant issues instead of thinking about the actual event; *Positive Reappraisal*, referring to thoughts of creating a positive meaning to the event in terms of personal growth; *Acceptance*, referring to thoughts of accepting what you have experienced and resigning yourself to what has happened; and *Refocus on Planning*,

referring to thinking about what steps to take and how to handle the negative event. For the purpose of the current study, a short 18-item version of the questionnaire in Persian (Hassani, 2011) was used. Items are rated based on a 5-point Likert scale ranging from 1 (never) to 5 (always). Cronbach's alpha for this version has been reported as 0.51-0.96 in previous studies (e.g., Hasani, 2010); furthermore, test-retest correlation coefficient has been found to be 0.51-0.71, indicating a fair reliability (ibid). The correlation coefficient between different subscales of this inventory and those of Beck Depression Inventory shows good concurrent criterion-rated validity for CERQ. In the present study, the Cronbach's alpha was between 0.69 0.78.

### **Freiburg Mindfulness Inventory (FMI)**

Mindfulness Inventory, originally designed by Buchheld, Grossman, & Walach (2001), includes 30 four-point Likert items measuring non-judgmental present moment observation and openness to negative experiences. The short version of this inventory consisting of 14 items was used in the present study. The Cronbach's alpha coefficient of this version was calculated as 0.86 in the present study.

### **Beck Depression Inventory**

To measure depression severity Beck Depression Inventory II (BDI-II; Beck, Steer, & Brown, 1996), the most widely used instrument for detecting depression, was used. It consists of 21 self-report items rated 0-3. The total score of the inventory ranges from 0 to 63. Moreover, it has high internal consistency with Cronbach's alpha reliability of .91 (Beck et al., 1996; Beck, Steer, Ball, & Ranieri, 1996). The Cronbach's alpha of this inventory was calculated as 0.86 in the present study.

### **Results**

Descriptive statistics (M and SD), internal consistencies coefficients (Cronbach's  $\alpha$ ), and bivariate inter-correlation coefficients (Pearson's  $r$ ) for all measures are reported in Table.

Table 1. Descriptive indices and inter-correlations between research variables

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13
1. depression	1												
2. mindfulness	.52*	1											
3. self-blame	.43*	.27*	1										
4. acceptance	.35*	.38*	.49*	1									
5. rumination	.44*	.30*	.68*	.44*	1								
6. positive refocusing	.23*	.38*	.17*	.26*	.19*	1							
7. refocus on planning	.52*	.63*	.33*	.33*	.29*	.41*	1						
8. positive reappraisal	.46*	.61*	.30*	.31*	.31*	.24*	.37*	1					
9. putting into Perspective	.20*	.44*	-.04	.04	-.03	.25*	.46*	.53*	1				
10. catastrophizing	.59*	.51*	.63*	.51*	.71*	.24*	.55*	.42*	.12*	1			
11. other-blame	.25*	.25*	.34*	.19*	.37*	.17*	.25*	.21*	-.08	.41*	1		
12. negative CER	.55*	.42*	.85*	.53*	.88*	.24*	.45*	.37*	-.08	.89*	.54*	1	
13. positive CER	.50*	.70*	.36*	.50*	.32*	.67*	.84*	.84*	.65*	.51*	.36*	.46*	1
Mean	16.9 1	34.7 4	12.6 1	12.4 0	13.7 8	11.5 6	12.7 6	12.7 2	12.0 7	11.3 0	12.9 4	50.6 5	60.2 5

Standard Deviation	11.60	5.78	3.92	2.62	3.75	3.91	3.87	4.13	3.25	4.51	1.71	11.65	7.37
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\*P<.05,& \*\*P<.01

According to Table 1, positive cognitive regulation strategies including acceptance, positive refocusing, positive reappraisal, refocusing on planning and putting into perspective have inverse significant relationship with students' depression. On the other hand, negative cognitive emotion strategies including self-blame, rumination, catastrophizing, and other-blame have direct significant correlation coefficient with depression among students.

Stepwise multiple regression analysis was used to predict depression and determine the distinctive role of each cognitive emotion regulation component and mindfulness in explaining depression variance and detecting the best predictors.

The results of depression regression analysis based on cognitive emotion regulation and mindfulness showed that catastrophizing ( $\Delta R^2 = .35$ ,  $F(1,353) = 189.864$ ,  $P = .001$ ), mindfulness ( $\Delta R^2 = .069$ ,  $F(1,352) = 41.781$ ,  $P = .001$ ), refocus on planning ( $\Delta R^2 = .015$ ,  $F(1,351) = 9.551$ ,  $P = .002$ ), and self-blame ( $\Delta R^2 = .015$ ,  $F(1,350) = 5.208$ ,  $P = .023$ ) could predict 44% of depression variance in four steps, respectively. Other components of emotion regulation did not enter the equation at step five of the analysis since they could not predict depression significantly. Table 2 demonstrates standardized and unstandardized regression coefficients in the fourth step.

Table 2. standardized and unstandardized coefficients of stepwise regression of depression based on cognitive emotion regulation and mindfulness

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig
		B	SE	Beta		
1	(Constant)	-.293	1.344		-.218	.828
	Catastrophizing	1.522	.110	.591	13.779	.000
2	(Constant)	25.581	4.200		6.09	.00
	Catastrophizing	1.11	.12	.43	9.19	.00
	Mindfulness	-.61	.09	-.30	-6.46	.00
3	(Constant)	27.89	4.21		6.61	.00
	Catastrophizing	.98	.12	.38	7.69	.00
	Mindfulness	-.44	.10	-.22	-4.13	.00
	Refocuse on planing	-.51	.16	-.17	-3.09	.002
4	(Constant)	26.40	4.24		6.22	.00
	Catastrophizing	.77	.15	.30	4.99	.00
	Mindfulness	-.46	.10	-.23	-4.32	.00
	Refocuse on planing	-.51	.16	-.17	-3.09	.002
	Self-blame	.35	.15	.11	2.28	.023

According to Table 2, depression could be predicted directly by catastrophizing in the first step, indirectly by mindfulness and refocus on planning in the second and third step, and directly by self-blame in the fourth step.

## Discussion

The results of the study also indicated that there is a significant relationship between cognitive emotion regulation and depression, which is in agreement with Garnefski et al. (2001; 2002) and Kraaij et al. (2003) who found that cognitive emotion regulation strategies play a significant role in the relationship between negative events and depression symptoms. Moreover, findings of various studies indicate that cognitive emotion regulation strategies such as self-blame, rumination, and catastrophizing are closely related with mental disorders like depression (Garnefski et al., 2001; 2002, Kraaij et al., 2003; Garnefski & Kraaij, 2006). Also, Mashhadi et al. (2011) showed that emotion regulation is considered as a key factor in adaptability with stressful life events, and there is a significant, positive relationship between depression and self-blame, blaming others, rumination, and catastrophizing strategies. The positive relationship between blaming others and depression is also in agreement with findings of Hassani (1389); Kraaij et al. (2008). The aforementioned studies generally refer to the fact that overuse of self-blame, blaming others, rumination, and catastrophizing strategies as maladaptive reactions are accompanied by higher intensification and continuation of depression. The negative relationship between depression, in one hand, and planning, positive refocusing, positive reappraisal strategies, on the other hand, has also been reported in several other studies. The relevant research suggests that in encountering with stressful events, the individuals who apply adaptive (planning, positive refocusing, positive reappraisal and putting into perspective) strategies experience less depression. In fact, the negative relationship between depression and adaptive strategies is due to the fact that by using these strategies, the person appraises negative events with a new approach and attends to positive aspects and potential benefits of the event in the long term. Thus, the person suffers less stress and accepts the event more easily. The negative relationship between the acceptance strategy and depression scores could be justified by considering the fact that by accepting stressful events, the person endeavors to compensate for them in order to enhance his present life situation, while aspiring for better future. In agreement with relevant literature in this area, the findings of the present study reveal that using more rumination and catastrophizing strategies as well as fewer acceptance and positive refocusing strategies would lead to higher scores in depression. It is noteworthy that the catastrophizing strategy, among other aforementioned strategies, can best predict depression scores (Garnefski et al., 2002, 2003; 2005, Martin & Dahlen, 2005); Mashhadi et al. (2011) maintain that therapists and counsellors should pay special attention to maladaptive strategies like self-blame, rumination, and catastrophizing in their treatment plans for emotional disorders.

The results of data analysis revealed that there is a negative relationship between mindfulness and depression, which is in line with PaPageorgiou and Wells (2000); Evans et al. (2008); Kaviani, Hatami, and Shafieabadi (2010); and Azargoon (2009). This might be due to the fact that attention to and awareness of thoughts and emotions are considered positive aspects of mindfulness, resulting in adaptive behaviors and positive psychological states and promotion of personal and social activities (Chambers, 2009). The results also confirm the findings of Brown and Ryan (2003) in which they concluded that mindfulness can predict self-regulation behavior and positive emotional states. In other words, mindfulness enhances non-judgmental emotions and is effective in clear observation

and acceptance of emotions and physical phenomena (Ogden, 2006). Therefore, it makes the individuals aware of their positive and negative feelings, helping them improve and moderate their emotional states and reduce their depression. Although the present study is based on correlation and cannot provide a cause-and-effect relationship, it could be suggested that interventional protocols and specialized workshops on mindfulness should be held to help learners develop awareness of their perception, thoughts, and feelings and finally reduce their negative emotions such as depression. Therefore, based on the findings of the present study and previous research, it can be concluded that cognitive emotion regulation and mindfulness could be regarded as key factors in regulating and reducing students' depression. Moreover, it can be concluded that emotion regulation processes enhance one's ability to act and enjoy life.

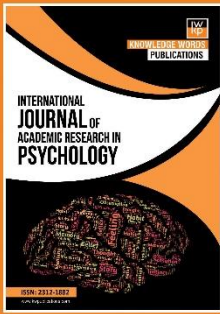
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# INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN PSYCHOLOGY



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To Link this Article: <http://dx.doi.org/10.46886/IJARP/v3-i1/2455>

DOI:10.46886/IJARP/v3-i1/2455

*Received: 11 August 2016, Revised: 22 October 2016, Accepted: 10 November 2016*

Published Online: 24 November 2016

**In-Text Citation:** (Sadoughi, & Hesampour, 2016)

**To Cite this Article:** Sadoughi, M., & Hesampour, F. (2016). Relationship between Social Support, Loneliness and Academic Adjustment among University Students. *International Journal of Academic Research in Psychology*, 3(1), 48-55.

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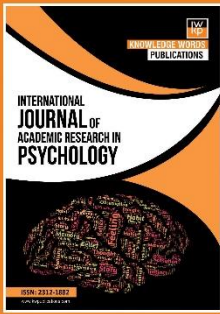
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Vol. 3, No. 1, 2016, Pg. 48 - 55

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# INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN PSYCHOLOGY



## Relationship between Social Support, Loneliness and Academic Adjustment among University Students

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### Abstract

Transition from high school to university often causes much stress for most students. In the new university environment, students often face various interpersonal, social, and academic demands, each of which could potentially create stressful situations for most of them. Such changes can lead to specific problems in adjustment. Therefore, the present study aimed to investigate the relationship between social support and loneliness, in one hand, and academic adjustment, in the other hand, among university students. The statistical population includes all students studying at the University of Kashan in 2014-2015 academic year. According to Krejcie and Morgan Table, 320 students were randomly selected via stratified multistage cluster sampling based on gender and faculty. The participants filled out Multidimensional Scale of Perceived Social Support (MSPSS), the UCLA Loneliness Scale (UCLA-LS), and the Academic Adjustment subscale of Baker and Siryk's Student Adaptation to College Questionnaire (SACQ). Stepwise Regression Analysis and Pearson Correlation were run in SPSS-22 to analyze the data. The results showed that academic adjustment has a significant positive relationship with the dimensions of social support and a significant negative relationship with loneliness. Moreover, loneliness and social support from family can significantly predict academic adjustment among university students.

**Keywords:** Social Support, Loneliness, Academic Adjustment, Students.

### Introduction

Transition from high school to university is regarded as a major change in the lives of many adolescents (Friedlander, Reid, Shupak, & Cribbie, 2007) and a key developmental challenge in late adolescence, which is due to the fact that individuals achieve greater independence and adopt more responsibilities in this period (Hickman, Bartholomae, & Mckenry, 2000). Studying at university provides students with opportunities for psychosocial development (Friedlander et al., 2007) but can

cause much stress (Leong, Bonz, & Zachar, 1997) and acute pressure (Friedlander et al., 2007) for them. Without proper academic adjustment, students might either face serious problems or drop out of university. In the US, around 30-40% of students drop out of university without obtaining their degree, and some never return for completing their education (Enochs and Ronald, 2006). Social support offered by families and peers is one of the main factors predicting academic adjustment among students (Grant-Vallone et al., 2004). Researchers believe that students who receive more support and consultation from their families are better capable of adapting with university. On the other hand, entering university might cause the former adjustment to be disrupted, thus individuals should be able to make an adjustment to the new environment and its particular features. Although some students achieve academic adjustment more quickly, others have difficulty detaching themselves from their previous relationships and/or adjust to their new academic and social life at university (Woosly, 2003). The extent to which and how social support can influence academic adjustment has been discussed in two main models. According to the first model, known as the generic model of social support (Lazarus, 1966), social support in itself directly influences an individual's health, and shortage or lack of it can cause more stress for the person. Therefore, social support could be helpful in many ways. Moreover, it can increase an individual's resistance to mental disorders in different ways by, for example, improving his/her self-esteem. The other model, called the buffering model of social support (Lazarus, 1966), states that only upon undergoing stressful experiences, social support can contribute to adjustment. Therefore, social support as a buffering factor can be helpful in preventing adjustment problems (Faghirpoor, 1995).

Moreover, one of major crises of the adolescence period and even other life periods is loneliness (Chary, 2003). Psychologists have defined loneliness in different ways. Elhageen (2004) defines it as an unpleasant experience in which the person perceives himself/herself distinct from others, following by serious behavioral problems such as sadness, anger, and depression. This might be indicative of unfulfillment of desires and expectations in social relationships and is characterized by such behaviors as avoiding contact with others (Elhageen, 2004). Peplau et al. (1982) define loneliness as the difference between the desired and current levels of social relationships in terms of their quantitative and qualitative aspects. In fact, loneliness is based on the gap between an individual's ideals and present achievements in his/her interpersonal close relationships. The wider this gap is, the stronger the loneliness will be (Peplau, 1982). On the other hand, some individuals might develop loneliness because they hold negative expectations in their interactions and lack necessary social skills for establishing and maintaining intimate relationships. Moreover, they have extreme anxiety in their social relationships (Solano & Koester, 1989), are sensitive to rejection (Russell, Peplau, & Cutrona, 1980), have difficulty establishing friendly relationships, performing social activities, participating in group activities, enjoying parties, and controlling the environment (Horowitz & de Sales French, 1979), consider themselves negative, worthless, and socially incompetent (Jones, Freemon, & Goswick, 1981; Jones & Moor, 1987; Jones, Sanson & Helm, 1983), and have low self-esteem (Heinrich & Gullone, 2006). Shahini, Asayesh, Ghobadi, and Sadeghi (2013) pointed out field of study and place of residence are two important factors influencing the amount of loneliness and social support students may receive. Considering the aforementioned studies; the present study, therefore, aims to examine the relationship between social support and loneliness, in one hand, and academic adjustment, in the other hand, among university students.

## Research Method

The present study is descriptive with a correlational design. The statistical population includes all BA and MA students studying at the University of Kashan in 2014-2015 academic year. Based on Krejcie & Morgan Table (1970), 350 was determined as the required sample size. Multistage cluster sampling method was used to randomly select three faculties, namely, Faculty of Humanities, Faculty of Engineering, and Faculty of Arts, out of each of which five classes were selected. Twelve students were chosen from each class. After explaining the objectives of the study to the participants, Multidimensional Scale of Perceived Social Support (MSPSS), the UCLA Loneliness Scale (UCLA-LS), and the Academic Adjustment subscale of Baker and Siryk's Student Adaptation to College Questionnaire (SACQ) were distributed among the participants, out of which 320 ones were completed and collected. Pearson Correlation and Stepwise Regression Analysis were run in SPSS-22 to analyze the data.

## Instruments

### Multidimensional Scale of Perceived Social Support (MSPSS)

The MSPSS (Zimet, Dahlem, Zimet, & Farley, 1988) is a 12-item self-report questionnaire scored on a 7-point Likert scale ranging from 1 (very strongly disagree) to 7 (very strongly agree). There are three subscales for different areas of support, namely, family, friends, and significant others. The Cronbach's alpha coefficient of internal reliability was 0.88. Zimet et al. (1988) report test-retest reliability of .85 over a 2-3 month period, along with moderate construct validity. The Cronbach's alpha coefficient was calculated as 0.82 in the present study.

### The UCLA Loneliness Scale (UCLA-LS)

**UCLA-LS** (Russell, Peplau & Cutrona, 1980) was used to assess the subjective feelings of loneliness or social isolation. There are 20 items seeking respondents' opinions about the extent to which they agreed with each description. The responses ranged from 1 (not at all) to 4 (often), with a total possible aggregate score range of 20–80. In this scale, the higher the score, the more loneliness the person experience. The Cronbach's alpha coefficient of internal reliability of this instrument is .94 (Russell, Peplau & Cutrona, 1980).

### Academic Adjustment

The Academic Adjustment subscale of Baker and Siryk's Student Adaptation to College Questionnaire (SACQ) was used to measure academic adjustment. This instrument consists of 67 nine-point Likert-scale items ranging from 1 (totally disagree) to 9 (totally agree). It has 4 sub-scales of academic adjustment (24 items), social adjustment (20 items), personal-emotional adjustment (15 items), and attachment to the institution or university (Baker & Siryk, 1986). In the present study, only the academic adjustment subscale was used. Higher scores in this scale indicated higher academic adjustment, motivation, academic achievement, and satisfaction. Baker & Siryk (1989) indicated the scores of this scale have a negative relationship with university turnover and a positive relationship with participation in social activities. In the present, Cronbach's alpha as an internal consistency for academic adjustment subscale was .86.

## Results

Descriptive statistics (M and SD), internal consistency coefficients (Cronbach's alpha), and bivariate inter-correlation coefficients (Pearson's r) for all measures are reported in Table 1.

*Table 1. Descriptive indices and intercorrelations between primary variables*

	1	2	3	4	5	Mean	Std. Deviation
1) Loneliness	1					38.88	8.83
2) Perceived social support	-.46**	1				60.28	8.36
3) Social support (family)	-.31**	.63**	1			20.84	2.99
4) Social support (friends)	-.34**	.78**	.210**	1		19.90	4.36
5) Social support (important other)	-.36**	.79**	.35**	.39**	1	19.53	3.85
6) adaptation with university	-.36**	-.22**	-.20**	-.12*	-.17**	126.85	19.64

According to Table 1, all perceived social support components including social support from family, social support from friends, and social support from important others, and adaptation with university have inverse significant relationship with students' loneliness. On the other hand, the components of perceived social support including social support from family, friends and important others have direct significant correlation coefficient with adaptation with university among students.

Stepwise Multiple Regression Analysis was used to predict adaptation with university and determine the distinctive role of each component of perceived social support and loneliness in explaining adaptation with university variance and detecting the best predictors.

The results of regression analysis based on cognitive emotion regulation and mindfulness showed that loneliness ( $\Delta R^2 = .107$ ,  $F(1,318) = 38.124$ ,  $P < 0.001$ ) and social support from family ( $\Delta R^2 = .012$ ,  $F(1,317) = 4.392$ ,  $P = .001$ ) could predict 12% of adaptation with university variance in two steps, respectively. Other components of perceived social support including friends and important others did not enter the equation at the third step of the analysis since they could not predict adaptation with university significantly. Table 2 demonstrates standardized and unstandardized regression coefficients in the second step.

*Table 2. standardized and unstandardized coefficients of stepwise regression of adaptation with university based on Perceived social support components and loneliness*

Model	R	R Square	Std. Error of the Estimate	Change Statistics				
				R Square Change	F Change	df1	df2	Sig. F Change
1 . Loneliness	.32	.107	18.59	.107	38.124	1	318	.000
2 . Social support (family)	.34	.119	18.49	.012	4.392	1	317	.037

According to Table 2, adaptation with university could be predicted indirectly by loneliness in the first step, and directly by perceived social support from family in the second step.

## Discussion

Perceived social support has an important role in reduction of mental disorders prevalence (Halvae & Nosratabadi, 2014), improvement of people's loneliness, life quality, and mental health (Kang, Park, & Wallace, 2016; Zhao, Kong, & Wang, 2012) and students' self-esteem and life satisfaction (Zhao, Wang, & Kong, 2014). Hence, students with strong social, supportive networks like family and friends enjoy more life satisfaction. In fact, as their life satisfaction and social support increases, they suffer less loneliness. The results of the present study are in agreement with those of Zhao, Kong, and Wang (2013); Wang et al. (2011); Tajalli and Ganbaripanah (2010). As Dyck & Holtzman (2013) maintain, improvement in the quality of interpersonal relationships and availability of social support leads to better psychological well-being and fewer depression symptoms. Also, access to social and supportive networks is known as one of the most important resources in protection of individuals against psychological sufferings (Tajalli & Ganbaripanah, 2010); Wang et al. (2011); Duru (2008) studied the relationship between loneliness and social support, and they found a negative relationship between family function and social support, in one hand, and loneliness, in the other hand. Moreover, Dong, Beck & Simon (2009) have indicated that social support has an important role in reduction of loneliness among the adolescents, youth, and elderly.

The findings of the present study showed that there is a statistically significant relationship between social support and academic adjustment, which was also reported by Sallvina et al. (2003), White and Hostings (2004); Sila and Begrio (2007). In addition, Adams et al. (2000) found that family is an influencing factor in the academic adjustment, and the family environment has a complementary role to academic experience quality. A student's academic experience contributes to his/her personal and social development. Moreover, Tav et al. (2000) maintained that social support leads to an increase in academic adjustment. Robert and Goblit (1997) found that individuals receiving more social support enjoy a higher degree of physical, mental, and social health and make a better adjustment to life challenges. Therefore, considering all the findings of the previous research and the present study, it can be concluded that there is a significant positive relationship between social support and academic adjustment. Furthermore, the higher the degree of social support an individual perceives, the higher the degree of adjustment he/she can make to life's challenges and tensions.

Moreover, the results of the present study showed that there is a significant relationship between loneliness and academic adjustment. The results of the present study are consistent with those of Len and Grun's (1992) study. They found out that lonely individuals make less academic adjustment, have less social competency, and are less likely to be chosen as a friend, show fewer honest behaviors, and act passively. Also, there is a significant relationship between loneliness and psychosocial disorders such as alcoholism, suicide, depression, anxiety, addiction, low self-confidence, negative attributions, delinquencies, and academic failures (Len and Grun, 1992). Katrina (2007) found that those with chronic loneliness had significantly weaker social skills than those without it and had a much less degree of academic adjustment. To justify the findings of the present study, since students are away from their families due to their educational circumstances and life at the campus, they might fail in establishing good social relationships with others because of loss of connection with their old friends and family, thus feeling lonelier and making less academic adjustment. Therefore, it is highly important that families and friends support students to establish intimate relationships with their new friends at campus and provide suitable conditions for them to avoid loneliness.



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