SELF-REGULATION AND CAREER DECISION MAKING AMONG UNDERGRADUATE STUDENTS

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Abstract

The present research conducted to study the relationship between self-regulation and career decision making among undergraduate students. The sample (N = 300) of study comprised of undergraduate students ages ranging from 16 to 21 years (M = 18.86, SD = 1.54) from government colleges (n = 152) and private colleges (n = 148). Short forms of Self-Regulation Questionnaire (Carey & Neal, 2005) and Career Decision Scale (Jones, 1989) were used to study the variables. Results reveal a positive relationship between low self-regulation and career indecisiveness while a negative correlation between age and career decision making. Girls have high self-regulation as compared to boys. There was no gender differences found on career decision making. Age and self-regulation predict career decision making among the sample and as age increases career decision making becomes poor. Further implications were also discussed.

Keywords: Career decision making, self-regulation, undergraduate students, impulse control, goal setting

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Self-regulation is characterized by procedure that empower an individual to guide his or her objective directed behavior over time and evolving circumstances including balance of thought, influence, and conduct (Kanfer, 1990; Karoly, 1993; Zimmerman, 2001). The managers practically in organizations intend to attain maximum achievement levels. Industrial organizational psychologists are highly concerned on people’s regulation they could call their own levels of career execution (Vancouver, 2000). Although, industrial organizational psychologist recognize as, what is important for individuals to self-direct at work but on the other hand, they know minimal about how individuals practically attempt and make it more effective (Karoly, 1993).

Self-regulation is an aptitude to encourage an individual for objective oriented behavior and postpone the subjective oriented behavior for accomplishment of goal directed or objective oriented behavior. Self-regulation is clarified with the assistance of two factors (Carey & Neal, 2005). The first is impulse control factor (shortages in any of self-managerial methodologies can help in objective regulated activities). The second is goal setting factor (approaches to minimize error, anticipating change, execution of activities change and assessment of advancement towards an objective).

Jones and Chenery (1980) clarified career decision making with the assistance of the following two components, one is career decisiveness i.e., an individual’s assurance regarding his/her career decision (Osipow, Carney, Winer, Yanico, & Koschier, 1987), where assurance relates to the degree of capability of an individual to make career decision and the other is career indecisiveness which relates to each restriction and uncertainty faced by the individual in the process of career decision making (Fuqua, Blum, & Hartman, 1988).
The three dimensional model of vocational decision status stated that numerous researchers and experts, who try to evaluate career decidedness utilize only one or two things to focus an individual’s vocation decision status. This practice has a long history, beginning with Williamson (1937), who launched an investigation of personality differences among undecided college students. To operationally characterize decidedness Williamson college students reported, no career decision as undecided. Professional decision is to show “level of assurance that the individual truly needed to plan for career” (p.355) by either checking very certain, certain or uncertain.

Goal-setting theory (Locke & Latham, 1990, 2002) was developed inductively in industrial organizational psychology over a 25 years period based on about 400 laboratories and field studies. These studies demonstrated that particular high objectives lead to larger amount of job execution than do simple objectives or ambiguous conceptual objectives, for example the urging to ’try one’s hardest.’ An individual is focused on objective has the essential capacity to accomplish it, and does not have conflicting objectives. So, there is a positive relationship between objective trouble and its execution. The objectives refer to the future valued results and the setting of objectives is above all of the disparity making process. It suggests discontent with one’s current condition and longing to accomplish an item or result. The objectives are identified with the influence of setting essential standard for self-satisfaction with execution. The high or hard objectives are persuading on grounds that they oblige one to achieve more with a specific end goal to be fulfilled than do low or simple objectives. The emotions of accomplishment in the work environment highlight that individuals see that they find themselves able to develop and meet career challenges.

A Pakistani research finding shows that vocation choice troubles predict low self-esteem and low environmental mastery further female score higher on environmental mastery (Ali & Shah, 2013). Afzal, Atta and Shujja (2013) reported that emotional intelligence was
positively related with career decision making. Emotional intelligence elements self-emotional appraisal and usage of feelings were found significantly related to career decision making. Emotional intelligence is a significant positive indicator of career decision making.

Vocation salience is significantly correlated in expected ways with profession choice making. Parental expectations are not a predictor of vocation choice making. Male students scored higher on career salience while female students were remarkably better in taking vocation choices (Hussain & Rafique, 2013). Hayee (2009) reported that self-regulation positively predicts rational, instinctive and spontaneous choice making styles and negatively predict the dependent and avoidant choice making style.

The capability of a student for effective movement from college setting towards work environment is a basic for psychological well-being of individual and public opinion in general. Profession choice making models and mediations intended to advertise dynamic familiarity with individual diversions and abilities will just include a positive move from college to work (Michael, 2006). During adolescence the period from secondary school to college students make their own recognition by creating action of self-regulation and inspiration. Miller and Byrnes (2001) found that teenagers give importance to institutional educational objectives for choice selection altogether anticipated their successful activities and older adolescent boys did not give importance to success to such extent as compared to younger boys and older adolescent girls.

In Pakistan researches on self-regulation and career decision style (Hayee, 2009), emotional intelligence and career decision making (Afzal, Atta, & Shuja, 2013) and career salience (Hussain & Rafique, 2013) have been conducted. Perceiving the potential effect of profession choice making on self-awareness and satisfaction (Uthayakumar, Schimmack, Hartung, & Rogers, 2010), past observational studies analyzed individual related variables that
influence career decidedness. These include personality traits (Borges & Savickas, 2002; Di Fabio & Palazzeschi, 2009; Starica, 2011), emotional intelligence (Di Fabio & Palazzeschi, 2009), mediation effect of attachment styles (Braunstein-Bercovitez et al., 2012). Obviously dispositional, emotional and cognitive elements assume an imperative part at the present time decision on vocation choices. There is no evidence of self-regulation and career decision making that has been carried out among undergraduate students in Pakistan. The present research will be an effort to fill this literature gap.

This research is conducted on very important variable which pertains to the selection of subjects for future vocational planning of undergraduate students. This research will exclusively highlight the significance and inescapable requirement of self-regulation which is directly concerned with career decision making among college students. Actually self-regulation and career decision making are part and parcel among college students for appropriate selection of subjects in future in accordance with their potential capabilities. One purpose of this research is to see the relationship of self-regulation on career decision making among undergraduate students. This study is helpful for students, parents, teachers and vocational counselors. On the basis of the literature review, the major objective of the present study was to determine the relationship between the levels of self-regulation and career decision making among undergraduate students. Additionally, it was also intended to investigate gender differences, age in relation to levels of self-regulation and career decision making among undergraduate students.

Hypotheses

1. Higher self-regulation is positively related with career decidedness among undergraduate students.
2. Lower self-regulation is positively related with career indecision among undergraduate students.
3. Girls show high self-regulation and career decidedness as compared to boys among undergraduate students.
4. Age is negatively related with career decision making among undergraduate students.

Methodology

Sample

In this research study purposive sampling technique (non-probability sampling technique) was used for the collection of the requisite information from the undergraduate students. The sample was consisted of \(N=300\) adolescents having boys \(n=149\) and girls \(n=151\). The age range of the sample of the present study was from 16 to 21 years \((M=18.86, SD=1.54)\). The sample of the study was collected from different government and private colleges of Rawalpindi and Islamabad. The age range of the participants is from 16 to 21 years \((M=18.86, SD=1.54)\). The participants included in the research are from 1st year to 4th year undergraduate students. 49.7% were boys and 50.3% were girls who participated in present study.

Measures

The following measures were used to assess the variables of the study.

The Short Form of Self-Regulation Questionnaire (SSRQ)

The SSRQ modified by Carey and Neal (2005) is used in present study. It is a 21 items questionnaire to assess self-regulatory process through self-report. The SSRQ is further divided into two subscales i.e., Impulse Control (consists of 11 items and includes item number 2, 4, 5, 6, 7, 8, 15, 17, 18, 19 and 21) and Goal Setting (consists of 10 items and includes number 1, 3, 9, 10, 11, 12, 13, 14, 16 and 20).
The SSRQ is rated on 5 point likert scale. In this score 1 has been equal to Strongly Disagree, 2 to Disagree, 3 to Uncertain or unsure, 4 to Agree and 5 to Strongly Agree. The SSRQ contains 9 reverse / negatively scored items (item no. 2, 4, 5, 6, 7, 11, 13, 17, 21). The score range of SSRQ is from 21 to 105 and divided into three levels e”81 High (intact) self-regulation capacity, 72 – 80 Intermediate (moderate) self-regulation capacity and d”71 Low (Impaired) self-regulation capacity (Carey et al., 2004). Cronbach’s alpha is also very high as reported by Carey, Neal & Collins (2004) for impulse control factor alpha ranged from .82 to .84. For goal setting factor alpha ranged from .84 to .86.

Career Decision Scale: It was developed by Osipow and adapted by Jones (1989). The scale consists of 25 items. It has three dimensions. Decidedness (7 items), Comfort (6 items), Reasons for being undecided (12 items). Career decision scale contains 5 reverse scored items which are 2, 3, 7, 12, and 16. The scale is 5 point Likert type. 1 has been equal to Strongly Disagree, 2 to Disagree, 3 to Neutral, 4 to Agree and 5 to Strongly Agree. The coefficient alpha is .90 (Jones, 1989). The score ranges from 25 to 125. High scores indicate career decidedness and low scores reflect career indecisiveness.

Procedure

For the data collection of the present study, formal permission was obtained from the principal of colleges. Before administration of questionnaire to students they were briefed pertaining to topic, objectives and significance of this research. After complete know how of this research study consent forms, demographic sheets and short form of self-regulation questionnaire and career decision making scale were given to students for completion with this assurance that their information will be kept confidential and used for this research. During completion process of questionnaires students were provided guidance in full for completion of questionnaires exactly in consonance with their feelings, so that a significant data or information could be
collected. After completion of questionnaires the same collected back with this assurance that all statements rated by each student. After collection of data students and their teachers were thanked for doing the needful.

Results

The data of 300 undergraduate students was analyzed on their scores of short form of self-regulation questionnaire (SSRQ) which is used to measure levels of self-regulation and career decision scale (CDS) measured career decision making. The details of these instruments have been given in the methodology section under instruments to estimate the internal consistency of the scales Cronbach alpha reliability coefficient was computed. Validity estimates of measures were calculated by obtaining subscales inter-correlation and scale total correlation of scales. In order to test propose hypothesis of study independent sample t-test was computed to see significant gender difference to find out relationship between variables correlation analysis was done between target variables. Analysis of variance (ANOVA) is computed to see mean differences between levels of self-regulation on career decision making and Posthoc Bonferroni was computed.

Correlation between Study Variables

Correlation was calculated to find out relationship between age and variables of study i.e., self-regulation its subscales and career decision making.
Self-Regulation and Career Decision Making

Table 1:
Correlation between age, career decision making, self-regulation and its subscales (N=300)

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>r</th>
<th>Age</th>
<th>CDS</th>
<th>SSRQ</th>
<th>IC</th>
<th>GS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>18.86</td>
<td>1.54</td>
<td>-</td>
<td>-14</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CDS</td>
<td>77.83</td>
<td>14.49</td>
<td>.83</td>
<td>-</td>
<td>-.56</td>
<td>-.51</td>
<td>.48</td>
<td></td>
</tr>
<tr>
<td>SSRQ</td>
<td>67.81</td>
<td>12.30</td>
<td>.70</td>
<td>-</td>
<td>-.87</td>
<td>.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IC</td>
<td>33.76</td>
<td>6.64</td>
<td>62</td>
<td>-</td>
<td>.56</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GS</td>
<td>34.06</td>
<td>7.31</td>
<td>76</td>
<td>-</td>
<td>.55</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p< .05, **p< .01 Note. M = Mean, SD = Standard Deviation, α = Cronbach alpha, CDS= Career Decision Scale, SSRQ = Short form of self-regulation Questionnaire, GS = Goal Setting, IC = Impulse Control

Table 1 shows total correlation of present study. There is a negative correlation between age and career decision making. CDS, SSRQ and its subscales are positively correlated with each other and level of significance is .01 and results indicate that there is a positive correlation between self-regulation and career decidedness and 1st hypothesis have been proved.

Prediction of age and Self-regulation on Career Decision Making

Age and self-regulation on career decision making was correlated to each other, so linear regression computed to see the prediction of age and self-regulation on career decision making.

Table 2:
Linear Regression analysis showing effect of age and self-regulation on career decision making (N=300).

<table>
<thead>
<tr>
<th>Predictors</th>
<th>R</th>
<th>R'</th>
<th>β</th>
<th>β</th>
<th>t</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>.14</td>
<td>.02</td>
<td>5.9</td>
<td>.14</td>
<td>-1.32</td>
<td>.54</td>
</tr>
<tr>
<td>SSRQ</td>
<td>.56</td>
<td>.31</td>
<td>1.96</td>
<td>.66</td>
<td>-1.14</td>
<td>.06</td>
</tr>
</tbody>
</table>

Note. CDS = Career Decision Scale, SSRQ = Short Form of Self-regulation Questionnaire, β= Standardized Regression Coefficient

According to Table 2 present study shows that there is significant difference between ages and self-regulation on career decision making among undergraduate students as standardized regression coefficient (β = -14) so there is negative relationship
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between age and career decision making as age increases career decision making becomes poor so research hypothesis is accepted.

Gender Differences

To see gender differences between boys and girls on self-regulation and career decision making, goal setting and impulse control independent sample t-test was computed.

Table 3:

Gender Differences in relation to study Variables (N=300).

<table>
<thead>
<tr>
<th>Scales</th>
<th>Boys (n=149)</th>
<th>Girls (n=151)</th>
<th>t(298)</th>
<th>P</th>
<th>Cohen’s d</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSRQ</td>
<td>66.03</td>
<td>69.58</td>
<td>2.25</td>
<td>.01</td>
<td>.28</td>
</tr>
<tr>
<td>CDS</td>
<td>76.95</td>
<td>78.70</td>
<td>1.05</td>
<td>.30</td>
<td>.12</td>
</tr>
<tr>
<td>GS</td>
<td>32.69</td>
<td>35.40</td>
<td>3.26</td>
<td>.00</td>
<td>.37</td>
</tr>
<tr>
<td>IC</td>
<td>33.34</td>
<td>34.17</td>
<td>1.09</td>
<td>.28</td>
<td>.12</td>
</tr>
</tbody>
</table>

Note: SSRQ = Short Form of Self-Regulation Questionnaire, CDS = Career Decision Scale, GS = Goal Setting, IC = Impulse Control.

Table 3 represents gender differences between boys (n=149) and girls (n=151). There is significant difference between boys and girls on self-regulation. The mean score of girls on short form of self-regulation questionnaire and its subscale goals setting higher than boys which shows that girls scores high on self-regulation than boys among undergraduate students. The results indicate that there is a significant difference between self-regulation that girls scores higher as compared to boys, hence 3rd hypothesis is accepted but on the other hand there is no significant difference between boys and girls on career decision making.

Differences on Levels of Self-regulation on Career Decision Making

Analysis of variance (ANOVA) was calculated to see mean differences on levels of self-regulation on career decision making.
Table 4:
Analysis of variance shows mean differences between levels of self-regulation on career decision making (N=300)

<table>
<thead>
<tr>
<th>Self-Regulation</th>
<th>Low  (n=100)</th>
<th>Moderate (n=100)</th>
<th>High  (n=200)</th>
<th>Mean</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>CDS</td>
<td>77.97</td>
<td>13.28</td>
<td>80.11</td>
<td>11.86</td>
<td>92.18</td>
</tr>
</tbody>
</table>

\*p<.05

Note: CI = Confidence Interval, LL = Lower Limit, UL = Upper Limit, CDS = Career Decision Scale

High-moderate: 12.07 \* 2.59 5.85 16.30
Moderate-low: 6.34 \* 1.76 2.12 10.57
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The above table shows that self-regulation is divided into three levels: 81 High (intact) self-regulation capacity, 72 – 80 Intermediate (moderate) self-regulation capacity and 71 Low (Impaired) self-regulation capacity (Carey et al., 2004). Table 4 illustrate that there is significant relationship between self-regulation and career decision making as higher (intact) self-regulation capacity show more career decisionedness whereas low or (impaired) self-regulation capacity more career indecisiveness which proved 1st and 2nd hypothesis of present study. Therefore Posthoc Bonferroni is used to measure mean differences between levels of self-regulation. Aforementioned table shows that there is a significant difference between each level of self-regulation.

**Gender Differences on Levels of Self-regulation**

To see gender differences between boys and girls on three levels of self-regulation chi-square was computed.

**Table 5:**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Low (n=151)</th>
<th>Moderate (n=149)</th>
<th>High (n=149)</th>
<th>Chi-Square</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Girls</td>
<td>81(53.6%)</td>
<td>47(31.1%)</td>
<td>23(15.2%)</td>
<td>5.22</td>
<td>.07</td>
</tr>
<tr>
<td>Boys</td>
<td>99(66.4%)</td>
<td>35(23.5%)</td>
<td>15 (10.1%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5 shows that percentages of girls (n = 151) on levels of self-regulation is higher than boys (n = 149). However, there is non-significant difference between gender and levels of self-regulation.
Figure 1. Graph represents gender differences on levels of self-regulation. Gender represented on x-axis and percentages on levels of self-regulation are represented on y-axis which shows that girls scores high on levels of self-regulation than boys.

Discussion

The basic aim of this research was to investigate the relationship between the levels of self-regulation and career decision making. In the present study Table 1 illustrate the mean, standard deviation, Cronbach alpha reliability of scales career decision making and self-regulation questionnaire including its subscales goal setting and impulse control. The Cronbach alpha reliability for career decision scale is \( r = .83 \) of the present study and coefficient alpha of career decision scale is .63 as calculated by Ajmal (2002). The Cronbach \( \alpha \) reliability of self-regulation questionnaire \( r = .80 \), and its subscales goal setting \( r = .76 \) and impulse control \( r = .62 \) of present study and Hayee (2004) calculated reliability for self-regulation was .70. It illustrates that positively correlation between career decision scale,
self-regulation and its subscales goal setting and impulse control. The finding of this research shows that there is a negative correlation between age and career decision making (see table 1).

The present study shows that there is a significant difference between age and self-regulation on career decision making among undergraduate students age range from 16 to 21 years (see table 2) and accepted the research 4th hypothesis which is supported by Finucane, Mertz, Slovic and Schmidt (2005) made a critical contrast in choice selection as per age that is as cognitive capacities decrease on account of age, choice making execution may decrease also.

The finding of present study shows that there are significant gender differences as girls score higher on self-regulation than boys ($t = 2.251, p < .05$) (see table 3) which accepts the research 3rd hypothesis. The percentage of girls is higher on levels of self-regulation (see table 5, fig. 1) which is supported by a research finding which shows that women were significantly participated in self-regulation more likely as compared to men and negatively affected by their feelings (Gwyther & Holland, 2011).

The present study shows that there are non-significant gender differences on overall career decision making but there are significant differences on subscale of self-regulation i.e., goal setting (see table 3). The results are not as per proposed research hypothesis. Naidoo (1998) investigated gender and career maturity collapses and discoveries showing that girls in college score higher than boys on vocation development inventories and boys are attitudinally more profession developed, so that is the reason that gender difference are not evident (p. 5).

The result shows that there is significant relationship between self-regulation and career decision making as higher (intact) self-regulation capacity show more career decidedness whereas low or (impaired) self-regulation capacity more career indecisiveness (see
Table 4). As research 1st and 2nd hypotheses are accepted and supported by the research findings shows that high self-regulation is protected with risk associated behaviors except only those people who have low self-regulation (Quinn & Fromme, 2010). In short present study shows that levels of self-regulation play an important role in career decision making among undergraduate students.

Conclusions

The aim of current study was to examine the role of self-regulation on career decision making among under graduate students and explored the differences of age, gender, and year of education of under graduate students. Overall the research findings revealed that higher or intact self-regulation predicts career decidedness whereas low or impaired self-regulation predicts career indecisiveness. The result shows that girls have a higher or intact self-regulation than boys. There was a significant difference between ages on career decision making as age increases career decision making becomes poor.

Limitations

1. It is a self-report inventory so students have not given biased responses and withhold genuine responses.
2. The research was carried out on the undergraduate students of the colleges of twin city. So the findings of this research are not generalizable.
3. In present study age and gender studied as demographic variables while other demographic variables are neglected.
4. The sample was taken only from college undergraduate students not from university undergraduates as they have more exposure and may have better chances to establish career decision ability and self-regulation.
Implications of the Study

The research study provides an understanding of self-regulation and individual career decision making. It has a significance to implement counseling and educational programs on the basis of career exploration and self-regulation processes for college students. This study is founded on past researches and explores role of self-regulation not formerly investigated as an element helpful in the career development process. Prominently investigation of relationship between self-regulation and career decision-making will be a potentially fruitful area of future inquiry. In addition to existing evidence role of self-regulation in prediction of career decision making is potentially helpful for counselors, parents and teachers.

The logical expansion of this finding is that activities which may enhance the basic levels of self-regulation and the subsequent likelihood of career decision making may better prepare adolescents and emerging adults for making decisions about their futures.
References


Research

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