

# Decision-making Styles predicting Decisional-Procrastination among College Principals

**Mohsin Atta(PhD)**, Assistant Professor, Department of Psychology, University of Sargodha, Sargodha, Pakistan

**Najma Iqbal Malik (PhD)**, Associate Professor, Department of Psychology, University of Sargodha, Sargodha, Pakistan

**Irsa Fatima Makhdoom (PhD)**, Lecturer, Department of Psychology, University of Sargodha, Sargodha, Pakistan.

**Nafeesa Fiaz**, M.Phil Scholar, Department of Psychology, University of Sargodha, Sargodha, Pakistan

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**Abstract.** The current study aimed to examine the impact of decision-making styles (DMS) on decisional procrastination in college principals (N=199) by viewing the construct from a multidimensional perspective. General Decision-making Style Questionnaire (Scot and Bruce, 1995) and Decisional Procrastination Scale (Mann, 1982) was used to measure the study variables. Data was collected through a postal survey and direct approach by the researcher. Purposive convenient sampling technique was used to collect the data. A correlational survey research design was used in the current study. The pattern of results indicated that rational style decision-making style negatively predicted decisional procrastination while avoidant decision-making style was a significant positive predictor of decisional procrastination. The result showed that dependent and spontaneous decision styles were not predictors of decisional procrastination. In the end, practical implications and theoretical implications are discussed along with future directions.

**Keywords:** Decision-making-styles (DMS), decisional-procrastination, standard-DMS, discrepancy-DMS, rational-DMS, intuitive-DMS, avoidant-DMS, spontaneous-DMS.

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## 1. Introduction

Decision-making is the basis of management systems. The life span of any organization depends on the quality of decisions being made (Bursalioglu, 1998). Administrators have to make effective and prompt decisions but if a leader starts to make impaired or faulty decisions, or leaves today's work for tomorrow whole organization might suffer. There are different decision-making styles (DMS), and every DMS serve to create a different behavioural pattern. One such pattern is procrastinator behaviour, or defensive avoidance also known as procrastination. College principals are prone to high degrees of stress due to their demanding position, responsible to make many different decisions for the welfare of their organization, but their demanding and stressful position might reduce their ability to consider all the alternatives available. To avoid faulty decisions proper information search should be made prior to decision-making (Mann, Burnett, Radford & Ford, 1997). In this article different decision-making styles are explored among college principals and their relation is observed with decisional procrastination.

### 1.1. Decision-making

Decision-making is a condition for making choice from multiple options (Ugurlu, 2013). In college setting principals as administrative heads, bear the responsibility to resolve the problems encountered by the faculty. They are also responsible for tackling organizational issues by taking the exact decisions necessary for the improvement of the organization. On the other hand, it is also necessary to understand that the decision-making process is a hectic exercise, which requires certain acts including pondering upon the problem, searching for relevant information, identifying possible solutions and finalizing the best them (Brim, 1962). Administrators possess different decision-making styles (DMS). The presence of different DMS results in various quality of decisions. The way the decision-making process is pursued plays a prominent role in the completion of organizational tasks.

Decision-making style is defined as a response pattern cultivated by habits during decision-making (Driver, 1979). It is also worth knowing that individuals respond to decision-making tasks based on a combination of cognitive processes and tendencies. According to Rowe and Mason (1987), the term decision-style means the way a person uses the information to formulate a decision. Driver, Brousseau, and Hunsaker (1990) combined two dimensions that are information use and solution focus and proposed five DMS that are decisive, hierarchic, flexible, integrative and systematic.

Scott and Bruce (1995, p.820) defined DMS as “the learned habitual response pattern presented by an individual when challenged with a decision situation”. It is not a personality trait, but a habit-based propensity and is predictive of how an individual will react in a specific decision situation. Scott and Bruce noted some gaps between the theoretical skeleton of research on DMS. They deduced that the reason could possibly be the unavailability of reliable instruments to measure DMS. Therefore, Scott and Bruce developed a questionnaire to measure DMS named as “General Decision-making Questionnaire”. Based on earlier research like Driver (1979) and Driver et al. (1990) they identified that individuals cannot be described in terms of a single style but they have a profile of different styles. They presented five DMS including rational, intuitive, dependent, spontaneous, and avoidant described below:

#### 1.1.1. *Rational Decision-making Style*

It is a logical and structured approach to decision-making. In this style search for information, the assessment of information, and the evaluation of the information are all carried out in a logical manner. This style is characterized by a comprehensive information search and the invention of a number of different alternatives. This system is primarily intentional, analytic, primarily verbal, and comparatively emotion-free (Tversky & Kahneman, 1983).

#### 1.1.2. *Intuitive Decision-making Style*

It is defined as sensing or perceiving something without the use of a rational process. It is characterized by a non-sequential information processing mode. It is also characterized by both cognitive and affective features and results in direct knowing without any use of conscious reasoning (Sinclair & Ashkanasy, 2005). Instead of a planned and systematic quest for information, this decision style is characterized by attention to detail in the flow of information. It is characterized by a predisposition to rely on instincts and feelings. Informal and unstructured reasoning is used to reach an informal conclusion (Kahneman & Tversky, 1982).

#### 1.1.3. *Dependent Decision-making Style*

This style emphasizes seeking guidance and advice from those having sheer comprehension of the matter before making a worthy and valuable decision. Although in certain cases it becomes inevitable to gain help from others in various forms in this style of decision individuals are not ready to take personal responsibility for a decision so they try to shift responsibility to someone else by seeking the advice of others (Argyropoulou & Sidiropoulou, 2003). When individuals are incapable of carrying

out a deliberate thinking process and are preoccupied with disturbing thoughts during decision-making they tend to adopt a dependent style (Scoot & Bruce, 1995).

#### 1.1.4. *Avoidant Decision-making Style*

Avoidant DMS is the opposite of a rational approach. According to Scott & Bruce (1995), it involves indecision, postponing, avoiding and delaying the decision and keeping oneself away from making a decision. Avoidant DMS is unproductive and is attributed to a lack of self and environmental awareness. Individuals having this style are controlled by external factors instead of internal factors (Scoot & Bruce, 1995).

#### 1.1.5. *Spontaneous Decision-making Style*

This decision style is characterized by feelings of and a need to be over and done with the decision-making process as quickly as possible. This style comprises thought chunking and, the concentration is focused on the information as a whole instead of analyzing the information in part (Coscarelli, 2007). According to Scott and Bruce (1995), spontaneous style is an attempt to make a decision in the spur of the moment.

A balanced approach to decision-making is necessary (Spicer & Sadler-Smith, 2005) otherwise faulty pattern of behaviour might emerge i.e., decisional procrastination.

### 1.2. *Procrastination*

The word "Procrastination" has a Latin origin from the word "procrastinate which," means "forward and tomorrow". So procrastination means putting off or postponing until another day (Ferrari, Johnson & McCown, 1995). In the past procrastination was regarded as the behavioural manifestation of inefficient time management, but recent research suggests that it is more than inefficient time management. Today procrastination is considered a disposition of characteristics that involve emotional, behavioural and cognitive components (Aremu, Williams, & Adesina, 2011). Two areas of procrastination are focused on in literature. The first one is behavioural procrastination which is characterized by task delays. The second one is a cognitive component which is also known as decisional delays (Ferrari et al. 1995).

Behavioural procrastination is comprised of two types. The first one is avoidant procrastination which is a coping tactic characterized by attempts to avoid tasks perceived as unpleasant, because of low self-confidence and self-esteem (Hammer & Ferrari, 2002). The second one is the arousal procrastination approach (Ferrari, Johnson & McCown, 1995) to task performance in which one purposely waits until the last minute. This delay in task is intended to experience a euphoric rush, or thrill during task completion. These individuals enjoy having a deadline and working under pressure (Hammer & Ferrari, 2002).

Milgram and Tenne (2000) demonstrated that many studies concentrated on behavioural procrastination but a few focused on decisional procrastination, having said that, the present article will be directed to fill this research gap and will explore decisional-procrastination tendencies among college principles.

#### 1.2.1. *Decisional Procrastination*

It is a maladaptive pattern of postponing a decision when faced with conflicts and choices (Ferrari, Johnson & McCown, 1995). This coping pattern is used when there is an intense conflict about an important decision and the decision-maker tries to escape the conflict (Janis & Mann, 1977). Decisional procrastination is divided into two primary categories. In the first case decisional procrastination is considered a response to a particular problem. The main determining factor of decisional procrastination for this category is the social context in which the decision is to be taken. The second category of decisional procrastination is habitual decisional procrastination, exhibited in general

decision-making situations. The main determinative factors for a habitual type are individual differences in cognitive styles, personality traits, and motivation.

Janis and Mann's (1977) conflict model of decision-making gives the best explanation of decisional procrastination. There are two distinct patterns of coping with challenges according to this model known as adaptive and non-adaptive patterns. One of the non-adaptive patterns is defensive avoidance. This pattern arises when alternatives available are unsatisfactory or risky and the decision-maker does not hope to find a better solution. Defensive avoidance (Janis & Mann, 1977) is an emotion-focused strategy and is characterized by denial and reducing worry by distancing oneself from the decision (Mann, Burnett, Radford & Ford, 1997). Defensive avoidance is of three types. One of these types is decisional procrastination, adopted when the decision-maker is fearful of making the wrong choice. Decisional procrastination is characterized by high stress, loss of hope for a better solution, and no tight deadline (Janis & Mann, 1977). Although hyper-vigilance is also associated with high stress, the absence of a deadline in DP paves the path for the decision-maker to procrastinate.

The conflict model of decision-making (Janis & Mann, 1977) states that stress resulting from decisional conflict is the main causal factor of failure to achieve high-quality decisions (Janis & Mann, 1977). There are five patterns of coping with stress and the choice of coping pattern to deal with stress depends heavily on the presence or absence of three antecedent conditions. The first condition is if the person is aware of serious risks related to preferred alternatives. The conflict will intensify as the decision-maker become cognizant of the fact that he might suffer losses no matter what choice he opts. The second condition is that the conflict level will be affected by the existence or lack of hope of finding a better alternative. The third condition is the belief that there is sufficient time to search and study before a decision is required. Choices that can be made in the distant future without any immediate time deadlines will reduce conflict but lack of deadline may also hinder the individual decision process (Mann, Burnett, Radford & Ford, 1997). This lack of urgency slows down the decisional process contributing to procrastination.

Five patterns of the decision in the conflict model of decision-making for coping with stress are listed below:

***Un-conflicted Adherence.*** The decision-maker chooses to continue the present course of action by ignoring the information related to the risks. This is also known as complacency.

***Un-conflicted Change.*** The most appropriate and most strongly recommended course of action is assumed by the decision-maker.

***Defensive Avoidance.*** The decision-maker procrastinates or tries to shift responsibility to someone else in order to escape the conflict. In this pattern of decision least objectionable alternative is sustained without considering other options, in an attempt to escape the risk. In this coping pattern, an incomplete evaluation of the information is done. This pattern of decision is characterized by defective information search that paves the path for faulty decisions.

***Hyper-Vigilance.*** The decision-maker searches hysterically and anxiously for a way out of the dilemma. This pattern of decision is characterized by a deadline and time pressures, creating a state of panic. Such a state of alarm leads to impulsive decisions done in an effort to get promising immediate relief.

***Vigilance.*** It is considered the ideal style of coping because it includes an in-depth search of information, appraisal, and contingency planning (Janis & Mann, 1977). This coping style is characterized by clarifying the objectives, considering the alternative choices, evaluating the consequences, and then proceeding to implement the chosen option.

### 1.3. Decision-making Styles and Decisional-Procrastination

People particularly those in leading positions are required to make effective decisions to adapt to the changing environment and to reach the goals set for the progress of their organization so as to survive in a competitive market. According to Ugurlu (2013), decision-making styles (DMS) are important in determining procrastination as different DMS leads to different behaviour patterns including procrastination. Harren (1979) demonstrated that the rational DMS is the most effective approach to decision-making. Rational DMS has an association with planning and information gathering (Jepsen, 1974), career decisiveness (Mau, 1995), and problem-solving efficacy (Phillips, Paziienza, & Ferrin, 1984 a).

Balkis (2006) demonstrated that procrastination tendencies are related to decision styles in teachers. According to Ugurlu (2013) rational, dependent and, spontaneous DMS have a negative relation with procrastination. In addition, intuitive and avoidant DMS have a positive relationship with general procrastination.

The aim of the present study is to study how different decision-making styles (DMS) are associated with decisional procrastination among college principals. The findings of the present study explored what decision-making style predicts decisional-procrastination and the one helps to shun it away. The current study assumed that procrastination is learned so could be avoided by identifying its antecedents i.e. decision-making styles. The majority of research on decisional-procrastination in existing literature has been conducted on university students (e.g., Ferrari & Olivette, 1993; Ferrari & Dovidio, 2000) and clinical populations, such as adults with obsessive-compulsive disorder (e.g. Ferrari & Sanders, 2006) but literature is lacking for this variable among the administrative population. The current study will fill this void of literature. Decisional procrastination studies on principals' populations by keeping their decision-making styles in view would not only broaden the literature base but also potentially spark the interest of researchers from other disciplines by laying the fundamental ground for further endeavors to investigate the issue in depth.

Based on previously discussed literature five hypotheses were formulated to explain the impact of different decision-making styles on decisional procrastination.

1. Rational DMS negatively predicts decisional procrastination.
2. Intuitive DMS positively predicts decisional procrastination.
3. Avoidant DMS positively predicts decisional procrastination.
4. Dependent DMS negatively predicts decisional procrastination.
5. Spontaneous DMS negatively predicts decisional procrastination.

#### Conceptual Diagram

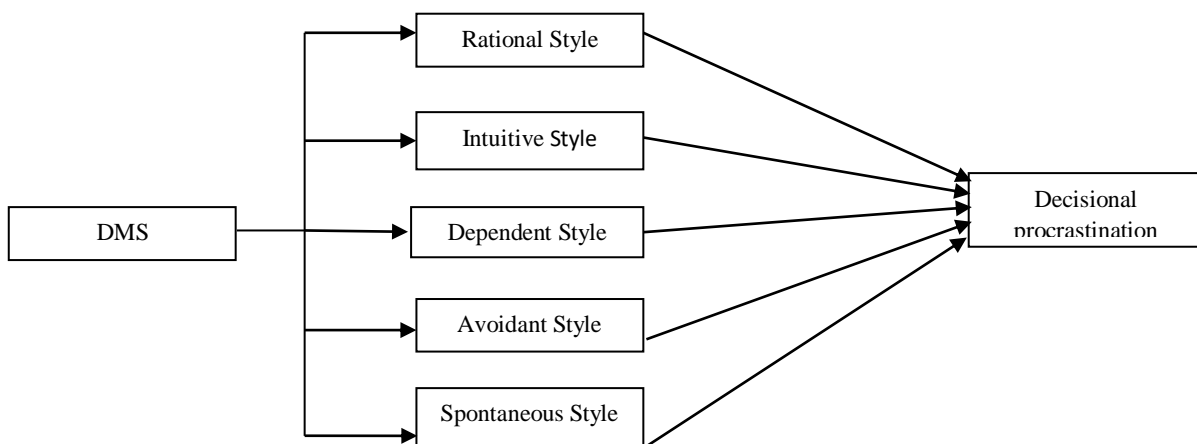


Figure 1. Theoretical framework showing the impact of perfectionism and decision-making styles on decisional procrastination.

## 2. Method

A correlational survey research design is used for the present study to explore the impact of having different decision-making styles on decisional-procrastination.

### 2.1. Sample

A total of 199 principals 42% males and 58% females responded to questionnaires from different colleges of Sargodha, Khushab, Mianwali, Bhakar and Jhang districts, Punjab, Pakistan. Participants approached through purposive sampling technique.

### 2.2. Instruments

Following instruments are used in the study.

**2.2.1. General Decision-making Style Inventory (GDMSI).** GDMSQ (Scott & Bruce, 1995) is anchored on a five point Likert scale comprising of 25 items, further divided into five sub scales including Rational style ( $\alpha = .82$ ), Intuitive style ( $\alpha = .75$ ), Dependent style ( $\alpha = .57$ ), Avoidant style ( $\alpha = .89$ ), and Spontaneous style ( $\alpha = .72$ ). Full scale reliability ranges from  $\alpha .57$  to  $.89$ .

**2.2.2. Decisional Procrastination Scale (DPS).** This Scale (Mann, 1982) is a five item self-report measure that is anchored on five point Likert scale. It is derived from Melbourne Decision-Making Questionnaire (MDMQ; Mann, Burnett, Radford, & Ford, 1997). Previous studies have reported a Cronbach alpha ranging between  $.71$  to  $.80$ , and a one-month test-retest reliability between  $.62$ -. $.69$  (Effert & Ferrari, 1989; Ferrari, 1994).

### 2.3. Procedure

Some of the principals were approached through postal mail; rest of the data was collected by the direct approach to the sample in their offices. In accordance with APA ethical guidelines, concerned authorities and participants were briefed about the goals of study. Permission letter by the department was attached to every questionnaire used for the data collection.

## 3. Results

Cronbach alpha was computed for all the scales. Some other statistical tests like Pearson correlation and regression were carried out in order to explore the stated relationship among study variables.

**Table 1**

*Correlation Matrix, Descriptive Statistics and Alpha Reliabilities for all Study Variables*

Variables	1	2	3	4	5	6	M	SD	$\alpha$
1	~	.45***	.43***	-.12	-.01	-.29***	19.48	3.47	.72
2	~	~	.35***	.21**	.27***	-.06	18.72	3.14	.61
3	~	~	~	.17*	.16*	.00	17.33	3.69	.66
4	~	~	~	~	.35***	.48***	14.44	3.53	.62
5	~	~	~	~	~	.10	15.84	3.57	.66
6	~	~	~	~	~	~	12.29	4.20	.69

Note. 1 = rational style; 2 = intuitive style; 3= dependent style; 4=avoidant style; 5 =spontaneous style; 6 = decisional procrastination.

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

Table 1 shows means, standard deviations and alpha coefficients for all the scales and subscales used in the study. The alpha reliabilities of aforementioned scales range from  $.61$  to  $.72$  that guaranteed their appropriateness and accuracy of measurement for present study. Table 1 also shows the correlation between constructs of DMS and decisional procrastination. It is evident from results that rational style

has a significant negative correlation with decisional procrastination and avoidant style has a significant positive correlation with decisional procrastination.

**Table 2**

*Regression Analysis for Predicting Decisional Procrastination from the Constructs of General Decision-making Styles*

Predictors	$\beta$	Decisional procrastination	
		$R^2$	F
Constant	11.13***		
Rational style	-.28**		
Intuitive style	-.07	.29	15.57***
Dependent style	.05		
Avoidant style	.56***		
Spontaneous style	-.07		

\*\* $p < .01$ . \*\*\* $p < .001$ .

To investigate contributions of different DMS in predicting decisional procrastination, multiple regression analysis was carried out. Table 2 suggested that 29% of the variance in decisional procrastination can be explained by a model consisting of different decision styles i.e. rational, intuitive, dependent, avoidant and spontaneous style. Overall the model was significant with  $F(5, 193) = 15.57$ ,  $p < .001$ ; and among the predictors, rational style ( $\beta = -.28$ ,  $t = 3.02$ ,  $p < .01$ ) was significant negative predictor of decisional procrastination and avoidant style ( $\beta = .56$ ,  $t = 6.97$ ,  $p < .001$ ) was significant positive predictor of decisional procrastination.

**Table 6**

*Mean Differences in Variables across Gender*

Variables	Male(n = 84)		Females (n = 115)		t(197)	95% CI		Cohen's d
	M	SD	M	SD		LL	UL	
RDM	19.50	3.43	19.47	3.51	0.06	-.95	1.01	.01
IDM	18.33	3.02	19.00	3.22	1.48	-1.55	.22	.21
DDM	17.49	3.29	17.21	3.96	0.53	-.77	1.32	.08
ADM	14.04	3.67	14.73	3.42	1.37	-1.69	.30	.19
SDM	15.19	3.30	16.32	3.70	2.23*	-2.13	-.13	.32
DP	11.69	4.60	12.72	3.85	2.08*	2.21	.15	.24

Note. RDM = rational decision-making; IDM = intuitive decision-making; DDM = dependent decision-making; ADM = avoidant decision-making; SDM = spontaneous decision-making; DP = decisional-procrastination.

\* $p < .05$ . \*\* $p < .01$ .

Table 6 shows the mean standard deviation and t values for males and females on DMS and decisional procrastination. Finding indicates that there are significant gender differences on spontaneous style with  $t(197) = 2.23$ , ( $p < .05$ ). There are also significant gender differences on decisional-procrastination with  $t(197) = 1.72$ , ( $p < .05$ ). Females scored significantly higher on spontaneous style, and decisional procrastination as compared to males. Value of Cohen's d shows small to medium effect size

#### 4. Discussion

The main objective of the present study was to find the impact of DMS of college principals on decisional procrastination by examining the DMS from a multidimensional perspective. The more specifically current study examined DMS i.e. rational, intuitive, avoidant, dependent and spontaneous as the predictor of decisional procrastination. The hypothesis made to check the relation of study variables is discussed below.

The first hypothesis of the study stated that “rational decision-making styles negatively predict decisional procrastination”. The hypothesis was supported by the data. The logical explanation of findings can be described by the fact that decision-makers who prefer a rational approach to decision-making have a sense of personal responsibility and control (Scott & Bruce, 1995; Thunholm, 2004). Responsible behavior has a negative relation with procrastination (Balkis, 2007; Dilmac & Bozgeyikli, 2009). In addition, feelings of control create a perception that they are able to achieve the outcome, so as a whole both of these factors assist principals in their decisions; by decreasing the probability of decisional procrastination. Harren, (1979) said, that the most effective approach to decision-making is the use of a rational style because rational DMS is characterized by the use of a logical and structured approach to decision-making. So in rational style, the search for information, the assessment of information, and the evaluation of the information are all carried out in a logical manner. Due to an orderly approach to information search, they collect the exact information, needed for their situation therefore administrators who endorse a rational DMS feel confident about making correct decisions, and so they are less likely to engage in decisional procrastination.

Ferrari and Dovidio (2001) found that indecisiveness is linked with less information search. So we can logically assume that rational DMS which is characterized by elevated information search decreases an individual tendency to procrastinate. It is also found that the internal locus of control is positively related to rational DMS (Akyürek et al., 2018). Scott and Bruce (1995) added that rational decision-makers attribute their destiny to factors inside. Such people believe that events in their life derive primarily from their own actions and abilities in other words they blame themselves for any bad consequence. In order to avoid the guilt, they try to search information thoroughly, which in turn reduce their tendency to delay decision. Bacanlı (2006) proposed that external locus of control is a strong predictor of impetuous indecisiveness, because such individuals do not consider themselves accountable resulting in decisional-procrastination. In short we can reason by the fact that, because rational DMS is affected by internal locus of control and decisional procrastination is predicted by external locus of control, it is quite logical to conclude that both of these study variables are in inverse relationship with each other.

Rational DMS could be partly predicted from self-esteem (Forsman & Johnson, 1996). Individuals high in self-esteem will positively evaluate and are more confident about their abilities to make the decision, on contrary self-esteem is negatively related to indecisiveness (Thunholm, 2004). Low self-esteem causes negative belief about oneself and one's ability to make decisions (Burka and Yuen, 1983) leading to decisional procrastination. In short rational DMS has positive association with self-esteem while decisional procrastination has a negative relation with self-esteem we can fairly conclude that both of the study variables would have a negative relation with each other. Depressive symptoms were found to be negatively correlated with rational DMS because when an individual is faced with a decision, the depressive symptoms could prime negative mood-congruent memory recall, which impedes the occurrence of a rational decision process (Gotlib et al., 2004). On the contrary, depression is found to have a positive relation with procrastinator behaviour (Wei, 2005). So because both of the study variables have an antithetical relationship with depression we can also conclude that they have an inverse relationship with each other as well. The literature reviews also supported the hypothesis by



supporting a negative relationship between rational DMS and procrastination (Balkis, 2007; Ugurlu, 2013). In addition, Loo (2000) depicted that approaching a problem rather than avoiding it is a feature of rational decision-making.

Second, the hypothesis of current study stated that “Intuitive decision-making styles positively predict decisional procrastination”. The results of the study were in a similar direction as stated by the hypothesis but were not significant (see Table 1 & 2). Previous literature shows a mixed relationship for both study variables i.e. the significant positive relationship between intuitive DMS and procrastination (Ugurlu, 2013) as well as negative but un-significant results (Santosa, 2017). The difference in findings between previous and present studies could be attributed to the cultural differences, as research depicting the significant positive relationship between study variables was done in European culture while that stating negative but un-significant was done in Asian culture. The findings could be explained by the fact that, because leaders in Asian culture value intuition more and consider it a positive construct as compared to western leaders (Lagerberg, 2014) so this positive assumption of the construct reverses its relationship with decisional-procrastination. The non-significance of findings can also be attributed to the instrument used in the study which was designed and validated on the western population, also because the sample size of my research was not large enough, so it can contribute to non-significant results. In addition, the sampling technique used was not efficient enough in that, a convenient and purposive sampling method was used, and so all the representative population of principals were not included in the sample.

The fifth hypothesis of the study present study states that “avoidant DMS positively predicts decisional procrastination among school and college administrators”. This hypothesis was supported by the data. Avoidant decision-making style is characterized by indecision, postponing, avoiding, and delaying the decision and keeping oneself away from making a decision (Scoot & Bruce, 1995) and decisional procrastination is also characterized by a similar underlying structure because both of these styles involved the sidestepping or withdrawal from the situation so it is obvious that two variables having symmetry and cohesiveness in nature will correlate. Scott and Bruce demonstrated that there is a positive relation between avoidant DMS and external locus of control. Individuals with a strong external locus of control have a propensity to praise or blame external factors, so they do not consider themselves accountable for not taking decisions or consequences associated with decisional delay. Avoidant decision makers attribute their destiny to the factors beyond their control. This lack of control makes such individuals vulnerable to decisional procrastination.

It is theoretical and research evidence that bolsters the present investigation for instance it is found that avoidant DMS is positively related to a lower reported level of well-being and higher perceived stress and depression (Bavol'ár, & Orosová, 2015). In another study avoidant, DMS is negatively correlated with mental health (Thunholm, 2004). Because some decisions are inevitable this avoidance instead of reducing stress may have the opposite impact on the person. As a result, principals with avoidant decision-making styles will have an increased level of stress. Monroe et al. (2005) exhibited that depressed individuals tend to experience greater post decisional regret and this anticipation of regret from an outcome of a bad decision may increase the avoidance of decisions

The sixth hypothesis of the present study states that “dependent DMS negatively predict decisional procrastination”. The results of the present study don't support the hypothesis. A zero relationship was found between dependent DMS and decisional procrastination. The reason can be described by the logic that people who endorse a dependents decision-making style depend on others for making their decision. So if they find support from others in making decisions they would be more likely to complete the task on time while if in case they could not find someone to support them their tendency to delay decisions will be increased. Hence the relation between dependent DMS and

decisional procrastination changes in accordance with the context. So it is quite reasonable for the results to have zero relationships with decisional procrastination. This discrepancy in findings between present and previous research can be attributed to cultural differences. Literature showing a negative relation between variables (Ugurlu, 2013) is typical of western cultures which are based on individualistic doctrines so dependent decision style does not indicate the excess of dependency they depend on others to a certain extent and only for the things which seemed out of control to them so it is reasonable to find that in western culture-dependent style does not lead to decisional procrastination. On the contrary in Asian countries including Pakistan collectivistic culture is regarded, where everything is done by taking the account of the whole family and the significant others showing an excess of dependency. Differences in findings can also be contributed to the fact that there were no studies found in literature exploring the impact of DMS on decisional procrastination instead DMS has been studied with respect to overall procrastination to which decisional procrastination is the only a part.

The last hypothesis of the present study stated that “spontaneous DMS negatively predict decisional procrastination”. The results of the present study were in the same direction as reported by the hypothesis but were non-significant. The reason can be attributable to the sample size. Ugurlu (2013) also demonstrated that spontaneous DMS is a negative predictor of procrastination. This hypothesis was formulated on the logic that spontaneous DMS is characterized by immediacy and a desire to come through the decision-making as quickly as possible so logically it should be negatively related to decisional procrastination. Analysis of all the DMS shows that the combined variance caused by all DMS in decisional procrastination is 29 %. So it can be inferred that the decisional procrastination of school and college administrators is significantly affected by their DMS.

A T-test was carried out for investigating gender differences among principals on study variables. The result of the t-test showed that spontaneous DMS is found to be significantly higher among females as compared to males implying that females take decisions that are more spontaneous as compared to males. In addition, decisional procrastination was found to be significantly higher in females as compared to males. Literature also supported the result by showing that women showed higher decisional procrastination as compared to men (Rassin & Muris, 2005a; Diaz Morales, Ferrari, Argumedo & Diaz, 2006). The result makes sense. In Asian culture, females are less exposed to the decision-making scenarios, so their DMS are often inappropriate or are not efficient. This creates a lack of confidence in them for their ability to make a decision, hence contributing to the decisional delay.

## **5. Conclusions**

Current findings endorsed that some dimensions of DMS i.e. rational and avoidant DM are significantly related to decisional procrastination of college administrators. More specifically result indicated that rational DMS negatively predicted decisional procrastination while avoidant DMS positively predicted decisional procrastination. The result also demonstrated that spontaneous decision-making style, discrepancy perfectionism and decisional procrastination have significant gender differences favoring women.

## **6. Implications**

The findings from this study are of particular interest to educators and leaders. Decision styles of principals have an impact on decisional procrastination; particularly rational DMS negatively predicted decisional procrastination so principals should be provided with an atmosphere where they could make more qualified decisions by increasing the amount of information provided to them. In addition, because avoidant style is related to an increased tendency to decisional delay efforts should be made to help principals shun it.

The Higher Education Commission (HEC) should design training programs on decision-making for principals, on the pattern of civil service and military academy. This training would enhance the professional grooming of the principals as well as would develop the capability of dealing with situations requiring decision-making both at the personal and organizational levels.

## 7. Limitations and Suggestions

Further domains of decision-making styles and decisional procrastination are recommended to be studied by using a large sample size. The use of a convenient sampling technique may also be a liability for the present research. Instead of using the self-report inventory the future research should also consider other modes of data collection like observation, focus group discussion or interviews. In addition; to warrant predictive relationships longitudinal research design should be used in future. The finding, that females are more indecisive than males was an important one, deserving further study. To further investigate decision styles and procrastination, an Asian version of the measure for study variables should be created.

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