



DOE/OR/00033--T665

Ethnic and Gender Differences
in Boredom Proneness

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JAN 23 1995
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Abstract

Although boredom may exhibit many shared elements, culturally specific attitudes have also been found to exist. The present paper investigated boredom proneness among African-American college students. Data from 120 participants on the Boredom Proneness (BP) Scale was analyzed and compared to cross-cultural participants. African-American females scored significantly higher than African-American males. Scores were presented from two other studies (Sundberg, Latkin, Farmer, & Saoud, 1991; Ahmed, 1990) to show a comparative look at boredom proneness in five other ethnic groups. African-American females are the only female ethnic group to score higher on the BP Scale than their male counterparts. Additionally, overall African-Americans were found to have higher BP scores than their Western counterparts.

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MASTER

Few investigators in the field of boredom research would deny that it is multidimensional in nature. Individual differences are apparent and thereby complicate efforts toward predicting persons prone to boredom, the causes involved, as well as effective intervention strategies. If we could identify persons or groups of persons at risk to become bored, perhaps we could reduce such outcomes as job dissatisfaction, absenteeism, labor turnover, accidents, performance decrements, substance abuse, personalized rebellion in institutions, school dropout, delinquency, and depression.

Boredom can occur under most any circumstances and it happens to most all of us. Although boredom may exhibit many shared elements, culturally specific attitudes do exist. Much research indicates that individuals differ in their susceptibility to distraction and boredom; and, hence, might differ in their reactions to the experimental manipulations (Drory, 1982; Hill, 1975; Smith, 1955; Stagner, 1975). However, cross-cultural studies on boredom and boredom proneness are almost nonexistent (Sundberg, Latkin, Farmer & Saoud, 1991). The present study investigates ethnic characteristics of African-Americans and their relationship to boredom proneness. According to Mikulus and Vodanovich (1993), there is not a comprehensive, integrated, functional definition of the construction of "boredom." They define boredom as "a state of relatively low arousal and

This research was supported by Alabama A&M University and an award from the Nuclear Regulatory Commission, HBCU Faculty/Student Research participation Program, Oak Ridge Institute for Science and Education.

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dissatisfaction, which is attributed to an inadequately stimulation situation." Others see boredom resulting from high arousal (Berlyne, 1967). These mixed results indicating both low and high levels of arousal can be resolved according to Geiwitz (1966) by postulating more than one sort or focus of arousal.

It appears that boredom occurs when we cannot keep our attention focused where it should be without a struggle. We perceive of it as dissatisfying and unpleasant and for it to be boredom, the person must not like it (Mikulus & Vodanovich, 1993). Farmer and Sundberg (1986) describe the boredom-prone person as experiencing varying degrees of depression, hopelessness, loneliness, and distractibility. A high level of frustration has also been associated with boredom (Perkins & Hill, 1985 and Stagner (1975). Common tasks are perceived as requiring effort with dissatisfaction with ones work and psychological well being. Obviously boredom is a complex response pattern consisting of a variety of changes. Some researchers consider boredom to also be an emotion (Igard, 1977; Plutchik, 1980).

The effect of boredom on educationally-related variables has been of interest to researchers for some time. Factors such as IQ, grade point average (GPA), dropout, ability test scores, and low achievement have been investigated. While research has found a negative relationship between boredom susceptibility and IQ scores (Robinson, 1975), others have found no significant relationship between the effects of intelligence on boredom (Farmer & Sundberg, 1986; Hill, 1975; Smith, 1955; Smith, 1981). While studying task monotony and performance efficiency, investigators (Locke, Byrd, Berger, and Childs, 1982) reported that retarded monitors found the task boring or otherwise unrewarding just like non-retarded

observers. Therefore, the data on the meditating effect of boredom proneness and educationally related variables remain mixed.

Similarly, Smith (1955) found boredom susceptibility and educational level to be unrelated and Drory (1982) found a negative relationship between them. Fogleman (1976) found a negative relationship between boredom and ability test scores and school dropout. While Farmer and Sundberg (1986) found boredom unrelated to course grade, Maroldo (1986) found a negative relationship between boredom susceptibility and grade point average. Feldhusen and Kroll (1991) found no difference in the level of boredom between academically talented elementary students and students so identified.

The work place in relation to boredom has also been widely researched as its impact is pervasive and often critical to such work place tasks as surveillance systems which detect equipment failure or malfunction, inspection, and process control. Gardner (1992) states that boredom is the secret ailment that especially afflicts middle-aged executives and large-scale organizations. Critical also in the work place is the influence that boredom exerts on job satisfaction. Smith (1953; 1955) and Drory (1982) report that jobs which give every external appearance of being repetitious to the casual observer were not always perceived as such by workers. The work of Evans and Laseau (1950) produced evidence that many industrial workers claim to enjoy repetitive work rather than suffering from boredom. Jerison (1977) reported that his subjects complained of severe boredom but exhibited no significant performance decrements when compared with unbored subjects.

After an exhaustive review, Smith (1981) reported that little is known about the relation between job performance and subjective boredom as

findings are mixed and in need of further study. If vocational guidance counselors and directors of personnel could screen and place individuals in jobs on the basis of factors that constitute boredom proneness; then, perhaps, industry could recognize profits by reducing performance decrements.

Gender differences in past studies indicate that males tend to be more prone to boredom than females (Zuckerman, Eysenck & Eysenck, 1978; Vandovich & Kass (1990). However, Tolor (1989); Farmer and Sundberg (1986); Bernstein, Kale & Cornell (1990) found no significant sex differences. Additionally, non-significant differences were found between males and females from Hong Kong and Lebanon (Sundberg, et.al. (1991).

A lack of difference in age span (16 though 60+ years) for boredom susceptibility was found by Zuckerman, et.al (1978) while others found older individuals less prone to be bored (Vodanovich & Kass, 1990). However, evidence was also found suggesting that older persons report less boredom (Sundberg, Grimes, Fenn, & Webb, 1981; O'Hanlon, 1981). Sundberg and Bisno (1983) have suggested that boredom may be especially problematic during two periods of major life transition, adolescence and old age, and requires further study. Farmer and Sundberg (1986) suggest that future research should be directed at assessing the prevalence of boredom over the age span.

A cross-cultures study involving the Boredom Proneness Scale with students from Australia, the United States, Hong Kong, and Lebanon was investigated for gender and cross-cultural commonalties. Males within all cultural groups scored higher than females. U.S. and Australian students reported similar levels while Lebanese students, followed by the Hong Kong students, reported the highest levels of boredom proneness

(Sundberg, et. al., 1991). Additionally, Ahmed (1990) looked at cultural differences among Canadians, all of whom were of European origin. Sundberg, et. al. (1991) suggested the need for the development of theories that include cultural aspects of boredom and, therefore, precipitated the present study.

METHOD

Participants, 120 students (60 males, 60 females), were enrolled in general psychology courses at a historically black university. All students were of African-American heritage ranging in age from 18 to 38. For participating in the study, students were given bonus points toward their final grade. The BP Scale was administered during regular class time and took between ten and fifteen minutes to complete. Values were measured by descriptive analysis and a T test.

RESULTS

African-American females ($n = 60$, mean = 12.86) scored significantly higher than African-American males ($n = 60$, mean = 11.15). African-American males scored lower than the groups of males from Lebanon (13.26) and Hong Kong (12.56) but higher than their Western counterparts, Canada (11.01), Australia (10.73, and the U.S.A. (10.90). This same pattern holds true for the African-American females in our study. They scored lower than Lebanon (13.19) and Hong Kong (12.18) but higher than the Western countries, U.S.A. (9.26), Australia (9.39), and Canada (10.91).

TABLE I
Gender Comparison of Boredom Proneness in African-Americans

Total Sample (n = 120)		Males (n = 60)		t test	Females (n = 60)	
M	SD	M	SD		M	SD
12.25	6.23	11.15	4.43	2.11*	12.86	4.38

*P < .05

TABLE 2
Means and Standard Deviations for Boredom
Proneness by Ethnicity and Gender

	Group	
	Male	Female
* Hong Kong	12.56 (4.79)	12.18 (4.01)
* Lebanon	13.26 (4.58)	13.19 (4.08)
* United States	10.40 (4.83)	9.26 (4.68)
** Canada	11.01 (4.21)	10.91 (4.12)
* Australia	10.73 (5.27)	9.39 (4.69)
* African-Americans	11.15 (4.43)	12.86 (4.83)

Note: Standard deviations are listed in parentheses.

*Denotes subjects from Sundberg, et. al./Boredom in Young Adults (1991)

**Denotes subjects from Ahmed/Psychometric Properties of the Boredom Proneness Scale (1990).

DISCUSSION

Although the data is mixed, it is generally held that males are more susceptible to boredom proneness than females. The present study fails to support this finding as African-American females scored significantly higher than African-American males. One's individual boredom may be associated with a deficiency in generating internal stimulation or a lack of external stimulation (Vodanovich & Kass, 1990). This takes into account the theory of high/low arousal being a trigger point for boredom. Further studies to pinpoint if this internal locus of control is more prevalent in African-American females need to be conducted. Environmental factors place the African-American female in a somewhat difficult position where her external stimulation could be blunted.

The African-American female is vulnerable to alienation from her culture by virtue of her gender as well as her race. The women's rights movement of the past two decades has made inroads toward reducing stereotypes and modifying the life style patterns that have probably contributed to higher rates of boredom and depression among females. Economic, political, and social changes are expected to enhance the psychological well being of women.

Higher boredom proneness scores for African-Americans as opposed to their Western counterparts also calls for a need to better understand theories of arousal as well as intervention strategies that have culturally specific applications. Boredom may be more problematic for African-Americans as they have not been adequately assimilated into the

mainstream of American society. Goals are less attainable and frequently result in frustrations, deprivation and hopelessness. Sundberg, et., al (1986) reports that boredom is maintained by an environment that is perceived as static with the actor remaining largely disconnected from the processes that comprise his or her environment. Boredom occurs in situations in which a persons capabilities are greater than situational opportunities for expression.

Further studies are needed to investigate rates of boredom proneness in African-Americans and its relationship to depression, perceived effort, and amotivational orientation. The authors also suggest a need for fmore cross-cultural investigations.

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STAT-STAR Data

A

Name: _____ Date: 8/3/1994 Time: 6:45

Datafile: BORED0M.SS0 Procedure: Two Sample |Mean-IndRawD

		MALE	FEMALE
Value #	1	11	14
Value #	2	9	14
Value #	3	14	8
Value #	4	10	14
Value #	5	13	14
Value #	6	6	10
Value #	7	7	14
Value #	8	14	8
Value #	9	8	10
Value #	10	13	11
Value #	11	7	17
Value #	12	4	17
Value #	13	7	16
Value #	14	6	24
Value #	15	9	18
Value #	16	12	14
Value #	17	5	7
Value #	18	9	13
Value #	19	10	14
Value #	20	3	7
Value #	21	16	14
Value #	22	17	9
Value #	23	16	3
Value #	24	19	9
Value #	25	15	15
Value #	26	6	15
Value #	27	11	14
Value #	28	19	8
Value #	29	18	18
Value #	30	16	17
Value #	31	16	23
Value #	32	18	18
Value #	33	16	19
Value #	34	16	18
Value #	35	8	20
Value #	36	4	11
Value #	37	11	17
Value #	38	7	17
Value #	39	8	16
Value #	40	8	18
Value #	41	11	19
Value #	42	14	8
Value #	43	23	5
Value #	44	11	11
Value #	45	9	11
Value #	46	5	12
Value #	47	14	12
Value #	48	9	8
Value #	49	7	8
Value #	50	10	13

STAT-STAR Data (page 2)

Name: _____ Date: 8/3/1994 Time: 6:45

Datafile: BORED0M.SS0 Procedure: Two Sample |Mean-IndRawD

		MALE	FEMALE
Value #	51	13	12
Value #	52	10	10
Value #	53	7	13
Value #	54	16	11
Value #	55	9	12
Value #	56	14	11
Value #	57	12	10
Value #	58	14	9
Value #	59	14	7
Value #	60	5	7

C

STAT-STAR Data Analysis

Name: _____ Date: 8/3/1994 Time: 6:43

Datafile: BOREDOM.SS0 Procedure: Two Sample |Mean-IndRawD

Null Hypothesis tested: $\mu_1 = \mu_2$ Comparing MALE & FEMALE

Sample1:	M =	11.150	Sample2:	M =	12.867
	SD =	4.430		SD =	4.380
	N =	60		N =	60

$(M_2 - M_1)$	=	1.717			
estSE of $(M_2 - M_1)$	=	0.811	t =	2.117	p-value = 0.03639
ω^2	=	0.028			

Estimated value of $(\mu_2 - \mu_1)$:

95% CI = 0.110 to 3.323

STAT-STAR Explanation

D

Name: _____ Date: 8/3/1994 Time: 6:44

Datafile: BOREDOM.SS0 Procedure: Two Sample |Mean-IndRawD

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+----- Explanation of Operators -----+
| * = Multiply      SUM = Summation      SQRT = Square root |
| / = Divide        ^SQ = Quantity squared |
+-----+

```

The 95 % CONFIDENCE INTERVAL estimate of the difference between two independent population means ($\mu_2 - \mu_1$) uses the "pooled" estimate of the standard error of the difference between means (SE.est).

First, the pooled estimate of the assumed common population variance (VAR.p) is computed:

$$\begin{aligned}
 \text{VAR.p} &= (\text{SS1} + \text{SS2}) / (\text{N1} + \text{N2} - 2) \\
 &= (1177.650 + 1150.933) / (60 + 60 - 2) \\
 &= 2328.583 / 118 \\
 &= 19.734
 \end{aligned}$$

where: SS1 = sums of squares for the first sample
SS2 = sums of squares for the second sample

Then, SE.est is computed using VAR.p:

$$\begin{aligned}
 \text{SE.est} &= \text{SQRT} [(\text{VAR.p} / \text{N1}) + (\text{VAR.p} / \text{N2})] \\
 &= \text{SQRT} [(19.734 / 60) + (19.734 / 60)] \\
 &= \text{SQRT} [0.329 + 0.329] \\
 &= 0.811
 \end{aligned}$$

Finally, the confidence interval limits are computed as

$$\begin{aligned}
 \text{CL} &= (\text{M2} - \text{M1}) \pm (t(\text{crit.}) * \text{SE.est}) \\
 &= (12.867 - 11.150) \pm 1.981 * 0.811 \\
 &= 1.717 \pm 1.606 \\
 &= 0.110 \text{ to } 3.323
 \end{aligned}$$

The NULL HYPOTHESIS test of no difference between the population means is evaluated using the t distribution:

$$\begin{aligned}
 t &= (\text{M2} - \text{M1}) / \text{SE.est} \\
 &= (12.867 - 11.150) / 0.811 \\
 &= 1.717 / 0.811 \\
 &= 2.117
 \end{aligned}$$

OMEGA SQUARED (Ω^2) is computed as follows:

$$\Omega^2 = (t^2 - 1) / (t^2 + \text{N1} + \text{N2} - 1)$$

E

$$\begin{aligned} &= (4.480 - 1) / \\ &\quad (4.480 + 60 + 60 - 1) \\ &= 3.480 / 123.480 \\ &= 0.028 \end{aligned}$$