Career Decidedness and Emotion Regulation as Predictors of Depression among Students

Davender[1]
Sandeep Singh[2]

Abstract:

Present investigation was intended to explore the relationship among career decidedness, emotion regulation and depression among adolescents. The study was conducted on six hundred senior secondary school students' age ranging from 15 to 19 years with a mean age of 17 years. These subjects were further sub divided on the bases of gender into male and female participants. They were selected from various schools of Haryana state following randomized technique. They were tested by administering Career Decidedness Scale, Difficulties in Emotion Regulation Scale and Beck Depression Inventory-II. The obtained data were analyzed by using hierarchical multiple regression in order to test the stated speculations. It was observed that career decidedness and emotion regulation were found to be the predictor of depression among subjects belonging to both the sexes. These reported findings were discussed in the light of relevant literature.

Key words.: *Career decidedness, difficulties in emotion regulation, depression, predictor, adolescents.*

I. INTRODUCTION

Individual go through the various stages of life such as from childhood to old age and development of an individual cannot be completed without some special attention to a period termed as adolescence. This particular age is known as transformative age. Various changes like physical, psychological cognitive take place in this age at a rapid pace. It is the age of identity crisis. Stress, anxiety, anger, hostility and depression are common feelings or emotions that emerged at this stage. This age creates stress, strain for the family as well as emotional hills for the adolescents. Poor self-esteem, social rejection, inferiority feelings can breed depression, defensiveness, pessimism, hostility, physical aggression and many other emotional problems. After attaining adolescence age they also become career conscious which instill strong desire for training and placement or paid work. State of anxiety aroused due to career planning and fear of failure in getting job in breed aggressive style of behavior. Anecdotal reports reveal that society is heading towards unhealthy behavior practice, which in sequel leading to instill depression and other negative well-being consequences.

Depression is a psychological state that involves emotional, motivational, cognitive deficits and physical symptoms. Thus it can be assumed that adolescence is a age which may increase various psychological problems like depression, anxiety, hostility and adjustment. Studies by Graber & Sontag (2009) and Hankin & Abela (2005) have estimated nearly 25 % to 40 % of adolescent females experience depressed mood, in comparison to 20% to 35% males,

Work is important in life of a man. Work not only provides financial incentives but also provide schedule, identity status and prestige. There are more than 3000 occupations or types of work estimated in the present time. The choice of occupation or work depends on various individual, social, economic, political and religious factors. "Career decision",

the term refers to the career choice decision of an individual. Researchers in the field showed much concern about career decision making for many years. Issues related to choosing a career now encompasses major aspects of life because of frequent changes of events that require people to rethink about making their career related decisions at times in their life. People face career decision making need not only during adolescents and early years of adulthood but also it appears at different ages of transitions in life span. These transitions state the potential to occur in decisions related to career. At this age they are unable to make a decision about the major career they wish to pursue. These are commonly labelled as being "undecided," a term described as being "not willing, not able, or not ready to take decisions regarding vocational stream" (Gordon, 1995). Although not all undecided students experience career indecision in the same way, for many of them the career choice making process can be extremely stressful and anxiety provoking. Such difficulties can cause career choice making process to be much more challenging and can even inhibit the student from making any choices.

It is estimated that nearly 20% to 60 % students seeking admissions or admitted to colleges are not clear about their choices related to career (Sepich, 1987; Gordon, 1995; Hayes, 1997; Gianakos, 1999; Titley & Titley, 1980).

Emotion regulation, the phenomenon describes the process by which generally an individual utilize to direct the nature of emotions and expression of experienced emotion that may vary in intensity and duration. Emotion regulation intervention deals with emotion generation process at different points of time and situation. Hence, it can be said that emotion regulation is a continuous process the overflow of an emotional response may be specified by the impacts of regulation as much as the influences of pure reactivity. In an influential research Ciarrochi etal. (2008) reported that

[1] Research Scholar, Department of Applied Psychology, GJUS & T, Hisar, Haryana,   Email dave.vashist@gmail.com
[2] Professor, Department of Applied Psychology, GJUS & T, Hisar, Haryana.

negative affects increased with the age progression and that led to decrease in positive affects. Further, they concluded that low emotional identification skill increased the fear, reduced positive affects and quality and quantity of so called social support. They also said that EIS also enhanced sadness among male participants.

Other studies have tried to establish relation in the specific context of depression between emotion regulation, sleep, and cognitive inhibition etc. It was found that previously depressed and currently depressed respondents reacted more quickly to emotional words than their counterpart healthy subjects. Subject suffering presently from depressive disorder showed disturbances in the inhibition of negative stimuli. Further, maladaptive emotional reactivity found among subjects having a history of depression (Harfmann, 2013).

II. OBJECTIVES OF THE STUDY

Main objectives of the study are

1. Examination of gender differences in career decidedness, emotion regulation difficulties and depression among students.
2. Examination of relationship between career decidedness and depression among students across gender.
3. Examination of relationship between emotion regulation difficulties and depression among students across gender.
4. Examination of career decidedness and emotion regulation difficulties as predictor of depression among students.

III. HYPOTHESES

Specific hypothesis are:

1. Significant gender differences are expected in career decidedness, emotion regulation difficulties and depression among students.
2. Career decidedness is expected to correlate negatively with depression among students across gender.
3. Positive relationship is expected between emotion regulation difficulties and depression among students across gender.
4. Career decidedness and emotion regulation difficulties are expected to be significant predictor of depression among students across gender.

IV. METHOD

Participants:

Six hundred senior secondary school students (50% females and 50% males) randomly selected from various schools from Haryana state participated in the study. Students who volunteered to participate in the study were included in the sample. Participants ranged in age from 15 to 19 years with the mean age of 17 years.

Measures:

Following tests were used to collect data.

a) For the assessment of depression Beck Depression Inventory-II (BDI-II) developed by Beck, Steer, and Brown (1996) was used. BDI- II consists of 21 statements and each response is being scored on a four point scale (0 to 3). The test has high internal consistency (α=.91) and it also has satisfactory validity.

b) In order to ascertain career decidedness the Career Decidedness Scale by Lounsbury et al. (1999) was used. The CDS contains 6 statements and each response is being scored on a 5 point Likert-type scale (1 to 5), ranging from strongly disagree to strongly agree. Reliability and validity for this scale are satisfactory.

c) The Difficulties in Emotion Regulation Scale (DERS) developed by Gratz& Roemer (2004) is a 36 item self-report questionnaire that measures difficulties in areas of emotion regulation. All items are to be scored on a 5-point Likert scale (1 to 5) ranging from "Almost Never" to "Almost Always." The DERS had excellent internal consistency (a=0.94). Test-retest reliability for this scale is (.88). This scale has satisfactory content validity.

Procedure:

Before tests were administered, the students were informed of the nature of project. Tests were administered on those who volunteered to participate. Testing was done in group setting in the group of 20-25 students. Each test was administered strictly according to the administration procedure laid down in respective manuals. Scoring was done according to scoring procedures prescribed by test authors which produced three scores (1 for depression, 1 for career decidedness and 1 for difficulties in emotion regulation). Obtained data were analyzed by using various statistical techniques. Most pertinent to research objectives are descriptive statistics, t-ratios, Pearson's correlations and Multiple Regression.

Results:

Descriptive statistics was used to ascertain the normality of data. For the examination of the gender differences, if any, in career decidedness, difficulties in emotion regulation and depression t-ratios were computed and are reported in table 1.

Table 1: Showing means, SDs', skewness, kurtosis and t-ratios of Career Decidedness, Difficulties in Emotion Regulation and Depression across gender

Variable	Gender	N	Mean	SD	Skewness	Kurtosis	t-ratio	Sig. level
Career Decidedness	Male	300	16.96	4.08	-.225	-.216	-6.185	P<.01
	Female	300	18.89	3.57	-.467	-.265		
Difficulty in Emotion Regulation	Male	300	94.14	18.01	.492	-.621	5.505	P<.01
	Female	300	85.43	20.65	-.614	.252		
Depression	Male	300	12.92	5.9	-.033	-.877	6.389	P<.01
	Female	300	10.12	4.74	.718	-.932		

Perusal of table 1 reveals that skewness and kurtosis values for Career Decidedness is (males = -.225 & .216; females = -.467 & -.265), for Difficulties in Emotion Regulation is (males=.492,-.621; females = -.614, .252) and for Depression is (males = -.033 & -.877; females = .718, -.932). Skewness and kurtosis values smaller than 3 in absolute value indicated that all variables were reasonably normally distributed and parametric analyses could be performed (Tabachnick & Fidell 2001). It also reveals that female students have scored

significantly high on Career Decidedness (Female mean= 18.89, SD= 4.08; Male mean= 16.96, SD= 3.57; t= -6.185) then their counterpart male students. It also reveals that male students have scored significantly high on Difficulty in Emotion Regulation (Male mean= 94.14, SD= 18.01;Female mean= 85.43, SD= 20.65; t= 5.505) and Depression (Male mean= 12.92, SD= 5.9; Female mean= 10.12, SD= 4.74; t= 6.389) then their counterpart female students. It depicts that female students tend to have high level of career decidedness than male students. It also depicts that male students tend to have high level of difficulties in emotion regulation and of depression than female students. With this finding hypothesis no. 1 positing that gender differences are expected in career decidedness, difficulties in emotion regulation, and depression is supported.

After ascertaining that data meet the requirements of applying Product Moment Method of Correlation Pearson's correlations among all the three variables have been obtained separately from males and females data.

Table 2a: Showing inter-correlation matrix of career decidedness, difficulties in emotion regulation and depression for males

	Gender	Career Decidedness	Dif. In Emotion Regulation	Depression
Career Decidedness	Male	1	-.327*	-.243*
Difficulty in Emotion Regulation	Male		1	.423*
Depression	Male			1

*p<.01

Table 2b: Showing inter-correlation matrix of career decidedness, difficulties in emotion regulation and depression for females

	Gender	Career Decidedness	Dif. In Emotion Regulation	Depression
Career Decidedness	Female	1	-.294*	-.375*
Difficulty in Emotion Regulation	Female		1	.504*
Depression	Female			1

*p<.01

Degree of Freedom being 298 (N-2), Coefficients .164 and .230 are significant at .05 and .01 probability level.

Perusal of table 2a reveals that in data of males, correlations among three variables have ranged between .423 and -.243. Career Decidedness has marked significant negative correlation with Difficulties in Emotion Regulation (r= -.327, p<.01) and Depression (r= -.243, p<.01). Difficulties in Emotion Regulation has correlated positively with Depression (r= .423, p<.01).

Perusal of table 2b reveals that in data of females, correlations among three variables have ranged between .504 and -.294. Career Decidedness has marked significant negative correlation with Difficulties in Emotion Regulation (r= -.294, p<.01) and Depression (r= -.375, p<.01). Difficulties in Emotion Regulation and Depression have correlated positively with each other with the coefficient of .504 (p<.01). Obtained findings depict that males and females high in career decidedness tend to have low level of

difficulties in emotion regulation and depression. With this finding hypothesis no. 2 positing that positive relationship is expected between difficulties in emotion regulation and depression among students across gender, and hypothesis no. 3 positing that negative relation is expected between career decidedness and depression among students across gender, are supported.

Table 3a: Showing stepwise multiple regression: Predictors of depression (Females).

Model	R	R Square	R Square Change	Beta	F Change	df1	df2
1	.375[a]	.140	.140	-.248*	48.67*	1	298
2	.557[b]	.310	.170	.431*	73.02*	1	297
a. Predictors: (Constant), Career Decidedness							
b. Predictors: (Constant), Career Decidedness, Difficulties in Emotion Regulation							

*P<.01

Perusal of table 3a reveals that Depression (criterion variable) as predicted by the Career Decidedness and Difficulties in Emotion Regulation which was estimated, for female data, by using the stepwise method, significant models emerged (Model 1: $F_{1,298}$= 48.67, p<.01, R square= .140; Model 2: $F_{1,297}$=73.02, p<.01, R square = .310). When career decidedness was entered in the equation, it accounts for 14% variance in predicting depression ($F_{1,298}$= 48.67, p<.01), which is significant. When difficulties in emotion regulation was entered in regression equation, the value of adjusted R square became .310 ($F_{1,297}$= 73.02, p<.01), which is also significant. It depicts that difficulties in emotion regulation accounted for 17% (31% - 14%) variance individually. The obtained beta value for Career Decidedness and Difficulties in Emotion Regulation is -.248 (p<.01) and .431 (p<.01) respectively. Obtained findings depict that 1 unit change in career decidedness will result in .248 unit change in depression in opposite direction and 1 unit change in difficulties in emotion regulation will bring .431 unit changes in depression.

Table 3b: Showing stepwise multiple regression: Predictors of depression (males)

Model	R	R Square	R Square Change	Beta	F Change	df1	df2
1	.243[a]	.059	.059	-.117**	18.72*	1	298
2	.437[b]	.191	.132	.385*	48.54*	1	297
a. Predictors: (Constant), Career Decidedness							
b. Predictors: (Constant), Career Decidedness, Difficulties in Emotion Regulation							

*P<.01

**p<.05

Perusal of table 3b reveals that Depression (criterion variable) as predicted by the Career Decidedness and Difficulties in Emotion Regulation which was estimated, for males data, by using the stepwise method, significant models emerged (Model 1: $F_{1,298}$= 18.72, p<.01, R square= .059; Model 2: $F_{1,297}$ = 48.54, p<.01, R square = .191). When career decidedness was entered in the equation, it accounts for 5.9% variance in predicting depression ($F_{1,298}$= 18.72, p<.01), which is significant. When difficulties in emotion regulation was entered in regression equation, the value of

R square became .191 ($F_{1, 297} = 48.54$, $p<.01$), which is also significant. It depicts that difficulties in emotion regulation accounted for 13.2% (19.1% - 5.9%) variance individually. The obtained beta value for Career Decidedness and Difficulties in Emotion Regulation is -.117 ($p<.01$) and .385 ($p<.01$) respectively. Obtained findings depict that career decidedness and difficulties in emotion regulation are significant predictors of depression among male and female students. Change of 1 unit in career decidedness will result in .117 unit change in depression in opposite direction and 1 unit change in difficulties in emotion regulation will result in .385 unit changes in depression. With this finding hypothesis no. 4 positing that career decidedness and difficulties in emotion regulation are expected to be significant predictor of depression among students across gender is supported.

V. DISCUSSION

In order to discuss the present findings attempts have been made to consider it with specific hypothesis. The first hypothesis of the study was concerned with gender differences in career decidedness, difficulties in emotion regulation and depression among students. It was observed that there were significant gender differences found in all variables i.e. Career Decidedness, Difficulties in Emotion Regulation and Depression among students. On the parameter of career decidedness females were on the higher pedestal. These results are not in line with the findings of Creed, Prideaux, & Patton (2005) who had found that females are more likely to be continuously undecided for career (maturity, barriers, indecision, decision-making and self-efficacy. On the other, on the parameters difficulties in emotion regulation and depression variables males were on higher side. Earlier researches are in opposition of these results. Studies made by Piccinelli and Wilkinson (2000) and Dyson and Renk (2006) suggest that females are more vulnerable to depression than males. Results of the present study on emotion regulation arein tune with previous studies. Women practice more emotion regulation strategies, express their emotions quite often (Kring et al., 1994; Mendes et al., 2003), experience their emotions more deeply (Gross & John, 1998; Williams & Barry, 2003), and show more emotional awareness (Barrett et al., 2000) in comparison to men.

The second and third hypotheses of the study were concerned with the relationship between career decidedness, difficulties in emotion regulation and depression among students. From Table 2a and Table 2b it was observed that there were significant relationships found among all variables i.e. Career decidedness decision, Difficulties in Emotion Regulation and Depression among students. Career Decidedness found to be negatively correlated with Difficulties in Emotion Regulation and Depression. It suggests that increase in career decidedness is related to lower depression among students. These results are in line with the study of Rottinghaus, Jenkins & Jantzer (2009) which suggests that the career decision status is associated with depression. Also the better is the career decidedness the lesser is the difficulty in emotion regulation and vice versa. These findings are in accordance with the findings of Bubić & Ivanišević(2016) who found that emotional stability and competence are positively related to career decision status. On the other hand, Difficulties in Emotion Regulation and Depression are positively correlated. It can be inferred from the results that the students facing more difficulties in emotion regulation will have more depression and vice versa. Results related to difficulties in emotion regulation and depression are in accordance with the previous studies conducted by Silk, Steinberg, and Morris (2003) and Cole, Michel, & Teti (1994) which suggest positive relationship between difficulties in emotion regulation and depression.

The last hypothesis was concerned about career decidedness and difficulties in emotion regulation as predictor of depression among students. The results of the regression analysis (Table 3a and 3b) indicate that difficulties in emotion regulation contributes 17% of the variance of depression among female students and 13.2 % of the variance among male students and is the strongest predictor of depression among students. These findings suggest that for students' emotion regulation difficulties i.e. having difficulties in controlling and handling emotions is very significant for affect on how they feel, think, and handle daily activities i.e. depression state. Probably because when emotion regulation difficulties are temporary these can cause anxiety, discomfort, poor controlled behavior turned in fairly constant poor regulation or difficulty in emotion regulation, it can be manifested in depression. These findings are in line with those of Martin and Dahlen (2005) who found emotion regulation as predictor depression. Career decidedness was also found to be a significant predictor of depression which contributes 14% towards the variance of depression in females and 5.9% towards the variance of depression in male students. These results are similar to the findings of Walker and Peterson (2012) and Diesinger (2012) who found that career decision is related to depression and is a good predictor of it. These findings imply that lesser is the career decision status more is the depression among students probably because the career decision may lead to perceptions of competence when performing activities related to career decision which further may lead to better subjective well-being and satisfaction.

VI. IMPLICATIONS

The findings of the study highlight the significance of career decidedness and difficulties in emotion regulation among students for relationship with depression and for prediction of it. As career decision making is very crucial for students for their better future and for their self-esteem, self-confidence and performance outcome. These finds can be very much helpful for career counseling professional as well as schools and parents for providing better services and environment for students to be successful in professional life. Also, emotion regulation requires for successful accomplishment of developmental task as well as for success in professional and personal life. Focusing on emotion regulation and career decision status, depression can be reduced. However more work is required to focus on these issues because not much work has been done in this direction.

VII. REFERENCES

- Barrett, L. F., Lane, R. D., Sechrest, L., & Schwartz, G. E. (2000).Sex differences in emotional awareness. *Personality and Social Psychology Bulletin,* 26, 1027-1035.

- Beck, A.T., Steer, R.A., & Brown, G.K. (1996). Manual for Beck Depression Inventory-II. SanAntonio, TX: Psychological Corporation.

- Ciarrochi, J., Heaven, L.C.P., & Supavadeeprasit, S. (2008). The link between emotion identification skills and socio-emotional functioning in early adolescence: A 1-year longitudinal study. *Journal of Adolescence, 31,* 565–582.

- Cole, P. M.; Michel, M. K. &Teti, L. O. D. (1994). The development of emotion regulation and dysregulation: A clinical perspective. Monographs of the Society for Research in Child Development, 59(2-3, 240), 73–100.

- Creed, P.; Prideaux, L. &Patton, W. (2005).Antecedents and consequences of career decisional states in adolescence. *Journal of Vocational Behavior,* 67(3), 397-412.

- Dyson, R., & Renk, K. (2006). Freshmen adaptation to university life: Depressive symptoms, stress, and coping. *Journal of Clinical Psychology,* 62, 1231–1244.

- Graber, J.A., & Sontag, L.M. (2009).Internalizing problems during adolescence. In: R.M. Lerner & L. Steinberg, *Handbook of adolescent psychology (3rd ed.)* (pp. 642-682). New Jersey: John Wiley and Sons, Inc.

- Gratz, K. L., & Roemer, L. 2004. Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the Difficulties in Emotion Regulation Scale. *Journal of Psychopathology and Behavioral Assessment,* 26,41–54.

- Gross, J. J., & John, O. P. (1998). Mapping the domain of expressivity: Multimethod evidence for a hierarchical model. *Journal of Personality and Social Psychology,* 74, 170-191.

- Hankin, B.L., & Abela, J.R.Z. (2005). Depression from childhood through adolescence and adulthood. A developmental vulnerability and stress perspective. In: B.L. Hankin, & J.R.Z. Abela (Eds). *Development of Psychopathology* (pp. 245-288). Thousand Oaks: Sage Publications, Inc.

- Harfmann, J.E. (2013). An investigation of maintenance and the correlates of depression: rumination, emotion regulation, cognitive inhibition, sleep, and diet. Thesis submitted in University of Kansas.

- Kring, A. M., Smith, D. A., & Neale, J. M. (1994). Individual differences in dispositional expressiveness: Development and validation of the Emotional Expressivity Scale. *Journal of Personality and Social Psychology,* 66, 934-949.

- Lounsbury, J. W., Tatum, H.E., Chambers, W., Owens, K., & Gibson, L. W. (1999). An investigation of career decidedness in relation to "Big Five" personality constructs and life satisfaction. *College Student Journal, 33*(4), 646-652.

- Martin, R.C. & Dahlen, C.R. (2005).Cognitive emotion regulation in the prediction of depression, anxiety, stress and anger. *Personality and Individual Differences*, 39, 1249–1260.

- Mendes, W. B., Reis, H. T., Seery, M. D., & Blascovich, J. (2003). Cardiovascular correlates of emotional expression and suppression: Do content and gender context matter? *Journal of Personality and Social Psychology,* 84, 771-792.

- Piccinelli, M. &Wilkinson, G. (2000). Gender differences in depression: Critical review. *The British Journal of Psychiatry,* 177 (6), 486-492.

- Rottinghaus, P.J.; Jenkins, N. & Jantzer, A.M. (2009). Relation of depression and affectivity to career decision status and self-efficacy in college students. *Journal of Career Assessment,* 17 (3), 271-285.

- Silk, J.S.; Steinberg, L. &Morris, A. S. (2003).Adolescents' Emotion Regulation in Daily Life: Links to Depressive Symptoms and Problem Behavior. *Child Development,* 74 (6), 1869-1880.

- Tabachnick BG &Fidell LS: Using multivariate statistics (4th ed.). Harper Collins, New York, 2001.

- Walker, J. V., & Peterson, G.W. (2012).Career Thoughts, Indecision, and Depression: Implications for Mental Health Assessment in Career Counseling. *Journal of Career Assessment,* 20 (4), 497-506.