

Self-Regulation as Predictor of Decision Making Styles among Managers of Cellular Companies

Aliya Abdul Hayee and Bushra Hassan

Quaid-i-Azam University

The present study aimed to explore the role of self-regulation in prediction of decision making styles among managers of cellular companies. Short Form of Self-Regulation Questionnaire (Carey & Neal, 2005) and General Decision Making Style Questionnaire (Scott & Bruce, 1995) were used to assess self regulation and decision making styles, respectively. The sample constituted managers of cellular companies ($N = 163$) of Rawalpindi and Islamabad. Findings revealed that self-regulation positively predicted rational, intuitive, and spontaneous decision making styles and negatively predicted the dependant decision making style, whereas it has nonsignificant correlation with avoidant decision making style. No differences were found among three levels of management in relation to self-regulation and decision making styles. Results also showed that men preferred to opt rational decision making style as compared to women. Moreover, young managers use intuitive, dependant, and avoidant decision making styles while older managers follow rational decision making styles.

Keywords: self-regulation, decision making styles, managers, cellular companies

Organizations are complex dynamic fields that are challenged by the demands of change and continuity (Burke & Trahan, 2000; Pettigrew, Woodman, & Cameron, 2001) and personnel are aspiring and working to achieve their personal as well as organizational goals. An individual's effort toward achieving a goal such as advancing the success of a change effort is because of the self-regulation which requires active temperamental processes in cognitive, emotional, and motivational context (Kuhl & Fuhrmann, 1998) as well as better decision making abilities (Scott & Bruce, 1995). For an organization's membership to be fully motivated in support of ongoing change goals,

Aliya Abdul Hayee and Bushra Hassan, National Institute of Psychology, Centre of Excellence, Quaid-i-Azam University, Islamabad, Pakistan.

Correspondence concerning this article should be addressed to Bushra Hassan, Department of Psychology, Women Campus, International Islamic University, Islamabad, Pakistan. E-mail: bushimalik@gmail.com

everyone must experience positive self-regulation in the changing environment for better and effective decision making (Bianco & Schermerhorn, 2004).

Self-regulations' role in social thought and behavior was more highlighted in past three decades as it includes the nature and value of one's projected outcomes, supporting motivation system (Higgins, 2000) which appears to be related to both cognitive and decision styles (Bandura, 2001; Kanfer, 2005; Thunholm, 2003). Very few researches have investigated the broader role of self regulation in decision making (Baron 2004; Brockner, Higgins, & Low, 2004). This omission is partly owing to the fundamental incompatibility that many perceive between decision making and self-regulation (Vancouver, 2000). On the one hand, many approaches to decision making view it as a systematically ordered, linear set of processes, still anchored in the world of determinant risk (Kahneman & Tversky, 2000). Thus the field of decision making is divided into distinct decision making styles that individual use and adapt in response to different task situations. On the other hand, self-regulation is widely viewed as a set of complex psychosocial processes which are neither linear nor well ordered (Vancouver & Day, 2005). Thus combining two areas has proven difficult from both theoretical and methodological perspective.

In fact adaptive decision making has become a focus for the cognitive perspective on decision making (Payne, 1997; Unger & Stahlberg, 2008). Studies have shown that different strategies are selected in response to task and environmental demands and also influenced by personal characteristics including self motivation (Kerstholt & Raaijmakers, 1997; Ranyard, Crozier, & Svenson, 1997). A similar conclusion is reached by Bandura (1997), who argues that generative social cognitive processes, self-efficacy, and self-regulated cognition in particular play a significant role in adaptive decision making with dynamic environments.

Managers make decisions on the basis of their management level as well as their hierarchical position in the organization. Pennino (2000) found that lower level managers displayed the behavioral decision making styles (quest for support, low tolerance for ambiguity, and short term problem solving) whereas managers of higher level displayed the conceptual style of decision making (creativity, risk taking, high tolerance for ambiguity, and cognitive complexity). Researchers (Certo, Connelly, & Tihanyi, 2008) found that top managers mostly make unstructured, novel, uncertain, and risky decisions and with the decrease in management level this capacity also decreases (Blankenship & Miles, 1986; Heller & Yukl, 1969). Men are viewed as logical and analytical problem solvers in

workplace (Loden, 1985) whereas women are believed to be more intuitive and empathetic. There are controversial findings regarding the differences of gender in decision making. Some researchers found that no gender differences exist (Baiocco, Laghi, & D'Alessio, 2008; Loo, 2000; Spicer & Sadler-Smith, 2005) while others found that women are more likely to use avoidant decision making style (Hablemitoglu & Yildirim, 2008). Older adults are more likely to employ intuitive decision making style while younger adults adopt the rational decision making style (Kim & Hasher, 2005). The results further showed that the older adults are less likely to change their decisions because of larger past experience in decision making. Other researchers stated that working memory (Charness & Bieman-Copland, 1992; Craik & Salthouse, 1992) and various cognitive aspects (Briggs, Raz, & Marks, 2001) declines with age thereby limiting older peoples' capacity to monitor decision processes. In comparison with young adults, older adults have slower information processing speed, shorter working memory span, more difficulty inhibiting irrelevant information, and slower activation of relevant information (Chen & Sun, 2003). On the contrary, Dror, Katona, and Mungur (1998) concluded that age does not degrade the quality of decisions' speed.

Very few researchers' attention turned towards the investigation of decision making styles opted by employees as well as managers (Bryant, 2006; Eberlin & Tatum, 2008; Scott & Bruce, 1995) and self-regulation capabilities that focused on individuals as leaders, decision makers, as team members, and as employees with varying degrees of work motivation (Carver & Scheier, 1998; Kanfer, 2005; Wood, 2005). Collectively these research findings reflect the increasingly dynamic nature of contemporary organizational environments, the demand for more adaptive individual thought and behavior, and highlighted the importance of self-directed goal pursuit, i.e., self-regulation (Brown & Eisenhardt, 1997). However, other studies pointed the gaps in these researches (Bandura, 1997; Brockner et al., 2004; Thunholm, 2003), particularly they identified the need for empirical and factual studies about the role of self-regulation in organizational setting specially the influence of self-regulation on people's cognition, decision making, and goal directed behavior (Baron, 2004; Baron & Ward, 2004; Brockner et al., 2004).

Mainly the self-regulations' role in social thought, decision making and behavior (Higgins, 2000) was highlighted in western culture (Thunholm, 2003; Unger & Stahlberg, 2008; Vohs et al., 2008) but the present research is designed to explore the self-regulation capabilities and decision making styles followed by Pakistani

managers. Present study intends to provide empirical evidence about the self-regulation and decision making styles of managers working at different levels, as it has been evident that in the complex turbulent environment self-regulation is more significant (Bandura, 1997; Brockner et al., 2004; Curry, 1983). Self-regulation abilities improved the self-regulation of individuals rather than depleting it (Baumeister, Gailliot, DeWall, & Oaten, 2006; Riaz, Haque & Hassan, 2010). The present study focused the managers of cellular companies as they encountered those situations which require goal setting and impulse control (i.e., self-regulation) and better opportunities for variety of decision making styles. As described earlier managers make decisions on the basis of their management level as well as their hierarchical position in the organization including top managers, middle managers and lower managers. The present research aims to explore the predictive role of self regulation in decisions making of managers; which will help organizations to take substantial steps for enhancing self regulation capacity of their managers leading to constructive decision making within organizations, which will in turn affect organization's success and productivity.

The objectives of present research were to explore the role of self-regulation as a predictor of decision making styles and to determine the impact of different demographics including management level, gender, and age on self regulation and decision making styles within organization. Following hypotheses were formulated in accordance to the stated objectives:

1. Self-regulation positively predicts rational, intuitive, and spontaneous decision making styles and negatively predicts avoidant and dependant decision making styles.
2. Top managers are more likely to adopt intuitive decision making style and middle managers adopt spontaneous decision making style.
3. Female managers are more likely to practice intuitive and avoidant decision making style as compared to their male counterparts.
4. Older managers use intuitive decision making style as compared to young managers.

Method

Sample

A purposive sample of 163 individuals from cellular companies of Rawalpindi and Islamabad participated in the present study.

Inclusion criteria was based on prior defined full time job experience of at least one year and supervision of five employees to ensure that participants were practically involved in different relevant corporate operations including decision making in the organization and requiring appropriate self-regulation. During the selection of sample, prior defined full time job experience of at least one year and supervision of at least five employees was insured to confirm that the participants were practically involved in the different relevant corporate operations and decision making practices.

The hierarchy for level of management was taken from annual reports of respective organizations and sample was divided into three distinct groups including top managers, middle managers and lower managers. Sample constituted men ($n = 81$) and women ($n = 82$), including top managers ($n = 14$), middle managers ($n = 45$), and lower managers ($n = 104$) having lower education level (Bachelor; $n = 38$), middle education level (Masters; $n = 123$), and higher education level (M.Phil and above; $n = 2$). There were young managers (20-30 years; $n = 114$), middle age managers (31-40 years; $n = 25$), and older managers (41 years and above; $n = 24$). These managers had varying experiential levels i.e., less experienced (1-10 years; $n = 129$), moderately experienced (11-20 years; $n = 21$), and highly experienced (21 years and above; $n = 13$). Data was collected from leading cellular companies including Mobilink ($n = 40$), Ufone ($n = 42$), Warid ($n = 41$), Zong ($n = 35$), and Telenor ($n = 35$).

Instruments

The Short Form of Self-Regulation Questionnaire (SSRQ).

The scale was developed by Carey and Neal (2005) was used in the present study. It's a 5-point rating scale with 21 items, based on the Self-Regulation Questionnaire (SRQ; Brown, Miller, & Lawendowski, 1999) to assess self regulatory processes through self report. It was designed to assess self-regulatory capacity across the seven processes of self-regulation. The SSRQ measures self regulation with the help of following two dimensions i.e., Impulse Control (11 items) and Goal Setting (10 items). Reported content validity, item-total correlation, and internal consistency (Cronbach's alpha) was very high (Carey & Neal, 2005). The score 1 is equal to *Strongly Disagree* and 5 to *Strongly Agree*, while 9 items are reverse scored. The minimum and maximum score of SSRQ ranged from 21 to 105 and divided into three categories i.e., ≥ 81 high (intact) self-regulation capacities, 72 to 80 moderate self-regulation capacity, and ≤ 71 low/impaired self-regulation capacities. Sample item of scale include "I usually keep

track of my progress towards my goal", "As soon as I see a problem or challenge, I start looking for possible solutions". All items showed significant positive correlation with total SSRQ scores ranging from .49 to .79 ($p < .05$).

General Decision Making Style Questionnaire (GDMSQ).

The scale was developed by Scott and Bruce (1995). It contained 25 items which were characterized as Rational Decision Making Style, Intuitive Decision Making Style, Dependent Decision Making Style, Avoidant Decision Making Style, and Spontaneous Decision Making Style (5 items in each subscale). High score on each subscale indicated greater use of respective decision making style and low score reflected less use of that decision making style. Furthermore internal consistency and factor stability were found adequate (Scott & Bruce, 1995). GDMSQ is a 5-point Likert scale where score 1 is equal to *Strongly Disagree* and 5 is equal to *Strongly Agree* and the score on each subscale ranged from 5 to 25. Sample items of scale include "I often need help of other people while making decisions", "I rarely make decisions without taking opinions from others". All items showed significant positive correlation with their respective subscales ranging from .54 to .78, ($p < .05$) which reflected construct validity of the scale.

Procedure

For data collection cellular companies of Rawalpindi and Islamabad were approached. Permission was acquired from the higher authorities of particular organizations to allow their managers to fill the given questionnaires. After having informed consent of managers they were briefed about the purpose of research. Questionnaires were presented to them and asked to rate their responses against each item honestly while ensuring confidentiality of information collected from them.

Results

The present study aimed to investigate the role of self-regulation in prediction of decision making styles. The correlation between self regulation and decision making styles were determined. Hierarchical regression was applied to determine the role of self-regulation in prediction of decision making styles. Moreover, One-Way ANOVA and *t*-test were used to explain differences in relation to level of management, gender, and age differences, respectively.

Table 1

Means, Standard Deviations, Cronbach Alpha and Inter scale correlations between Subscales of GDMSQ and SSRQ

Variables	M(SD)	α	Rational	Int	Dep	AV	SP
SSRQ	68.96(6.4)	.70	.55**	.44**	-.43**	-.10	.46**
Rational	11.71(4.6)	.83	—	-.39**	-.55**	-.45**	.29**
Int	16.31(4.4)	.77		—	-.58**	-.14	.52**
Dep	17.66(3.3)	.59			—	-.17*	.28**
AV	20.89(2.6)	.62				—	-.15
SP	15.83(3.3)	.63					—

* $p < .05$, ** $p < .01$

Note. Int = Intuitive; Dep = Dependant; AV = Avoidant; SP = Spontaneous

Reliability of SSRQ was found to be .70, whereas the subscales of GDMSQ that is Rational (.83), Intuitive (.77), Dependant (.59), Avoidant (.62), and Spontaneous (.63) were also found adequately reliable. The above Table shows inter scale correlations between the SSRQ and subscales of GDMSQ. Self-regulation has significant positive correlation with rational, intuitive, and spontaneous decision making styles. Whereas Self-regulation has negative significant correlation with dependant decision making style and nonsignificant correlation with avoidant decision making.

Table 2

Hierarchical Regression Analysis of Self-Regulation as predictor of Decision Making Styles

Predictors	R ²	ΔR^2	B	SE	β	t	p
Step 1							
Constant	.30	.29	59.31	1.11			
Rational			.78	.11	.56	9.2	.000
Step 2							
Constant	.19	.19	58.31	1.73			
Intuitive			.20	.11	.14	6.3	.000
Step 3							
Constant	.18	.18	54.79	2.21			
Dependent			-.03	.15	-.01	5.2	.000
Step 4							
Constant	.01	.00	75.08	1.11			
Avoidant			-.29	.19	-.11	1.5	.131
Step 5							
Constant	.21	.20	55.53	2.21			
Spontaneous			.84	.13	.43	6.2	.000

Hierarchical regression analysis was carried out by leaving other demographic variables with respect to predictability as it lacks theoretical support for hierarchical regression analysis. Table 2 showed that self-regulation as a predictor variable has significant positive effect on rational, intuitive, and spontaneous decision making styles and significant negative effect on dependent decision making style while nonsignificant effect on avoidant decision making. Self regulation as predictor accounted for 30.2% variance in the dependent variable i.e., rational decision making style 19.6% variance in intuitive decision making style, 18.8% variance in the dependent decision making style, 1% variance in the avoidant decision making style, and 21% variance in the spontaneous decision making style.

Level of Management, Gender, Age, Decision Making Style, and Self-Regulation

In order to see the difference between level of management, age decision making styles, and self regulation, the sample was divided into three groups and ANOVA was computed while for the gender differences *t* analysis was computed and the results are as follows:

Table 3

One way Analysis of Variance of SSRQ and Subscales of GDMSQ on Three Levels of Management

Variables	Top Managers	Middle Managers	Lower Managers	<i>F</i>	<i>p</i>
	(<i>n</i> = 14) <i>M</i> (<i>SD</i>)	(<i>n</i> = 45) <i>M</i> (<i>SD</i>)	(<i>n</i> = 104) <i>M</i> (<i>SD</i>)		
SSRQ	68.85(4.36)	69.77(7.45)	68.6(2 6.3)	0.49	.611
GDMSQ					
Rational	9.93(3.67)	12.08(4.34)	11.78(4.87)	1.19	.310
Intuitive	15.07(4.53)	15.73(4.16)	16.72(4.54)	1.37	.257
Dependent	16.14(1.35)	17.51(3.06)	17.93(3.54)	1.89	.153
Avoidant	21.21(2.08)	20.97(2.76)	20.81(2.65)	0.18	.830
Spontaneous	14.64(2.21)	16.4(3.5)	15.7(3.41)	1.56	.210

Between groups *df* = 2; within groups *df* = 160; groups total *df* = 162

Results in Table 3 showed nonsignificant differences on three levels of management in relation to SSRQ and GDMSQ. It indicates level of management has no effect on decision making styles and self-regulation.

Table 4

Means, Standard Deviations and t-values on SSRQ and Subscales of GDMSQ for Male and Female Managers

Variables	Male Managers (n = 188)	Female Managers (n = 112)	t(161)	p	95% CI		Cohen's d
	M(SD)	M(SD)			LL	UL	
SSRQ	68.07(6.0)	69.84(6.8)	1.12	.268	-3.7	.2	-0.27
GDMSQ							
Rational	12.98(5.1)	10.42(3.6)	3.65	.000	-3.9	-1.1	0.57
Intuitive	16.85(4.2)	15.77(4.5)	1.56	.120	-.2	2.4	0.24
Dependent	17.17(2.7)	18.15(3.7)	1.89	.060	-1.9	.03	-0.30
Avoidant	20.96(2.2)	20.81(2.9)	.35	.724	-.6	.9	0.06
Spontaneous	16.35(3.6)	15.31(2.9)	1.97	.050	-.00	2.0	0.32

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Table 4 showed nonsignificant differences between male and female managers on SSRQ. Further, nonsignificant gender differences were found on four subscales of GDMSQ i.e., Intuitive, Dependant, Avoidant, and Spontaneous, whereas male managers mostly adopt Rational Decision Making Style as compared to women.

Table 5

Means, Standard Deviations, and F-values of SSRQ and Subscales of GDMSQ on Three Levels of Age

Variables	Young Managers (n = 114)	Middle Mangers (n = 25)	Older Managers (n = 24)	F	p
	M (SD)	M (SD)	M (SD)		
SSRQ	68.72(6.64)	68.36(7.31)	70.71(4.47)	1.05	.352
GDMSQ					
Rational	9.45(3.48)	11.84(4.95)	12.16(4.69)	3.45	.034
Intuitive	16.88(4.42)	15.56(3.57)	14.33(4.88)	3.80	.024
Dependent	18.34(3.26)	16.4(2.56)	15.75(3.12)	9.09	.000
Avoidant	22.08(2.20)	20.4(2.25)	20.75(2.73)	3.16	.045
Spontaneous	15.97(3.38)	15.64(3.53)	15.33(3.13)	0.403	.669

Between groups $df=2$; within groups $df=160$; groups total $df=162$

Table 5 showed nonsignificant differences among three levels of age on self-regulation. Whereas significant mean differences were indicated on four subscales of GDMSQ that is young managers use Intuitive, Dependant, and Avoidant Decision Making Styles, while older managers follow Rational Decision Making Style.

Discussion

The basic aim of this research was to investigate the role of self-regulation as predictor of decision making styles among employees of cellular organizations. Additionally the other aim was to determine the impact of different demographics including management level, gender, and age on self regulation and decision making styles.

The first hypothesis predicting positive relationship between self-regulation and rational, intuitive, and spontaneous decision making styles was supported by the results. Self-regulation is a systematic process of human thought and behavior that involves setting personal goals and steering towards the achievement of these goals (Higgins, 2002) and rational decision making style also involves the deliberate analysis and evaluations of alternatives to reach on an ideal goal (Gross, Crandall, & Knoll, 1980). Moreover intuitive and spontaneous decision making style is also based on the interplay of cognitive and affective processes (Howlet, Kees, & Kemp, 2008; Scott & Bruce, 1995; Sinclair & Ashkanasy, 2005). The findings of present study ascertain the important role of self regulation in effective decision making for meeting organizational goals and objectives. Few studies have investigated the role of self-regulatory processes in terms of adaptive decision making (Payne, 1997; Vancouver, 2000; Vacouver & Day, 2005). In fact adaptive decision making i.e. rational, intuitive, and spontaneous has focused on the cognitive perspective of decision making. Studies have shown that different strategies are selected in response to task and environmental demands and also influenced by personal characteristics (Kerstholt & Raaijmakers, 1997; Ranyard et al., 1997). Similarly it has been concluded that self-regulated cognition in particular play a significant role in adaptive decision making with dynamic environments (Bandura, 1997). The current results are consistent with Thunholm (2003) findings which indicated that rational, intuitive, and spontaneous decision making styles of Swedish military officers' has been partly predicted by self-esteem and motivation.

The first hypothesis also assumed that self regulation will negatively predict avoidant and dependent decision making styles; was partially supported as results showed that self-regulation

negatively predict the dependent decision making style. Further self-regulation showed nonsignificant prediction of avoidant decision making style. These findings are in line with earlier evidence which revealed that the dependant and avoidant decision-making styles could not be predicted from scores on the self-esteem and motivation scales and from scores on the action control scales (Thunholm, 2003). The result indicated that decision making style is not only reflective of habits and thinking practices as proposed in earlier researches (Bryant, 2006; Thunholm, 2003). Decision making style also involves basic self-evaluation and the general ability to initiate and maintain intentions i.e. self-regulation.

Findings of the second hypothesis revealed nonsignificant differences among management levels on SSRQ and GDMSQ. The results are consistent with the findings of Riaz (2009). Contextual factors (task characteristics and problem solving) play a vital role in determining the suitability and effectiveness of decision making at each management level (Rowe & Boulgardies, 1992). Certain environments where complete information is available, probabilities are known, and outcomes are predictable require the managers to make effective decisions in ideal context. The only work of the decision maker is to identify the most ideal and best alternative from the information in hand (Cohen, March, & Olsen, 1972).

Furthermore Klein (2003) concluded that decisional environments filled with uncertainty, change, time pressure, ill-structured tasks, and ambiguity are more appropriate for intuitive decision making (Smith, 2008), whereas cellular companies serving in Pakistan are more structured organized, and well established, minimizing the chances of intuition based decision making. Whichever the decision making style followed by the managers, it depends upon various individual as well as organizational factors including thinking styles, mood states, organizational culture and norms, domain specificity, and problem structure (Smith, 2008; Sinclair & Ashkanasy as cited in Sadler-Smith & Sparrow, 2008).

Individuals have one primary, one secondary, and one least preferred style and there exist one or more than one points of convergence between all the decision making styles. It is one of the many reasons that most individuals employ decision styles in conjunction (Driver, Brousseau, & Hunsaker, 1993; Singh & Greenhaus, 2004). Further, decisions styles are widely based on the risk and uncertainty in the surrounding environment and situation (Certo et al., 2008) and identical scenario of current uncertainty in our country might have changed or disturbed their decision making styles as well, thereby, leading to nonsignificant difference in management

levels. Moreover, level of pressure experienced by managers at the time of decision making determines when they will take shift from their dominant to backup decision making style (Driver et al., 1993).

Nonsignificant differences were also found among three levels of management on self-regulation. Baumeister et al. (2006) found that the regular exercise in self-regulation produce improvement in self-regulation (which is the ability to plan, guide, and monitor one's behavior flexibly in the face of changing circumstances) and most private organizations allow their managers to make decisions on their own.

The present study indicated significant mean differences between male and female managers on only one subscale of GDMSQ that is: Rational. These results are consistent with earlier findings (Loo, 2000) which found that male managers are more likely to adopt rational decision making style as compared to their female counterparts. Prior researches have concluded that men are highly inclined towards the use of rational decision making styles as compared to women (Loden, 1985). On the other hand, studies (Agor, 1989; Baiocco et al., 2007; Bryant, 2006) found no gender differences in self-regulation. There are controversial findings in gender context of decision making and decision making styles (Baiocco et al., 2007; Brenner & Bromer, 1981). Probable explanation would be that women are increasingly joining the work force and working in diverse organizational setups such as cellular companies, which are considered as nontraditional occupations for women. Therefore, the women's increased level of motivation and self regulation enables them to survive and strive as equal to men, which is reflected as nonsignificant difference in self-regulation capacity of both men and women.

Results indicated nonsignificant differences among three levels of age on self-regulation it could be the fact as previous researches have concluded that gender and age are nonsignificant factors in self-regulation (Grant & Higgins as cited in Bryant, 2006). With reference to decision making styles, results indicated significant differences across the different age groups revealing young managers scoring high on intuitive, dependent, and avoidant whereas, older managers opted for rational decision making styles. Several researchers (Baiocco et al., 2008; Loo, 2000; Riaz, 2009) found that older adults use rational decision making style more than intuitive, avoidant, and spontaneous decision making styles. As this age is marked with wisdom and generosity, these people think of different alternatives and plan their course of action before actually executing the decisions. Similarly, older and younger adults are similar in their cognitive processes involving risk taking behavior (Dror et al., 1998). Younger

managers are found having high score on intuition; as intuition adds value when making judgment calls, managing unforeseeable, and when creativity and innovation are necessary. Younger people are also more willing to take risk and like to seek creativity and innovation leading to the higher use of intuition as their decision making strategy (Aaohn, 1999).

Limitations and Suggestions

Despite the usefulness of present study in Pakistani organization, few limitations have also been observed. In the present study while assessing the role of self-regulation in decision making, it was impossible to control all the individuals and organizational factors such as task characteristics, situational and dispositional factors, as well as the individuals own personality and cultural background.

Secondly self-reported measures were used in assessing self-regulation and decision making styles which might have affected the responses as the self-reported scales are vulnerable for response bias and fake good on part of participant (Curry, 1983). Further the sample consists of only the managers of cellular companies which may reduce the generalizability of present findings to other organizational setups. Future researches may also consider organizational variables like organization's culture, communication climate, emotional intelligence, and hierarchical structure that would be effecting self-regulation and decision making aspects. Moreover, multiple rating sources should also be incorporated which can be rated by the participants, their subordinates as well as their bosses as it will reduce biases.

Implications

Present study is an initiative to assess the predictive role of self-regulation in decision making styles. The investigation of individual and organizational factors increases the worth as well as theoretical and practical implication of the current study. This research has vast implications in the organizational setup as it can be used in developing positive self-regulatory abilities and can further provide a comparative analysis of different personnel, their self-regulation abilities, and decision making styles. While exploring the relationship between these two variables organizations as well as employees, can individually suggested to take substantial steps for enhancing self-regulation capacity by motivating them and increasing their morale

which will further results in more dynamic and constructive decision making within organization as per requirement of the present day challenges.

Additionally, in the current economic recession it is highly important to understand and judge these variables as both variables are important for the success and failure of the organization because managers are the most affected members of the organization and their decisions are vital in failure and success of organization.

Conclusion

Overall research findings revealed that self-regulation positively predicted the rational, intuitive, and spontaneous decision making styles and negatively predicted the dependant decision making style; whereas nonsignificant prediction was found with avoidant decision making style. Nonsignificant differences were observed among three levels of management on self-regulation and decision making styles. Results showed that men preferred to use rational decision making style, while young managers employ intuitive, dependant, and avoidant decision making styles and older managers follow rational decision making style.

References

- Agor, W. (1989). *Intuition in organizations*. London: Sage Publications.
- Aaohn, J. (1999) Intuition comes of age: Workplace applications of intuitive skill for occupational and environmental health nurses. *Occupational Review*, 47(4), 156-162.
- Baiocco, R., Laghi, F., & D' Alessio, M. (2008). Decision making style among adolescents: Relationship with sensation seeking and locus of control. *Journal of Adolescence*, 20, 1-14.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Bandura, A. (2001). Social Cognitive theory: An agented perspective. *Annual Review of Psychology*, 52, 1-26.
- Baron, R. A. (2004). The cognitive perspective: A valuable tool for answering entrepreneurship's basic why questions. *Journal of Business Venturing*, 19(2), 221-239.
- Baron, R., & Ward, T. (2004). Expanding entrepreneurial cognition's toolbox: Potential contributions from the field of cognitive science. *Entrepreneurship Theory and Practice*, 28, 553-573.

- Baumeister, R. F., Gailliot, M., DeWall, C. N., & Oaten, M. (2006). Self-regulation and personality: How interventions increase regulatory success, and how depletion moderates the effects of traits on behavior. *Journal of Personality*, 74, 1773-1801.
- Bianco, A. T., & Schermerhorn, J. R. (2004). *The role of self-regulated strategic leadership in organizational change: An exploratory dispositional model*. Lincoln: University of Nebraska.
- Blankenship, L. V., & Miles, R. E. (1986). Organizational structure and managerial decision behavior. *Administrative Science Quarterly*, 13, 106-120.
- Brenner, O. C., & Bromer, J. A. (1981). Sex stereotypes and leader behaviour as measured by the agreement scale for leadership behavior. *Psychological Reports*, 48, 960-969.
- Briggs, S. D., Raz, N., & Marks, W. (2001). Age related deficits in generation and manipulation of mental images: The role of sensorimotor speed and working memory. *Psychology and Aging*, 16(3), 449-456.
- Brockner, J., Higgins, E. T., & Low, M. B. (2004) Regulatory focus theory and the entrepreneurial process. *Journal of Business Venturing*, 19(2), 203-220.
- Brown, S. L., & Eisenhardt, K. M. (1997). The art of continuous change: Linking complexity theory and time paced evolution in relentlessly shifting organizations. *Administrative Science Quarterly*, 42, 1-34.
- Brown, J. M., Miller, W. R., & Lawendowski, L. A. (1999). The self-regulation Questionnaire. In L. VandeCreek & T. L. Jackson (Eds.), *Innovation in clinical practice: A sourcebook* (Vol. 17, pp. 281-292). Sarasota: Professional Resource Press/Professional Resource Exchange.
- Bryant, P. T. (2006). *The role of self-regulation in decision making by entrepreneurs* (Unpublished doctoral dissertation). Macquarie University, Sydney, Australia. Retrieved from www.http://sydney.edu.au/business/_data/assets/pdf_file/0005/93218/ResearchReview_2009_2010.pdf
- Burke, W.W., & Trahan, B. (2000). *Business climate shifts: Profiles of change makers*. Boston: Butterworth Heineman.
- Carey, K. B., & Neal, D. J. (2005). A follow-up psychometric analysis of self-regulation questionnaire. *Addictive Behavior*, 19(4), 414-422.
- Carver, C. S., & Scheier, M. F. (1998). *On the self-regulation of behavior*. Cambridge: Cambridge University Press.
- Certo, S. T., Connelly, B. L., & Tihanyi, L. (2008). Managers and their not-so rational decisions. *Business Horizons*, 51(2), 113-119.
- Charness, N., & Bieman-Copland, S. (1992). The learning perspective: Adulthood. In R. J. Stenberg & C. A. Berg (Eds.), *Intellectual development* (Vol. 2, pp. 287-302). New York: Cambridge University Press.

- Chen, Y., & Sun, Y. (2003). Age differences in organizational decision making: Using simple heuristics. *Educational Gerontology*, 29, 627-635.
- Cohen, M. D., March, J. G., & Olsen, J. P. (1972). A garbage-can model of organizational choice. *Administrative Science Quarterly*, 17(1), 1-25.
- Craik, F. I. M., & Salthouse, T. A. (1992). *The handbook of aging and cognition*. Hillsdale, NJ: Erlbaum.
- Curry, L. (1983, April). *An organization of learning styles theory and constructs*. ERICNo.ED 225185, paper presented at annual meeting of American Educational Research Association, Montreal.
- Driver, M. J., Brousseau, K. E., & Hunsaker, P. L. (1993). *The dynamic decision maker*. San Francisco: Jossey Bass Publications.
- Dror, I. E., Katona, M., & Mungur, K. (1998). Age difference in decision making: To take a risk or not? *Gerontology*, 44, 67-71.
- Eberlin, R. J., & Tatum, B. C. (2008). Making just decisions: Organizational justice, decision making, and leadership. *Management Decision*, 46(2), 310-329.
- Gross, I. H., Crandall, E. W., & Knoll, M. M. (1980). *Management for modern families*. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Hablemitoglu, S., & Yildirim, F. (2008). The relationship between perception of risk and decision making styles of Turkish university students: A descriptive study of individual differences. *World Applied Sciences Journal*, 4(2), 214-224.
- Heller, F. A., & Yukl, G. (1969). Participation, managerial decision making, and situational variables. *Organizational Behavior and Human Performance*, 4, 227-241.
- Higgins, E. T. (2000). Making a good decision: Value from fit. *American Psychologist*, 55(11), 1217-1230.
- Higgins, E. T. (2002). How self regulation creates distinct values; the case of promotion and prevention decision making. *Journal of Consumer Psychology*, 12(3), 177-191.
- Howlet, E., Kees, J., & Kemp, E. (2008). The role of self-regulation, future orientation, and financial knowledge in long-term financial decisions. *The Journal of Consumer Affairs*, 42, 223-242. Retrieved from <http://www.encyclopedia.com/doc/1G1-180552478.html>
- Kahneman, D., & Tversky, A. (2000). *Choices, values, and frames*. Cambridge: Cambridge University Press.
- Kanfer, R. (2005). Self regulation research in work and I/O psychology. *Applied Psychology*, 54(2), 186-191.
- Kerstholt, J. H., & Raaijmakers, J. G. (1997). *Decision making in dynamics task environments' decision making: Cognitive models and explanations*. London: Rutledge.

- Kim, S., & Hasher, L. (2005). The attraction effect in decision making: Superior performance by older adults. *Quarterly Journal of Experimental Psychology*, 58(1), 120-133.
- Klein, G. (2003). *Intuition at work*. New York: Bantam Dell.
- Kuhl, J., & Fuhrmann, A. (1998). In J. Heckhausen & C. S. Dweck (Eds.), *Motivation and self-regulation across the life span* (pp. 15-49). Cambridge: Cambridge University Press.
- Loden, M. (1985). *Feminine leadership: On how to succeed in business without being one of the boys*. New York: Times Books.
- Loo, R. (2000). A psychometric evaluation of the general decision-making style inventory. *Personality and Individual Differences*, 29(5), 895-905.
- Payne, J. W. (1997). *The scarecrows search: A cognitive psychologist's perspective on organizational decision making*. Cambridge: Cambridge University Press.
- Pennino, C. M. (2000). *The relationship between managerial decision making styles, principled reasoning, and selected variables in business organizations* (Unpublished doctoral dissertation). Department of Business Education, New York University. Retrieved from http://www.blm.gov/pgdata/etc/medialib/blm/nv/culturalreports/cultural.resource.Par73523.File.dat/greatbasin_archaeology.pdf
- Pettigrew, A. M., Woodman, R. W., & Cameron, K. S. (2001). Studying organizational change and development: Challenges for future research. *Academy of Management Journal*, 44, 697-713.
- Ranyard, R., Crozier, W. R., & Svenson, O. (1997). *Decision making: Cognitive model and explanations*. New York: Rutledge.
- Riaz, M. N. (2009). *Leadership styles as predictor of decision making styles* (Unpublished M.Phil. dissertation). National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan.
- Riaz, N., Haque, A., & Hassan, B. (2010). Role of individual and organizational factors in decision making. *Pakistan Journal of Psychology*, 41(1), 14-62.
- Rowe, A. J., & Boulgardies, J. D. (1992). *Managerial decision making: A guide to successful business decisions*. New York: McMillan.
- Sadler-Smith, E., & Sparrow, P. R. (2008). *Intuition in organizational decision making: The oxford handbook of organizational decision making*. Oxford: Oxford University Press.
- Scott, S. G., & Bruce, R. A. (1995). Decision making style: The development and assessment of a new measure. *Educational and Psychological Measurement*, 55(5), 818-831.
- Sinclair, M., & Ashkanasy, N. M. (2005). Intuition: Myth or a decision making tool. *Management Learning*, 36(3), 353-370.

- Singh, R., & Greenhaus, J. H. (2004). The relation between career decision-making strategies and person job-fit: A study of job changers. *Journal of Vocational Behavior*, 64(1), 198-221.
- Spicer, D. P., & Sadler-Smith, E. (2005). An examination of the General Decision Making Style Questionnaire in two UK samples. *Journal of Management Psychology*, 20(2), 137-149.
- Smith, S. L. (2008). The Role of intuition in collective learning and the development of shared meaning. *Advances in Developing Human Resources* 10(4), 494-508.
- Thunholm, P. (2003). Decision making styles: Habit, style or both? *Personality and Individual Differences*, 36(4), 931-944.
- Unger, A., & Stahlberg, D. (2008). *The influence of self-regulation on decision making*. Germany: University of Mannheim.
- Vancouver, J. B. (2000). Self Regulation in organizational settings: A Tale of two paradigms. In M. Boekaerts & P. R. Pintrich (Eds.), *Handbook of self regulation* (pp. 303-341). San Diego: Academic Press.
- Vancouver, J. B., & Day, D. V. (2005). Industrial and organizational research on self regulation: From construct to applications. *Applied Psychology*, 54(2), 155-185.
- Vohs, K. D., Baumeister, R. F., Schmeichel, B. J., Twenge, J. M., Tice, D. M., & Nelson, N. M. (2008). Making choices impairs subsequent self-control: A limited resource account of decision making, self-regulation, and active initiative. *Journal of Personality and Social Psychology*, 94, 883-898.
- Wood, R. (2005). New frontiers for self-regulation research in I/O psychology. *Applied Psychology*, 54(2), 192-198.

Received August 17, 2010
Revision received April 14, 2011