
EXAMINING RELATIONSHIP BETWEEN EMOTIONAL DISPOSITION AND ACADEMIC SELF-EFFICACY AMONG UNIVERSITY UNDERGRADUATE STUDENTS

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ABSTRACT

The study examines relationship between emotional disposition and academic self-efficacy among undergraduate student. Five emotions of happiness, sadness, anger, fear, and anxiety were studied using correlational design and data was collected from 376 (male=199 and female=177) undergraduate students drawn from different courses of study. Two questionnaires - emotional disposition questionnaire ($\alpha=.919$) and academic self-efficacy questionnaire ($\alpha=.776$) were used to collect data which was analysed at .05 significant level. The Result suggests significant positive relationship between emotional disposition and academic self-efficacy, $r(374) = .117, p = .023$. Based on individual emotion, finding reveals a significant positive correlation between happiness and academic self-efficacy, $r(374) = .148, p < .01$, and also anger and academic self-efficacy, $r(374) = .103, p < .05$. No significant relationship was observed for sadness, $r(374) = .098, p > .05$; anxiety, $r(374) = -.001, p > .05$, fear and academic self-efficacy, $r(374) = .045, p > .05$. While t test analysis suggests no significant difference in happiness, fear, and anger based on gender, it was however found that female students had a mean score significantly higher than male in anxiety and all other negative emotions. From the findings, it was recommended among others that every university should consider assessing the psychological/emotional disposition of thousands of undergraduate students especially, the new and returning students as the knowledge of student's wellbeing could help the university in providing necessary counselling support to students to improve their wellbeing in school.

Key word: Happiness, Sadness, Anger, Fear, Anxiety, and Academic Self-Efficacy

INTRODUCTION

The university campus is a regulated and challenging academic environment where desire to achieving academic goals is paramount to

every student. Since ways to achieving these goals do not always come easy, it is possible that some students may display frustration due to; inability to attain their desired goals, dissatisfaction in studying a course perceived to be foisted on them, and gloomy looks due to lack of wherewithal to cater for their basic needs on campus, among others. These and many other associated problems can stir up feelings (negative or positive) in students. It is argued that emotional disposition such as happiness, anger, anxiety, fear and sadness can be productive or counterproductive in learning depending on its intensity. However, to what extent do such emotions influence cognitive constructs such as academic self-efficacy in students, is one of the problems this study intends to address. Although, some studies have shown that students learn and perform more successfully when they feel secure, happy, and excited about their studies (Boekaerts, 1993; Oatly & Nundy, 1996, Bandura, 1997)), it is important also to find out which of this type of emotion aids academic self-efficacy in students. Researchers believed that while some amount of arousal may have the potential to energize an individual it might also have the ability to interfere with one's ability to perform a given task successfully. Hertel and Rude (1991) believed that when emotions are heightened, it could use up one's intellectual resources. Emotions are transient, neurophysiologic responses to a stimulus that excites a coordinated system of bodily and mental responses that informs about relationship to the stimulus and prepares one to deal with it in some way. Emotional disposition is the persistent tendency to feel a certain kind of emotion in the presence of a stimulus. Literature (e.g., Bandura, 1997) have shown the interplay between emotion and academic self-efficacy owing to the fact that emotion is critical to achievement in learning. It shapes experience and outcomes in important domains of students' life (Campos, Keltner, & Tapias, 2004).

STATEMENT OF THE PROBLEM

Success in learning is often influenced by several factors and emotion may be one of those. It is often the driving force behind motivation, positive or negative (Gaulin & Donald, 2003) and it is functionally important to students' intrapersonal and interpersonal relationships in school and interaction with learning and self-belief, motivation to learn, behaviour, performance, and even personality development. Some studies (e.g., (Boekaerts, 1993; Oatly & Nundy, 1996) have shown that students learn and perform more successfully when they feel secure, happy, and excited about their studies. Although, some amount of arousal may have the potential to

energize an individual, it may also have the ability to interfere with one's ability to perform a given task successfully. Given this argument, it is important to find out if student's belief in their ability to execute academic tasks successfully can be enhanced or marred by certain emotion. In Hertel and Rude (1991) words, when emotions are heightened, it could use up one's intellectual resources.

Research Objectives

This study was designed to achieve the following objectives:

1. To find out relationship between emotional disposition and academic self-efficacy among undergraduate students.
2. To find out gender difference in emotional disposition among undergraduate students

Research Question

1. What is the relationship between emotional disposition and academic self-efficacy among undergraduate students?
2. Is there gender difference in emotional disposition among undergraduate students?

Research Hypothesis

1. There is no significant relationship between emotional disposition and academic self-efficacy.
2. There is no significant difference in emotional disposition between male and female undergraduate students.

Research Design

The study adopted a correlational design, a technique of gathering data primarily with questionnaire in order to describe the problem under investigation.

Participants

A representative sample of three hundred and seventy-six (376) students were selected and distributed proportionately based on population across the courses with higher number drawn from science oriented courses and education. The least number of respondents were those from social sciences. Krejcie and Morgan (1970) table for determining sample size of a given population was used to determine total population needed for the study.

The following table shows the number of participant used for the study.

Table 1. Distribution of respondents based on course of study

Course of study	Sample		Total
	Male	Female	
Education	45	40	85
Sciences	71	65	136
Social sciences	40	35	75
Administration	43	37	80
Total	199	177	376

Table 2. Classification of Respondents based on Age group

Age	Frequency	Percent
<20	112	29.8
21-25	189	50.3
26-30	61	16.2
>30	14	3.7
Total	376	100.0

Table 2 shows that 80.1% of the respondents used for the study were <26 years old. While, age 26-30 category constitutes 16.2%, only 3.7% were >30 years old. It is arguably a predominantly early adult population.

Outcome Measures

Emotional Disposition Questionnaire

A thirty-five (35) item emotional disposition questionnaire was developed specially for students to assess five emotional disposition of happiness, sadness, anxiety, fear, and anger. Analysis of piloted data for this instrument using odd/even number split-half method yielded the following reliability index for each subscale; happiness, .799; Sadness, .787; Anxiety, .828; Fear, .714; Anger, .703; and Composite emotional disposition scale, .919. Each subscale has seven statements and respondents were asked to tick one out of five options that represents how they feel. The Likert five-point response format of Strongly Agree (5), Agree (4), Undecided (3), Disagree (2), and Strongly Disagree (1) was used to measure the extent to which the respondents agree or disagree with a statement. The minimum response

expected on each subscale is 7 with a maximum of 35. Higher score above 21 suggests presence of such emotion.

Academic Self-Efficacy Questionnaire

This questionnaire was prepared specifically for students with eighteen (18) items and it was developed and used to assess students' academic self-efficacy. That is, to tests student's belief in their ability to accomplish academic task successfully. Analysis of piloted data for this instrument using odd/even number split-half method yielded a coefficient of .776. In the scale, respondents were asked to tick one out of five options that correctly describe them. All the items were rated using the Likert five-point response format of Strongly Agree (5), Agree (4), Undecided (3), Disagree (2), and Strongly Disagree (1) to measure the extent to which the respondents agree or disagree with a statement. The minimum expected score from this questionnaire is 18 with 90 as maximum. Therefore, a mean score above 54 indicates higher level of self-efficacy.

Data Collection

The face-to-face method involving paper and pen was used to collect data. The researcher along with three assistants who were briefed on the research objectives carried out the administration of the questionnaire, which lasted for three days. All questionnaires administered were retrieved. This implies there was no mortality.

Data Analyses

All data analyses were performed with SPSS version 25.0. A standard P value < 0.05 was considered statistically significant. Pearson correlation coefficient was used to test the relationship between emotional disposition and academic self-efficacy. To examine the gender variation in emotional disposition, independent sample t test was used.

Results

Table 3: Pearson’s correlation matrix showing relationship between emotional disposition and academic self-efficacy among undergraduate students.

<i>Variable</i>	<i>Happiness</i>	<i>Sadness</i>	<i>Anxiety</i>	<i>Fear</i>	<i>Anger</i>	<i>ASE</i>
Happiness	1					
Sadness	-.416** .000	1				
Anxiety	-.284** .000	.464** .000	1			
Fear	-.171** .001	.402** .000	.590** .000	1		
Anger	-.004 .943	.359** .000	.323** .000	.390** .000	1	
ASE	.148** .004	.098 .058	-.001 .990	.045 .385	.103* .045	1

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

N=376

ASE = Academic self-efficacy

Table 3 is a Pearson correlation matrix showing the relationship between emotional disposition and academic self-efficacy of students. The correlation table shows a significant positive correlation between happiness and academic self-efficacy, $r(374)=.148, p<.01$, and also anger and academic self-efficacy, $r(374)=.103, p<.05$. No significant relationship was observed for sadness, $r(374)= .098, p=.058$; anxiety, $r(374)= -.001, p=.990$, fear and academic self-efficacy, $r(374)= .045, p=.385$. Further outcome shows that happiness correlates negatively with all the negative emotions used in the study.

Table 4. Independent sample t test on differences in types of emotional disposition due to gender.

<i>Variables</i>	<i>Gender</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>df.</i>	<i>t-cal.</i>	<i>p</i>
Happiness	Male	199	30.060	3.898	374	.152	.879
	Female	177	30.000	3.788			
Sadness	Male	199	13.653	4.724	374	-2.811	.005
	female	177	15.118	5.384			
Anxiety	Male	199	17.889	5.616	374	-2.492	.013
	female	177	19.440	6.451			
Fear	Male	199	16.959	5.626	374	-.930	.353
	female	177	17.519	6.044			
Anger	Male	199	14.281	5.546	374	-1.832	.068
	female	177	15.412	6.424			
Composite Emotional Disposition	Male	199	92.844	15.549	374	-2.726	.007
	Female	177	97.491	17.502			

Table 4 suggests that male and female students differ significantly in their emotional disposition, $t(374)=-2.726$, $p=.007$. The hypothesis, which states that there is no significant difference in types of emotional disposition due to gender, is therefore rejected. The table further shows that male and female undergraduate students significantly differ in sadness, $t(374)=-2.811$, $p=.005$ and anxiety, $t(374)=-2.492$, $p=.013$. They do not however differ significantly in their disposition to happiness, $t(374)=.152$, $p=.879$; fear, $t(374)=-.930$, $p=.353$; and anger, $t(374)=-1.832$, $p=.068$.

DISCUSSION

Findings suggests that significant relationship exist between types of emotional disposition and academic self-efficacy $r(374)=.117$, $p=.023$. It indicates significant positive correlation between happiness and academic self-efficacy, $r(374)=.148$, $p=.004$., and also anger and academic self-efficacy, $r(374)=.103$, $p=.045$., whereas, sadness, anxiety, and fear do not significantly correlate with academic self-efficacy. This finding corroborates Kavanagh and Gordon (1985) results, which suggested that emotional states have widespread impact on self-efficacy judgment. That subject with elated mood in their study were found to have high belief in their own abilities compared to depressed subjects who are noted for self-criticism and negative opinion about themselves. When people are sad, they have lower self-efficacy belief than when they feel happy (Amrhein, Salovey & Rosenhan, 2003; Kadzin &

Bryan, 1981; Underwood, Froming, and Moore, 2002). Kendra (2012) also states that emotional states can affect how a person feels in his ability to accomplish a given task. Lyubomirsky and Boehm (2008) added that, people who experience positive affect are particularly well suited to experience success in their studies. Other researchers have also proposed that anger correlate with high self-efficacy (Roseman, 1984), or a sense of power (MacKinnon & Keating, 1989). Frijda (1986) suggested that a belief in the ability to cope with a potential threat causes anger, that is, if the threat is stronger than a person's capacity to cope, he/she will experience fear. If the person appraises that the threat can be overcome, he/she will experience anger. Anger triggers problem solving to overcome obstacles to goal attainment (Mikulincer, 1998; Scherer, 1984). The outcome also supports Stanley G. Hall assertion as cited in DiGiuseppe (2006) that Anger is an expression of egoism as such; confidence feeling and self-belief intensify it. Izard (1977) reported that anger is associated with a sense of strength and self-assurance, even as DiGiuseppe and Froh (2002) found that the ratings of self-efficacy by all the respondents when imagining a previously anger-provoking situation was at a significant high level. No participant reported having low self-efficacy when feeling angry. This supports the idea that some degree of belief students have in their resourcefulness is associated with some levels of anger disposition.

Similarly on table 3, it was found that significant differences exist between male and female students in the emotional dispositions of sadness, $t(374)=-2.811$, $p=.005$, and anxiety, $t(374)=-2.492$, $p=.013$. Result suggests female students had a higher mean score in sadness subscale and in anxiety subscale than the male. In short, female students got a higher mean score in all the negative emotions than the males. This finding corroborates Abdel-Khalek and Alansari (2004) investigation on gender differences in anxiety among volunteer undergraduates recruited from 10 Arab countries where they reported that females students had higher mean anxiety scores than did their male counterparts in all 10 countries. Evidence also suggests that women express sadness largely than do men. Women, in comparison with men, express sadness with more intensity or more frequency (Allen & Haccoun, 1976; Balswick & Avertt, 1977), and report crying with greater frequency and intensity (Lombardo, Cretser, Lombardo, & Mathis, 1983; Oliver & Toner, 1990). Men and women typically report differences in their general emotional experience, such as overall emotional intensity or expressivity (Grossman & Wood, 1993; Johnson & Shulman, 1988), as well as

in the experience and expression of specific emotions (Birnbaum et al., 1980; Fabes & Martin, 1991; Shields, 1984). Despite the popular belief that women are the more emotional, sex reviewers and researchers disagree as to whether there is empirical support for sex differences in emotional expression and experience (Brody & Hall, 1993; Fischer, 1993; LaFrance & Banaji, 1992; Shields, 1991). Fear and sadness are the emotions that women express more than do men (Brody & Hall, 1993; Fischer, 1993). In one study, Manstead and Fischer (1995) reported that across different scenarios, women did not significantly differ from men in their reports of how much anger they would feel in these situations. However, as predicted, women reported feeling more powerless and reported that they would experience more despair than men would. Brody, Lovas, and Hay (1995) obtained slightly different results. They reported in their work that women tended to report more anger than men would.

CONCLUSION

Emotions are felt and expressed everyday by students as they engaged in different school activities, which are tailored towards achieving their academic goals. Therefore, when these emotions interfere with competence beliefs, students might find classroom activities boring and uninteresting, become academically disenchanted or in a worst-case scenario become a school dropout. Teachers and school authority can help reduce negative emotions and promote happiness among students by providing various avenue for feedback about students' work. Among others, university should consider assessing the psychological/emotional disposition of thousands of undergraduate students especially, the new and returning students as the knowledge of student's wellbeing could help the university in providing necessary counselling support to students to improve their wellbeing in school and self-efficacy belief.

REFERENCES

- Abbas, S. M., Akber, A. & Siddiqa, A. (2012). The Impact of Emotional Intelligence on Self-efficacy of Nursing Staff Serving in Pakistan. *Global Journal of Management and Business Research*. Vol. 12. Global Journals Inc. USA.
- Abdel-khalek, M. A., & Alansari, B. M. (2004). Gender Differences in Anxiety among Undergraduates from Ten Arab Countries. *Social Behaviour and Personality*, 32(7), 649-656.

- Allen, J.G., & Haccoun, D.M. (1976). Sex Differences in Emotionality: A Multidimensional Approach. *Human Relations*, 29,711-722.
- Amrhein, J., Salovey, P. & Rosenhan, D. L. (2003). Joy and Sadness Generates Attributional Vulnerability in Men. *Journal of Happiness Studies*. Vol. 6, No.2. pp. 56-61.
- Bandura, A. (1997). *Self-efficacy: The Exercise of Control*. New York: Freeman.
- Balswick, J. & Avertt, C. P. (1977). Differences in Expressiveness: Gender Interpersonal Orientation, and Perceived Parental Expressiveness as Contributing Factors. *Journal of Marriage and the Family*, 39, 121-127.
- Birnbaum, D. W., Nosanchuk, T. A., & Croll, W. L. (1980). Children's Stereotypes about Sex Differences in Emotionality. *Sex Roles*, 6, 435-443.
- Boekaerts, M. (1993). Being Concerned with Well-Being and with Learning. *Educational Psychologists*, 28(2), 149-167.
- Brody, L. R. & Hall, J. A. (1993). Gender and Emotion. In Lewis, M. & Havil and, J. M. (Eds.), *Handbook of emotions* (pp. 447-460). New York, NY: Guilford Press.
- Brody, L R., Lovas, G. S., & Hay, D. H (1995). Gender Differences in Anger and Fear as a Function of Situational Context. *Sex Roles*, 32, 47-78.
- Campos, B., Keltner, D. & Tapias, M. P. (2004). Emotion. In Spielberger, C. (Eds). *Encyclopedia of Applied Psychology*, Vol. 1. New York. Academic Press.
- DiGiuseppe, R. & Froh, A. (2002). End Piece: Reflections on the Treatment of Anger. *Journal of Clinical Psychology*, 55 (3), 365–379.
- DiGiuseppe, R. (2006). *Understanding Anger Disorder*. Oxford University Press.
- Fabes, R. A., & Martin, C. L. (1991). Gender and Age Stereotypes of Emotionality. *Personality and Social Psychology Bulletin*, 17,532-540.
- Fischer, A. H. (1993). Sex Differences in Emotionality: Fact or stereotype? *Feminism &Psychology*, 3, 303-318.
- Frijda, N. H. (1986). *The Emotions*. England: Cambridge University Press.
- Gaulin, S. J. C. & Donald H. M. (2003). *Evolutionary Psychology*. Prentice Hall.

- Grossman, M., & Wood, W. (1993). Sex Differences in Intensity of Emotional Experience: A Social Role Interpretation. *Journal of Personality and Social Psychology*, 65, 1010-1022.
- Hertel, P. T. & Rude, S. S. (1991). Depressive Deficits in memory: Focusing attention Improves Subsequent Recall. *Journal of Experimental Psychology: General*, 120(3), 301-309.
- Hooper D, Coughlan J, & Mullen M. (2008). Structural Equation Modelling: Guidelines for Determining Model Fit. *Articles*. 6:53–60.
- Johnson, J. T., & Shulman, G. A. (1988). More alike than meets the eye: Perceived Gender Differences in Subjective Experience and its Display. *Sex Roles*, 19, 67-80.
- Kadzin, A. E. & Bryan, J. H. (1981). Competence and Volunteering. *Journal of experimental Social Psychology*, 7, 87-97.
- Kavanagh, D. J., & Gordon H. B. (1985). Mood and Self-efficacy: Impact of Joy and Sadness on Perceived Capabilities. *Cognitive Therapy and Research*, vol. 9, No. 5. Pp. 507-525
- Kendra, C. (2012). *What is Self-efficacy?* Retrieved on 25-03-2012 from http://psychology.about.com/od/theoriesofpersonality/a/self_efficacy.htm.
- LaFrance, M. & Banaji, M. (1992). Toward a Reconsideration of the Gender-Emotion Relationship. In M. S. Clark (Ed.), *Review of Personality and Social Psychology: Emotion and Social Behaviour*(Vol. 14, pp. 178- 202). Newbury Park, CA: Sage.
- Lombardo, W. K., Cretser, G. A., Lombardo, B., & Mathis, S. L. (1983). 'For Crying' out Loud,' There is a Sex Difference. *Sex Roles*, 9, 987- 996.
- Lyubomirsky, S. & Boehm, J. K. (2008). Does Happiness Promote Career Success? *Journal of Career Assessment*. New Delhi. Sage Publication.
- MacKinnon, N. J., & Keating, L. J. (1999). The Structure of Emotions: Canada-united states comparison *Social Psychology Quarterly*, 52(1), 70–83.
- Manstead, A. S. R., & Fischer, A. H. (1995). *Gender and Emotions: The Role of Powerlessness*. Paper Presented at the Meeting of the International Society for Research on Emotion, Toronto, Canada.

- Matsumoto, D. (2009). *The Cambridge Dictionary of Psychology*. Cambridge University Press. New York.
- Mikulincer, M. (1998). Adult Attachment Style and Individual Differences in Functional Versus Dysfunctional Anger. *Journal of Personality and Social Psychology*, 74(2), 215-524.
- Oatley, K., & Nundy, S. (1996). Rethinking the Role of Emotions in Education. In D.R. Olson & N. Torrance (Eds.), *The Handbook of Education and Human Development: New Models of Learning, Teaching and Schooling* (pp. 257-274). Cambridge, MA: Blackwell.
- Oliver, S. J., & Toner, B. B. (1990). The Influence of Gender Role Typing on the Expression of Depressive Symptoms. *Sex Roles*, 22, 775--791.
- Roseman, I. J. (1984). Cognitive determinants of emotions: A structural theory. In R. Shaver (Ed.), *Review of personality and social psychology*: Vol. 5 (pp. 11–36). Beverly Hill, CA: Sage.
- Scherer, K. R. (1984). Emotions as a Multi-Component Process. A Model with Some Cross Cultural Data. In R. Shaver (Ed.), *Review of Personality and Social Psychology* (Vol. 5, pp. 11–36). Beverly Hill, CA: Sage.
- Shields, S. A. (1984). Distinguishing between Emotion and Non-emotion: Judgments about Experience. *Motivation and Emotion*, 8, 355-369.
- Shields, S. A. (1991). Gender in the Psychology of Emotion: A Selective Review. In Strongman, K. T. (Ed.), *International Review of Studies on Emotion* (pp.227-247). New York, NY: Wiley.
- Stasosphere (1999). *Emotional Disposition*. Retrieved on 10 June, 2012 from <http://chestbooks.com>
- Underwood, B., Froming, W. J., & Moore, B.S. (2002). Mood and Personality. A Search for the Causal Relationship. *Journal of Personality*, 68, 321-328.