BOREDOM PRONENESS: ITS RELATIONSHIP TO MEANS-ENDS DOMAIN

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Abstract- The study aims to examine the relationship between boredom proneness and paratelic dominance. It was hypothesized that boredom proneness would be positively correlated with three subscales of paratelic dominance. For this purpose, 100 college students (18-24 yrs) were administered on the Boredom Proneness Scale (Farmer & Sundberg, 1986) and the Paratelic Dominance Scale (Cook & Gerkovich, 1993). A Pearson product moment correlation was utilized and the results suggest that boredom proneness is positively correlated with Spontaneity (r=0.256**, p<0.01) but the association of boredom with Playfulness (r=0.168,n.s.) appeared weak. Unexpectedly, boredom proneness appeared negatively correlated with Arousal Seeking (r=-0.118,n.s.), although this association is weak. The hypotheses of present research have been partially supported. The results of the present study provide empirical evidence that boredom proneness is positively correlated with spontaneity. However, no significant relationship of boredom proneness appeared with Playfulness and Arousal Seeking. Implications for determining the association of boredom proneness and paratelic dominance are discussed.

IndexTerms- Boredom Proneness, Paratelic Dominance, Playfulness, Spontaneity, Arousal Seeking

I. INTRODUCTION

Boredom is very commonly experienced by people. Boredom's prevalence has been widely recognized (e.g., Anderson, 2004; Klapp, 1986; Orcutt 1984) and modern society is termed as "the age of boredom" (Farnworth, 1998; Klapp, 1986; Svendsen, 2005). Findings have proposed different factors contributing to the rise of boredom such as the rise of industrialization and repetitive work (Thompson, 1929), an increase in leisure time (Spacks, 1995), the rise of media reporting on extraordinary events juxtaposed with ordinary lives (Darden & Marks, 1999).

Boredom is a state of dissatisfaction resulting from a combination of an uninteresting environment and attentional constraint (Mikulas & Vodanovich, 1993; Todman, 2003). Boredom has situational as well as individual determinants. When boredom is experienced as a result of external circumstances, it is considered situation-dependent (Todman, 2007). Alternatively, when boredom is considered the result of individual determinants it can be viewed as a personality characteristic that varies in degree across individuals. Trait boredom is referred to as *boredom proneness* and is operationalized as an individual's susceptibility to experiencing boredom.

In psychology, boredom has been labelled, "a neglected topic" (Robinson, 1975), and in sociology, boredom has been perceived as "socially disvalued" (Darden & Marks, 1999). According to Todman (2003), Boredom is considered an aversive subjective state that results from attempts to allocate attentional resources to an environment that is no longer interesting coupled with the natural tendency to remove attention from such an environment. In an attentional theory of boredom proneness (Harris, 2000) it is associated with an inability to regulate attention in a directed and focused manner (Fisher, 1993; Hamilton, 1981). Mikulas and Vodanovich (1993) define boredom as a state of low arousal and dissatisfaction, determined by an inadequate stimulating situation. Specifically, boredom is a cue that the current strategy for exploring a particular environment has exhausted all available stores of novelty and positive reinforcement (Todman, 2003).

An association between boredom and a wide range of undesirable physical and psychological outcomes makes it important to explore the personality determinants of boredom Proneness. This paper aims to investigate the applicability of reversal theory (Apter, 1982) in the area of boredom proneness. **Reversal Theory** (Apter, 1982), a theory of personality, motivation and emotion, first proposed by Smith and Apter in mid 1970s, is based on the notion that people are inherently inconsistent (Kerr, Murgatroyd & Apter, 1993) and have a number of metamotivational modes or states that determine how the world is experienced.

The Means-Ends Domain governs how a person feels about his or her progress in reaching goals. The Metamotivational states in this domain are Telic and Paratelic. In the **telic** state, an individual tends to lead to planning ahead whereas the **paratelic state** is related to spontaneity. High arousal is experienced as anxiety and is disliked in the telic state; whereas it is experienced as an exciting and enjoyed in the paratelic state. Reversal theory calls these opposite states of mind the serious and the playful state. The basic value of the paratelic state is that of pleasure, and of the telic state is that of seriousness.

Researchers have demonstrated an association between boredom and a wide range of undesirable social and psychological problems. Boredom has been associated with negative affect such as anxiety (Sommers, & Vodanovich, 2000, Vodanovich, Verner, & Gilbride, 1991), hopelessness and loneliness (Farmer & Sundberg, 1986), depression (Carriere, Cheyne, & Smilek, 2008; Farmer & Sundberg, 1986; Goldberg, Eastwood, LaGuardia, & Danckert, 2011),

and anger (Dahlen, Martin, Ragan, & Kuhlman, 2004; Rupp & Vodanovich, 1997). Boredom proneness has also been implicated in attention lapses, difficulty sustaining attention, and increased attention deficit hyperactivity disorder (ADHD) symptoms (Carriere et al., 2008; Malkovsky, Merrifield, Goldberg, & Danckert, 2012). Furthermore, it is associated with a number of problem behaviors such as procrastination (Vodanovich & Rupp, 1999), pathological gambling (Mercer-Lynn & Eastwood, 2010) and general failure to self-regulate behavior (Struk, et al., 2015).

Individuals who score high on boredom measures, such as Boredom Susceptibility Scale (BSS; Zuckerman, 1979), Boredom Proneness Scale (Farmer & Sundberg, 1986), Boredom Coping Scale (BCS; Hamilton, Haier, & Buchsbaum, 1984), Leisure Boredom Scale (LBS; Iso-Ahola & Weisiger, 1990), and Free Time Boredom Scale (Ragheb & Merydith, 2001), have higher rates of negative behaviors including substance abuse. Boredom has also been linked to decreased academic achievement and increased likelihood of dropping out of school (Caldwell & Smith, 2006). Researchers have also reported boredom proneness to be related significantly to lower educational achievement, truancy rate, and poor work performance (e.g., Smith, 1981), substance abuse and eating disorders (e.g., Ganley, 1989). Other researchers have established a connection between boredom and detrimental health effects in organizational settings (e.g., Smith, Cohen, and Stammerjohn 1981).

In light of the broad relationships observed between boredom proneness and negative psychological and physical outcomes, it is important to explore the personality determinants of boredom Proneness. Apter (2001) has stressed that it is important to think in terms of how an individual is at a given time (state) and how he or she tends to be over time (dominance). Individuals have an innate tendency to spend relatively more time in one metamotivational state than it's opposite in a given pair of states which is known as **Metamotivational Dominance.** A dispositional tendency of an individual to spend the majority of his time in one meta-motivational state than other is Metamotivational Dominance (Apter, 1984).

Preferred Arousal: A link between boredom proneness and Paratelic State.

The following table shows different arousal levels experienced in different metamotivational states:

	telic state	paratelic state	
high arousal	unpleasant	pleasant	
	(anxiety)	(excitement)	
low arousal	pleasant	unpleasant	
	(relaxation)	(boredom)	

The table shows different arousal levels experienced in different metamotivational states.

Paratelic state is mainly characterized as activity oriented; one in which the goal of the activity is not important compared to the ongoing behavior and the experience. High level of felt arousal in the paratelic state is experienced as pleasant because it is associated with excitement, whereas a low level of felt arousal is experienced as unpleasant and described as a state of Boredom. In contrast to the paratelic state, high level of felt arousal in the telic state is experienced as anxiety and low level of felt arousal is associated with a state of relaxation.

In the paratelic state, individuals are characterized as present-oriented, playful, arousal seekers (Apter, 2001; Kerr, 1997). Moderate levels of stress were experienced with the greatest challenge and enjoyment by paratelic-dominant individuals, whereas a no-stress experience was accompanied by feelings of boredom for those individuals (Kuiper, Olinger, and Dobbin, 1987).

The findings of previous studies, individual's metamotivational states, and dominance have been shown to be important psychological constructs in determining boredom. Thus the objective of the present study is to identify the relationship between metamotivational dominance and Boredom Proneness.

II. METHODOLOGY

Objectives:

- 1. To study relationship between Playfulness and Boredom Proneness
- 2. To study relationship between Spontaneity and Boredom Proneness
- 3. To study relationship between Arousal Seeking and Boredom Proneness

Hypotheses:

- 1. Boredom Proneness would be positively correlated with Playfulness.
- 2. Boredom Proneness would be positively correlated with Spontaneity.
- 3. Boredom Proneness would be positively correlated Arousal Seeking.

Sample

This study included a total of 100 participants (40 males and 60 females). The age range of selected participants was between 18 to 22 years.

Measures

For this study, each participant completed the following two questionnaires after a demographic form which required the participants to fill in their name, age, gender, and educational qualification. The two questionnaires are as follows:

- 1. **Boredom Proneness Scale (BPS, Farmer & Sundberg, 1986):** The 7-point Likert version of the Boredom Proneness Scale is a self-reported questionnaire. The scale consists of 28 items. It ranges from 1 (highly disagree) to 7 (highly agree). Internal consistency estimates for the scale have ranged between 0.79 and 0.84.
- 2. The Paratelic Dominance Scale (PDS; Cook & Gerkovich, 1993): PDS is a 30-item instrument designed to measure an individual's tendency to be in the paratelic or telic state most of the time. PDS yields scores on three subscales: playfulness, spontaneity, and arousal-seeking. Each subscale has 10 items, thus giving a possible maximum subscale score of 10 and a possible maximum PDS total score of 30. These statements are judged either true or false. Internal reliability of subscales was derived from the factor analyses. The reported alpha values were 0.75 and 0.78 for playfulness, 0.83 and 0.84 for spontaneity, 0.83 and 0.84 for arousal-seeking. For the total PDS score, alpha coefficients were found to be 0.87 and 0.86.

Procedure

For the purpose of the present study, participants were asked to fill two scales. After taking consent of participants, they were administered on Boredom Proneness scale and Paratelic Dominance scale. Scoring of both the scales was done as per the guidelines given in the manual. The Total score of Boredom Proneness scale, total score of the Paratelic Dominance scale along with scores on its following three subscales: Playfulness, Spontaneity and Arousal Seeking were used for further statistical analysis.

III. RESULTS

In the light of the stated hypotheses, Pearson product-moment correlation between Boredom proneness and three subscales of Paratelic dominance (Playfulness, Spontaneity, and Arousal Seeking) was utilized. The results obtained are as follows.

table 1- correlation between boredom proneness and paratelic dominance (playfulness, spontaneity, and arousal seeking).

	bps	playful.	spon.	ar. seek.
bps	1			
playful.	0.168	1		
spon.	0.256**	0.319**	1	
ar. seek.	-0.117	0.047	0.237*	1

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

The results of the present study have been shown in table no. 1. It is the correlation matrix depicting correlation between Boredom proneness and three subscales of Paratelic dominance (Playfulness, Spontaneity, and Arousal Seeking). A Pearson product moment correlation was utilized and the results suggest that boredom proneness is positively correlated with Spontaneity (r=0.256**, p<0.01) but the association of boredom with Playfulness (r=0.168,n.s.) appeared weak. Unexpectedly, boredom proneness appeared negatively correlated with Arousal Seeking (r=-0.118,n.s.), although this association is weak. The hypotheses of present research have been partially supported.

IV. DISCUSSION

This research was undertaken to examine the relationship between boredom proneness and paratelic dominance. Paratelic state is mainly characterized as a playful state. In contrast to individuals in the telic state, high level of felt arousal in the paratelic state is experienced as pleasant, whereas a low level of felt arousal is experienced as unpleasant and is described in terms of Boredom (Apter, 2001; Kerr, 1997). Based on Apter's (2001) description of telic-dominant and paratelic-dominant individuals' levels of felt arousal, it was hypothesized that boredom proneness would be positively correlated with three subscales of paratelic dominance. The hypotheses of this research have been partially supported.

The results of the present study provide empirical evidence for the association of boredom proneness with playfulness and spontaneity. It is in line with conception of reversal theory (Apter, 1984, 2001) and previous research findings (Martin, Kuiper, Olinger & Dobbin, 1987; Cogan and Brown, 1999) which indicated that the feeling of boredom is linked with paratelic dominant individuals because being excitement seekers, paratelic-dominant individuals tend to easily experience boredom in non-stressful (low arousal) situations.

Unexpectedly, results for Arousal Seeking subscale are inconsistent with the conception of Reversal theory (Apter, 2001) and previous research studies (Kerr, 1991; Summers and Stewart, 1993) which provided that paratelic individuals preferred more sensation seeking and challenging activities, while telic participants preferred less challenging activities, and saw paratelic activities as anxiety provoking. In the present research, the association of Arousal Seeking (subscale of Paratelic Dominance scale) has appeared negative but weak with boredom proneness. It is also notable that the states are related with felt arousal and one reason for this inconsistency is that sometimes low arousal may be required temporarily in the paratelic system in order to feel boredom. Another finding (Sharpe, 1995) provided no difference between telic and paratelic dominant group of gamblers on proneness to boredom.

V. LIMITATIONS AND SUGGESTIONS

This research carries an identifiable limitation which needs to be addressed. The sample is the middle SES college students aged between 18-22 years. Thus, the interpretation of the study result would refer to only college students studying in District Bathinda colleges in Punjab, India. These findings could not be generalized in other regions of India. The study across age group in other regions of the country should be conducted.

VI. IMPLICATIONS

From Reversal theory's point of view, Individual experiencing greater boredom proneness is unable to switch or reverse the state adequately. Apter (1990) described that much of the psychological problems arise as inadequacies of the reversal mechanism. The Structural disturbances (across modes) can occur due to two reasons: inhibited reversal and inappropriate reversal.

The telic/paratelic states reversal process has received notable interest in literature (Kerr, 2001; Potocky & Murgatroyd, 1993; Woodman & Hardy, 2001; Zaichkowsky & Baltzell, 2001). Reversal theory provides a general conceptual framework that psychological reversals can alter metamotivational states. As Reversal theory has therapeutical powers, it can be used in order to facilitate the reversals for individuals stricken only to one state, who are unable to reverse at the demand of situation (Contingent factors). Kerr (1997) argued that because boredom results from low arousal, which is in contrast to the telic state, unpleasant for an individual when in the paratelic state. So, paratelic dominant would more likely to suffer from boredom proneness and its related negative consequences. By manipulating states, boring state can be changed to a relaxed state. Thus, it can play an important role in reducing boredom and enhancing engagement.

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