

Boredom Proneness—The Development and Correlates of a New Scale

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This article reports the development, validation, and correlates of a self-report measure of boredom proneness. The 28-item Boredom Proneness (BP) Scale demonstrates satisfactory levels of internal consistency (coefficient $\alpha = .79$) and test-retest reliability ($r = .83$) over a 1-week interval. Evidence of validity for the BP is supported by correlations with other boredom measures and from a set of studies evaluating interest and attention in the classroom. Other hypothesized relationships with boredom were tested, with significant positive associations found with depression, hopelessness, perceived effort, loneliness, and amotivational orientation. Additional findings indicate boredom proneness to be negatively related to life satisfaction and autonomy orientation. The relationship of boredom to other affective states is discussed, and directions for future research are outlined.

Boredom is a common emotion, with boredom proneness a predisposition with important individual differences. The Boredom Proneness (BP) Scale was developed in response to the notable disparity between the importance of boredom as an issue in psychology, education, and industry and the dearth of research that addresses this disposition. In a review of the psychological and psychiatric studies of boredom from 1926 to 1980, Smith (1981) found that articles on this subject averaged less than one per year. To our knowledge, five relevant measures other than simple self-ratings exist; however, no full-scale measure has been published which assesses the general construct of boredom proneness. Two of these scales, the Boredom Susceptibility scale (Zuckerman, Eysenck, & Eysenck, 1978) and the Boredom scale of the Imaginal Processes Inventory (Singer & Antrobus, 1970), are subscales of larger measures. The Boredom Coping Scale (Hamilton, Haier, & Buchsbaum, 1984) was, in part, influenced in its development by these subscales, but emphasizes an adaptive coping ability. A job boredom scale developed by Grubb (1975) was used to assess the presence of boredom among auto assembly line workers. There is also an unpublished job boredom scale by Lee

(1983). Most of the research on boredom has not relied on psychometrically developed scales but on self-ratings or on assumptions by the authors that certain kinds of tasks are boring. The development of a general scale to measure the tendency toward experiencing boredom seems warranted.

As a psychological issue, boredom is recognized as a widespread and significant problem. In one study of drug abusers (Samuels & Samuels, 1974), boredom and curiosity were reported to be the most common causes of drug use. Similarly, boredom has been associated with eating for both obese and nonobese persons (Abramson & Stinson, 1977; Leon & Chamberlain, 1973). Evidence of psychopathology has also been found to be inversely related to the ability to cope adaptively with boredom (Hamilton et al., 1984). With regard to education, bored students have been found to report views of school as being useless and display higher truancy rates (Robinson, 1975), and to be rated more often as maladjusted by teachers in comparison to other children (Fogelman, 1976). In industry, reported boredom and job dissatisfaction tend to correlate highly (O'Hanlon, 1981), and associations have been demonstrated between boredom and monotony at work with property damage (Drory, 1982) and daydreaming (Smith, 1955).

Considerable controversy remains regarding the individual differences of persons prone to boredom. Much of the research suggests that extroverts are especially susceptible (Smith, 1981); however, some studies have failed to support this association (e.g., Hill, 1975; Smith, 1955).

The mediating effect of intelligence on boredom proneness is likewise mixed. In a study using Raven's Standard Progressive Matrixes as a measure (Hill, 1975), no significant relationships were evident. Educational level was found to be unrelated to boredom susceptibility in one study (Smith, 1955), but related in another (Drory, 1982). In a study with primary school children, Fogelman (1976) found that children who rated themselves as either "always enjoy" or "often bored" generally had lower scores on general ability tests than those who were "sometimes bored." Robinson's (1975) study with secondary school children found a weak, but significant, association between boredom at school and lower intelligence test scores.

One of the most robust findings in the literature is that boredom and job dissatisfaction are more prevalent among younger assembly line workers in comparison to their older counterparts (O'Hanlon, 1981). However, O'Hanlon cautions against interpreting these studies as evidence for age differences in the prevalence of boredom for different age groupings as the studies reviewed were not longitudinal and thus did not control for adaptation to monotonous work or sample bias due to selective attrition. The homogeneity of the samples under study may have also produced a biasing effect.

This article presents the development, validation, and correlates of a scale designed to assess one's proneness toward experiencing boredom.

THE DEVELOPMENT OF THE
BOREDOM PRONENESS SCALE

Item Development and Scale Refinement

An initial pool of about 200 true-false items was developed following a review of the relevant literature, surveys of situations people report as being boring, and interviews. Duplications and items for which three out of four judges could not agree on the direction of scoring were subsequently eliminated. Preliminary scales were tested in several studies and subjected to numerous revisions.

The current 28-item form (see Table 1) includes items that were retained only after meeting or exceeding each of the following criteria: (a) a part-whole correlation of at least .20 with the summary score of the final form, (b) endorsement in the bored direction by at least 10% of the sample, (c) a retest correlation of at least .20 for both males and females, (d) a larger correlation with the summary

TABLE 1
The Boredom Proneness Scale

1. It is easy for me to concentrate on my activities. (F)
2. Frequently when I am working I find myself worrying about other things. (T)
3. Time always seems to be passing slowly. (T)
4. I often find myself at "loose ends," not knowing what to do. (T)
5. I am often trapped in situations where I have to do meaningless things. (T)
6. Having to look at someone's home movies or travel slides bores me tremendously. (T)
7. I have projects in mind all the time, things to do. (F)
8. I find it easy to entertain myself. (F)
9. Many things I have to do are repetitive and monotonous. (T)
10. It takes more stimulation to get me going than most people. (T)
11. I get a kick out of most things I do. (F)
12. I am seldom excited about my work. (T)
13. In any situation I can usually find something to do or see to keep me interested. (F)
14. Much of the time I just sit around doing nothing. (T)
15. I am good at waiting patiently. (F)
16. I often find myself with nothing to do—time on my hands. (T)
17. In situations where I have to wait, such as a line or queue, I get very restless. (T)
18. I often wake up with a new idea. (F)
19. It would be very hard for me to find a job that is exciting enough. (T)
20. I would like more challenging things to do in life. (T)
21. I feel that I am working below my abilities most of the time. (T)
22. Many people would say that I am a creative or imaginative person. (F)
23. I have so many interests, I don't have time to do everything. (F)
24. Among my friends, I am the one who keeps doing something the longest. (F)
25. Unless I am doing something exciting, even dangerous, I feel half-dead and dull. (T)
26. It takes a lot of change and variety to keep me really happy. (T)
27. It seems that the same things are on television or the movies all the time; it's getting old. (T)
28. When I was young, I was often in monotonous and tiresome situations. (T)

score of the 28-item form than with either of two depression scales also administered (Beck Depression Inventory [Beck, Ward, Mendelson, Mock, & Erbaugh, 1961]; Center for Epidemiologic Studies–Depression Scale [Radloff, 1977]). The latter criterion was employed in the recognition that although boredom and depression symptomatology manifest some overlapping characteristics, they are hypothesized as being two distinct constructs. Three items were rejected because of a failure to meet this criterion. An additional six items were eliminated due to similarities with other items or our concerns regarding item format. Item 6 of the current scale is a slightly modified version of an item appearing in the Boredom Susceptibility Scale, Form V (Zuckerman et al., 1978).

RELIABILITY

The reliability of the BP Scale was assessed in two ways. Internal consistency was assessed with coefficient alpha (KR-20) for the entire sample of 233 college undergraduates (93 males, 140 females). A satisfactory level of internal consistency was evident ($\alpha = .79$).

Test-retest reliability was evaluated in a subsample of 28 males and 34 females who were readministered the BP Scale 1 week after their initial testing. Overall, the BP Scale demonstrates adequate test-retest reliability for both sexes ($r = .83$), with more stability exhibited by females ($r = .88$) than by males ($r = .74$).

VALIDITY

Study 1: Self-Ratings of Boredom and Interest

Method. Burisch (1984) cites examples demonstrating that self-ratings are often quite valid measures of trait constructs. Two questions aimed at assessing self-ratings along the boredom/interest continuum were used in combination as a validating measure. Each question was rated on a 5-point scale, ranging from *never* to *most of the time*, with scoring keyed in opposing directions. The responses to these questions (“How often do you feel bored?” and “How much of the time are you satisfied or interested in what you are doing?”) were summed to yield a composite score.

Results. Usable responses from 222 college undergraduate volunteers were obtained. The Boredom Proneness Scale yielded a strong relationship with the composite self-rating score ($r = .67, p < .001$), indicating that one’s willingness to label oneself as bored and uninterested or unsatisfied in personal activities bear a close association with the BP Scale.

Study 2: Lack of Interest and Attention in the Classroom

Two related hypotheses were tested in this study. One hypothesis is that persons who are highly prone to boredom are apt to regard an event (in this instance, two lectures) as being more boring than those who display minimal boredom proneness. The other hypothesis is that change- or stimulus-seeking behavior will produce attentional shifts to irrelevant stimuli. This hypothesis is congruent with previous research investigating this issue (Hamilton, 1981).

Method. Boredom proneness was assessed with a preliminary 33-item form of the BP Scale. This preliminary form demonstrates a strong correlation with the current 28-item form ($r = .90, N = 173$). Because these two forms are highly related, it is believed that the findings displayed below are generalizable to the current form and provide some evidence of its validity.

Subjects for this study were 63 students (23 males, 40 females) from an introductory-level personality course. These students attended each of three class sessions, dispersed approximately equally over the duration of the term. In the first of these sessions, subjects were administered the preliminary 33-item Boredom Proneness Scale as part of a demonstration in personality assessment. In two later class sessions, students were given a rating form prior to the day's lecture which asked for three types of judgments based on the lecture to follow:

1. *Boring topics presented:* Students were asked to list those topics covered in the course of the day's lecture that they felt were uninteresting or boring.
2. *Focus of attention during the lectures:* Prior to both lectures students were notified that a signal would be given on three separate occasions during the lecture. In the spaces provided on the form, students would indicate where their attention was focused at that moment (e.g., on the lecture, on someone or something else in the classroom, on some matter outside the classroom).
3. *A rating of the day's lecture:* Students were provided with a 7-point rating scale to indicate their overall interest in the lecture, ranging from *extremely boring* to *extremely interesting*. Students were asked to make this judgment at the end of the class session.

Two different instructors presented the lecture, in an attempt to reduce any bias created by the delivery characteristics of a single lecturer.

Students' ratings and listings for each of the three judgments were summed over the two lectures and correlated with the 33-item BP Scale administered on the first of these three sessions.

Results. As hypothesized, students high in boredom as measured by the BP Scale listed significantly more boring topics comprising the two lectures ($r = .25, p < .05$), and were less attentive ($r = -.29, p < .05$). For those prone to boredom,

there is evidence suggestive of less interest and involvement in classroom proceedings.

The result from the lecture ratings were not as conclusive, but are suggestive of a trend. The lecture ratings for the two lectures combined produced a modest correlation ($r = .23, p < .09$). Only for Lecture 1 was a significant relationship obtained when lecture ratings of boringness were compared with BP Scale scores ($r = .31, p < .05$). Lecture 2 comparisons display a weak correlation ($r = .13, NS$). Many uncontrolled variables may have contributed to the findings from the second lecture, such as the novelty of the second lecturer (who had not previously presented to this class) or the difference in time between the administration of the BP Scale and the presentation of the two lectures, the difference being greater for Lecture 2 than for Lecture 1.

Study 3: Correlations With Other Boredom Measures

At the time this study was initiated, the authors were aware of only one measure of boredom. The Boredom Susceptibility Scale (ZBS) (Zuckerman et al., 1978) is a 10-item subscale of the Sensation Seeking Scale (Form V), and assesses "aversion to repetition, routine, and dull people, and restlessness when things are unchanging" (p. 140). Soon thereafter, we discovered Lee's Job Boredom Scale (See, 1983) which evaluates one's satisfaction, interest, and connectedness with one's job. This 17-item scale has raters evaluate their perceptions of their job using 5-point ratings. The 28-item Boredom Proneness Scale was expected to demonstrate a satisfactory positive relationship with these two scales.

Method. A majority of the sample of 233 college undergraduates on which the 28-item BP Scale is based was administered the Boredom Susceptibility (ZBS) scale (49 males, 92 females). In addition, those subjects who reported having at least a part-time job for which they received monetary compensation were asked to complete the Job Boredom (JB) Scale. Twenty-two males and 20 females responded to the JB Scale.

Results. Although BP demonstrated a satisfactory relationship with JB ($r = .49, p < .001$), only a weak relationship was found with ZBS scale ($r = .25, p < .01$). Unexpectedly, JB and ZBS yielded a weak, *negative* relationship ($r = -.18, NS$).

Comparing our self-rating measures with these scales, ZBS demonstrates a moderate correlation with self-ratings ($n = 138, r = .32, p < .001$) as did JB ($n = 42, r = .43, p < .01$). Table 2 presents the correlation coefficients among the boredom measures.

The observed variability in the correlations between ZBS and other boredom measures is most likely due to a combination of several factors. One possibility is the low factor loadings associated with females for the ZPS scale, as reported by

TABLE 2
Correlation Among Measures of Boredom

	BP	SR	JB
SR	.67** (222)		
JB	.49** (42)	.43* (42)	
ZBS	.25* (141)	.32** (138)	-.18 (34)

Note. Values in parentheses indicate the number of subjects.

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

Zuckerman et al. (1978). Almost two thirds of the sample administered the ZBS scale in this study were female. If it is the case that the ZBS scale is not well-defined for females, then it is plausible that this predominantly female sample may display limited effects. Other researchers (Hamilton et al., 1984) using a longer form of the ZBS scale have reported an unexpectedly low ($r = -.04$) association between ZBS and boredom coping.

Another possibility is that each of the boredom scales tap different aspects of the boredom experience. The BP Scale emphasizes one's connectedness with one's environment on many situational dimensions, as well as the ability to access adaptive resources and realize competencies. The ZBS scale appears to be related to sensation seeking, emphasizing one's reaction to external events such as entertainment. More specific is the JB Scale which only assesses one's relationship with one's work.

THE DISTRIBUTION OF THE BP SCALE

The overall distribution of the BP Scale for 233 college undergraduates displays a positive skew. This relationship is consistent for both sexes. The mean BP scores for males are greater than that for females ($M = 10.44$ and 9.30), respectively, and although not reaching statistical significance, there is a suggestion of possible sex differences in boredom proneness, $t(231) = 1.78$, $p < .10$.

RELATION OF BOREDOM TO OTHER CONSTRUCTS

Throughout the scale development, hypothesized relationships with boredom were tested in different samples of college undergraduates. Because different subjects were tested at different times, sample sizes vary across measures.

Table 3 presents the correlations among measures of those constructs hypothesized to be related to boredom and three measures of boredom (BP = Boredom Proneness, ZBS = Zuckerman's Boredom Susceptibility, SR = Self-Ratings). Lee's (1983) Job Boredom (JB) Scale is not included in this analysis as the number of subjects with scores on that scale and any other one was too small. An examination of Table 3 shows that, in general, BP and SR demonstrate similar correlations. Unexpectedly, ZBS typically failed to correlate significantly with these constructs. Discussion will therefore be limited to the BP and SR.

Depression, Hopelessness, and Effort

Giambra and Traynor's (1978) investigation of the correlations among subscales from the Imaginal Processes Inventory found that the Boredom subscale correlated moderately (.47 to .52) with scores from three depression scales. This degree of relatedness might be expected, as boredom and depression can both be described as "depressions" in mood which exhibit some overlapping symptoma-

TABLE 3
Relationships With Boredom

<i>Measure</i>	<i>BP</i>	<i>ZBS</i>	<i>SR</i>
Beck Depression Inventory (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961)	.44*** (111)	.05 (111)	.46*** (108)
Center for Epidemiologic Studies—Depression Scale (Radloff, 1977)	.54*** (127)	.09 (70)	.38*** (130)
Hopelessness Scale (Beck, Weissman, Lester, & Trexler, 1974)	.41*** (94)	.15 (94)	.33*** (91)
Perceived Effort Scale	.47*** (91)	.00 (62)	.35*** (89)
UCLA Loneliness Scale (Russell, Peplau, & Ferguson, 1978)	.53*** (72)	-.01 (71)	.35** (68)
Experience Seeking Scale (Zuckerman, Eysenck, & Eysenck, 1978)	.05 (141)	.20* (143)	.14 (138)
Life Satisfaction Index (Neugarten, Havinghurst, & Tobin, 1961)	-.42*** (106)	-.14 (100)	-.40*** (103)
General Causality Orientations Scale—Autonomy (Deci & Ryan, in press)	-.36*** (83)	-.04 (58)	-.26* (81)
General Causality Orientations Scale—Control (Deci & Ryan, in press)	.14 (83)	-.14 (58)	.13 (81)
General Causality Orientations Scale—Impersonal (Deci & Ryan, in press)	.43*** (83)	-.11 (58)	.49*** (81)
Course Grade	.11 (83)	.02 (56)	.13 (81)

Note. Numbers in parentheses indicate number of subjects.
* $p < .05$. ** $p < .01$. *** $p < .001$.

tology. However, features such as the *intensity* and *quality* of mood are hypothesized as being distinguishing elements of these two constructs.

The degree of association between boredom and depression measures was tested. Moderate correlations between both BP and SR were both the Beck Depression Inventory (BDI; Beck et al., 1961) and the Center for Epidemiologic Studies–Depression Scale (CES-D; Radloff, 1977) were obtained (see Table 3), adding to Giambra and Traynor's finding that boredom is associated with responses to depression scales.

The Hopelessness Scale (Beck, Weissman, Lester, & Trexler, 1974) was used to assess a core component of the depressive syndrome, negative expectations. Beck and colleagues (Beck, Kovacs, & Weissman, 1975; Minkoff, Bergman, Beck, & Beck, 1973) found hopelessness to be the mediating link between depression and suicidal intent. When applied to boredom, hopelessness may take on a more existential theme, as exemplified by the person who lacks goals or ambitions, views life in pessimistic terms, and concludes that his or her existence lacks meaning or purpose. Hence, BP and SR were expected to display at least a modest relationship with hopelessness. This degree of relatedness was obtained for both BP and SR ($r = .41$ and $.33$, respectively, $p < .001$).

The foundation of O'Hanlon's (1981) theory of boredom as a unique psychophysiological state is based primarily on four central concepts: arousal, habituation, effort, and stress. Effort has also been associated with depression, and both the BDI and CES-D assess this symptom (e.g., "It takes extra effort to get started at doing something" and "I could not get 'going'"). Because boredom has been viewed as a conflict between habituation and the ability to maintain a satisfactory arousal level (O'Hanlon, 1981), one might speculate that effort may be more strongly associated with boredom than with depression.

To test this hypothesis, an 11-item scale was constructed to assess the extent to which a person perceives effort required to engage in typical daily activities such as "performing well at work or school" or "entertaining myself when alone." Response choices were on a 4-point continuum, ranging from *requiring no effort* to requiring considerable effort.

This effort scale demonstrated a nonsignificant correlation with the BDI ($r = .18$, $n = 35$), and a moderate correlation with BP ($r = .46$, $p < .001$) and SR ($r = .35$, $p < .001$). Because the effort and CES-D scales were not administered at the same testing sessions, their relationship was not tested. Although the evidence is suggestive rather than compelling, perceived efforts appears to be one element more strongly associated with boredom than with depression.

Loneliness

In its inaugural article, the developers of the UCLA Loneliness Scale report that loneliness was associated with self-ratings of "empty" ($r = .58$), "restless" ($r = .36$), and "bored" ($r = .36$), among other terms (Russell, Peplau, &

Ferguson, 1978). Consequently, BP and SR were expected to demonstrate a moderate relationship with this scale. This hypothesis was confirmed for both the BP ($r = .53, p < .001$) and SR ($r = .35, p < .01$).

Experience Seeking

The Experience Seeking Scale (Zuckerman et al., 1978), a subscale of Form V of the Sensation Seeking Scale, measures the "seeking of experience through the mind and senses, travel, and nonconforming lifestyles" (p. 140). Attraction to novelty has been shown to be an accompaniment to boredom susceptibility, as demonstrated by modest, yet significant, correlations between experience seeking and ZBS for both males (.21 and .26) and females (.29 and .37) (Zuckerman et al., 1978). We tested the hypothesis that BP and SR would likewise demonstrate a positive relationship with experience seeking. Unexpectedly, both BP and SR failed to demonstrate a significant association; however, the relationship between ZBS and experience seeking was obtained ($r = .20, p < .05$).

Life Satisfaction

Because boredom and job dissatisfaction have been shown to be strongly related (O'Hanlon, 1981), it seemed reasonable to suspect that boredom and life satisfaction should demonstrate an inverse relationship. The Life Satisfaction Index, Form A (Neugarten, Havinghurst, & Tobin, 1961) is a general attitude survey measuring personal satisfaction across many dimensions. This index when compared with BP and SR exhibited the negative relationship expected ($r = -.42$ and $-.40$, respectively, $p < .001$).

Causality Orientation

Deci and Ryan (in press) posit three orientations of self-determination: autonomy, control, and impersonal. These motivational orientations are associated with a person's perceived locus of causality of his or her behaviors. With the autonomy orientation, the person's behaviors are influenced more by personal goals and interests rather than by external supports; these people tend to be intrinsically motivated. The control orientation is found in a person who is guided by controls, whether they be internal or external. Controlling events such as deadlines or extrinsic rewards are a strong source for self-motivation; characteristically, these people tend to be extrinsically motivated. The impersonal orientation, as exemplified by the person who feels inadequate in realizing goals and effectively handling situations, is associated with amotivation.

The level of each of the above orientations is assessed by the three subscales comprising the General Causality Orientations Scale (Deci & Ryan, in press). With regard to boredom, the control orientation was expected to produce at

least a modest correlation with BP and SR, corresponding to those instances when boredom susceptibility is heightened due to the absence or removal of external controls, producing a more situationally experienced boredom rather than an enduring susceptibility. A stronger relationship was expected with the impersonal orientation, as these persons typically lack both external controls and autonomous strivings as motivators, and are hence amotivational. The autonomy orientation, on the other hand, was expected to be inversely related to boredom, as these persons characteristically initiate and structure cognitions and behaviors around personal interests and goals.

As can be seen in Table 3, the hypotheses concerning the autonomy and impersonal orientations were supported, but not that for the control orientation.

Course Grade

As previously noted, the relationship between boredom and intelligence has produced mixed results. Some studies are suggestive of a positive relationship (Drory, 1982), negative relationship (Robinson, 1975), curvilinear relationship (Fogelman, 1976), or no relationship at all (Hill, 1975; Smith, 1955). The diversity of these findings may, in part, be related to the wide variety of intelligence measures used. Indirect measures, such as educational level, have been employed with inconsistent results (Drory, 1982; Smith, 1955).

As an indirect measure of intellectual ability, we chose the course grade received in an introductory-level personality class. Grading was done on a 4.0 basis, with students choosing the pass/no pass grade option excluded from this analysis.

Course grade was found to be unrelated with BP ($r = .11$, NS) and SR ($r = .12$, NS), and no curvilinear relationships were found.

DISCUSSION AND SUMMARY

The Boredom Proneness Scale was developed to fulfill the need for a general assessment tool to measure the tendency toward experiencing boredom. The BP Scale demonstrates satisfactory levels of internal consistency and test-retest reliability. Preliminary evidence of scale validity is encouraging; however, additional research on the scale's psychometric properties in diverse samples is still needed.

From the findings of this investigation, the emerging picture of the boredom-prone person is one who experiences varying degrees of depression, hopelessness, loneliness, and distractibility. Common tasks are perceived as requiring effort, with dissatisfaction with one's work and psychological well-being. Boredom-prone persons tend to be amotivating and display little evidence of autonomous orientation as conceptualized by Deci and Ryan (in press).

One surprising finding from this research is that BP and other constructs hypothesized to be related to boredom failed to establish moderate correlations with the widely used ZBS scale. Zuckerman et al. (1978) report low factor loadings in the ZBS, as well as low reliability. Other researchers (Hamilton et al., 1984) also report unexpected findings with a longer form of the ZBS. An examination of ZBS item content shows a marked association between the ZBS subscale and its parent measure, the Sensation Seeking Scale. Our research suggests that proneness to boredom is influenced by several factors, with sensation seeking being but one component.

Future research should be directed at assessing the prevalence of boredom over the age span. Sundberg and Bisno (1983) have suggested that boredom may be especially problematic during two periods of major life transition, adolescence and old age. The adolescent, Sundberg and Bisno point out, has yet to assume an adult role, remaining largely unassimilated into mainstream society. Similarly, with retirement in advanced years, one is again confronted with disengagement from adult roles. The maintenance and discovery of interesting ways to spend one's time may become more of a problem in one's later years. However, in studies with a preliminary, longer form of the BP Scale (Sundberg, Grimes, Fenn, & Webb, 1981), evidence was obtained suggesting that older persons report less boredom, contrary to the investigator's hypothesis but consistent with O'Hanlon's (1981) findings.

Although a relationship between boredom and depression is evident, we view the two as distinct constructs, being distinguished by *quality* and *intensity* of mood. Prototypically, depression is characterized by feelings of sadness or personal loss, whereas boredom is characterized by a lack of interest, which can exist independently of sadness. Furthermore, sadness can be described as a more intense mood state in comparison to a generalized lack of interest, which entails less emotional energy. The environment can be a salient component in the maintenance of both boredom and depression. With depression, contributing events from the environment have often been found to be the result of *ongoing processes*, whether they be the result of personal interactions (Biglan, Hops, & Sherman, 1985) or from the occurrence of an inordinate amount of unpleasant events (Lewinsohn & Talkington, 1979). In contrast, 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. To differentiate boredom from depression, an investigation into sex and symptomatology differences may be useful. Prevalence rates of depression have been typically found to be higher in females (e.g., Amenson & Lewinsohn, 1981). In contrast, there is a suggestion from this study that males may be more boredom prone. Limited attention has commonly been associated with boredom (e.g., Hamilton, 1981), and evidence exists suggesting that effort may be more strongly related to boredom than to depression. Further research should also be directed at clarifying the state versus trait aspects of boredom and depression.

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REFERENCES

- Abramson, E. E., & Stinson, S. G. (1977). Boredom and eating in obese and nonobese individuals. *Addictive Behaviors*, 2, 181-185.
- Amenson, C. S., & Lewinsohn, P. M. (1981). An investigation into the observed sex difference in prevalence of unipolar depression. *Journal of Abnormal Psychology*, 90, 1-13.
- Beck, A. T., Kovacs, M., & Weissman, A. (1975). Hopelessness and suicidal behavior: An overview. *Journal of the American Medical Association*, 234, 1146-1149.
- Beck, A. T., Ward, C. H., Mendelson, M., Mock, J. E., & Erbaugh, J. K. (1961). An inventory for measuring depression. *Archives of General Psychiatry*, 4, 561-571.
- Beck, A. T., Weissman, A., Lester, D., & Trexler, L. (1974). The measurement of pessimism: The hopelessness scale. *Journal of Consulting and Clinical Psychology*, 42, 861-865.
- Biglan, A., Hops, H., & Sherman, L. (1985). *Coercive family processes and marital depression*. Unpublished manuscript.
- Burisch, M. (1984). Approaches to personality inventory construction: A comparison of merits. *American Psychologist*, 39, 214-227.
- Deci, E. L., & Ryan, R. M. (in press). The general causality orientations scale: Self-determination in personality. *Journal of Research in Personality*.
- Drory, A. (1982). Individual differences in boredom proneness and task effectiveness at work. *Personnel Psychology*, 35, 141-151.
- Fogelman, K. (1976). Bored eleven-year-olds. *British Journal of Social Work*, 6, 201-211.
- Giambra, L. M., & Traynor, T. D. (1978). Depression and daydreaming: An analysis based on self-ratings. *Journal of Clinical Psychology*, 34, 14-25.
- Grubb, E. A. (1975). Assembly line boredom and individual differences in recreation participation. *Journal of Leisure Research*, 7, 256-269.
- Hamilton, J. A. (1981). Attention, personality, and the self-regulation of mood: Absorbing interest and boredom. *Progress in Experimental Personality Research*, 10, 281-315.
- Hamilton, J. A., Haier, R. J., & Buchsbaum, M. S. (1984). Intrinsic enjoyment and boredom coping scales: Validation with personality, evoked potential and attention measures. *Personality and Individual Differences*, 5, 183-193.
- Hill, A. B. (1975). Work variety and individual differences in occupational boredom. *Journal of Applied Psychology*, 60, 128-31.
- Lee, T. W. (1983, October). *Development and validation of a measure of job boredom*. Paper presented at the meetings of the Oregon Psychological Association, Salem, OR.
- Leon, G. R., & Chamberlain, K. (1973). Emotional arousal, eating patterns, and body image as differential factors associated with varying success in maintaining a weight loss. *Journal of Consulting and Clinical Psychology*, 40, 474-480.
- Lewinsohn, P. M., & Talkington, J. (1979). Studies on the measurement of unpleasant events and relations with depression. *Applied Psychological Measurement*, 3, 83-101.
- Minkoff, K., Bergman, E., Beck, A. T., & Beck, R. (1973). Hopelessness, depression, and attempted suicide. *American Journal of Psychiatry*, 130, 455-459.

- Neugarten, B., Havinghurst, R. J., & Tobin, S. S. (1961). The measurement of life satisfaction. *Journal of Gerontology*, *16*, 134-143.
- O'Hanlon, J. F. (1981). Boredom: Practical consequences and a theory. *Acta Psychologica*, *49*, 53-82.
- Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, *1*, 385-401.
- Robinson, W. P. (1975). Boredom at school. *British Journal of Educational Psychology*, *45*, 141-152.
- Russell, D., Peplau, L. A., & Ferguson, M. L. (1978). Developing a measure of loneliness. *Journal of Personality Assessment*, *42*, 290-294.
- Samuels, D. J., & Samuels, M. (1974). Low self-concept as a cause of drug abuse. *Journal of Drug Education*, *4*, 421-438.
- Singer, J. L., & Antrobus, J. S. (1970). *Imaginal processes inventory* (rev. ed.). New York: Center for Research in Cognition and Affect, Graduate Center, City University of New York.
- Smith, P. C. (1955). The prediction of individual differences in susceptibility to industrial monotony. *The Journal of Applied Psychology*, *39*, 322-329.
- Smith, R. P. (1981). Boredom: A review. *Human Factors*, *23*, 329-340.
- Sundberg, N. D., & Bisno, H. (1983, April). *Boredom at life transitions - adolescence and old age*. Paper presented at the meetings of the Western Psychological Association, San Francisco, CA.
- Sundberg, N., Grimes, D., Fenn, D., & Webb, C. (1981, August). *Aging and boredom*. Paper presented at a meeting of Division 20, Adult Development and Aging, of the American Psychological Association, Los Angeles, CA.
- Zuckerman, M., Eysenck, S., & Eysenck, H. J. (1978). Sensation seeking in England and America: Cross-cultural, age and sex comparisons. *Journal of Consulting and Clinical Psychology*, *46*, 139-149.

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