



## The Habitual Boredom Scale: Preliminary Findings

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**Abstract:** This research presents the conceptualization of habitual boredom and the development of a scale for its measure. Bargdill suggests that habitually bored individuals experience five overlapping psychological themes: ambivalence, passive avoidance stance, passive hope, identity confusion and shame. The authors propose that situational boredom and habitual boredom are two different constructs. Other boredom scales have mixed the two constructs together during their development. This scale of habitual boredom has been developed in terms of the five themes and has been tested through several prior administrations. This paper reports the results of the latest test that reflects modification and refinement of the scale through previous tests. The data indicate that the scale with 35 items is fairly reliable. Each of the five themes measured by the scale is configured by seven items. The current iteration has included two face validity questions. Persons experiencing habitual boredom are at risk of serious psychological impacts since the changing situations does not seem to curb the effects of boredom.

**Keywords:** Habitual Boredom Scale, situational boredom, ambivalence, passive stance, passive hope, identity confusion.

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## **1. Introduction**

The current research follows a line of projects that began with a phenomenological investigation (Giorgi, 2018) of people who described themselves as being bored with their lives (Bargdill, 1999). That research produced 33 overlapping themes, meaning that some of the factors that influenced one theme were also partially present in the next theme. The themes emerged from narrative accounts by the participants and then narrative statements were used for supporting evidence of the theme. These theme-based-narrative-statements became the first items for a scale of habitual boredom.

The researcher prefers the term habitual boredom as compared to trait or chronic boredom for numerous reasons. First, people appear to gradually become habitually bored and did not previously recognize boredom as one of their traits. Second, the term trait can also imply a permanent condition that one has and will always have whereas a habit is a repetitive behavior pattern that is hard to change, but not impossible with the proper effort. Third, trait can imply a genetic pre-disposition as in an “inborn trait” and the authors know of no research showing that boredom is a genetic condition. Finally, chronic boredom has a sense of hopelessness to it like a terminal diagnosis, it is our contention that any condition can change from a habitually boredom to some other attunement. New research on “perceived life boredom” (Tam et al., 2021) created a seven item survey that falls in line with what the authors are calling habitual boredom. The Habitual Boredom Scale is systematic attempt at measuring this type of boredom.

The researcher continued to condense themes to make the findings more useful to both clinicians and other researchers (Bargdill, 2000a, 2000b). The overlapping nature off many of the themes were further titrated into five implicit areas that are now understood to be implicit themes beneath the general heading of habitual boredom. The five implicit themes at the center of this habitual boredom (ambivalence, identity confusion, passive hope, shame, and passive avoidance) were described in detail by Bargdill (2014). This paper has only recently gained wider circulation due to digital document indexing (DOI). Hence, a short recap is in order.

After previously not being bored, a person who became habitually bored had a long-term project meet a firm obstacle. Other people convince the person to change directions. This would lead to ambivalence which meant the person became aware of anger toward those other people but was not as aware of anger toward oneself. Progress on the new project did not come easily and a habit of passive avoidance was established; here, the person does not ask for assistance but rather acts like everything is progressing normally. As some point, the persons became aware that they were not succeeding, and hence, an increasing sense of shame developed that also strengthened avoidance. Identity confusion arose as persons recognized that they no longer the active engaged person they once were and they can no longer see a positive outcome for themselves in the future. They are stuck in boredom. They do, however, a maintain a passively hopeful mentality which means that they believe someone else (external locus of control) will save them from their boredom. Habitual boredom can become depression if this passive hope can no longer be maintained. Habitual boredom spread from the initial project to all parts of the person’s life. Despite the unpleasant experience, the bored individuals did not take actions get out of their boredom. In fact, those who did escape did so because they were forced out of complacency due to external forces (e.g. divorced by spouse, terminated from job).

A later work attempted to distinguish Habitual boredom from that of unipolar or major depression (Bargdill, 2019) using comparative phenomenology. Taking the existing five implicit themes of habitual boredom, the researcher compared the boredom participants narrative statements with those in a phenomenological analysis of depression (Carter, 1990)

Compared to Habitual boredom, the depressed person's experience differed on those five themes. Instead of externalizing ambivalence [blames others] the depressed person experience internalizes blame; instead of passive avoidance, the depressed person experienced extreme willfulness, instead of shame the depressed felt guilt, instead of identity confusion the depressed experience negative objectification of self; instead of passive hope, the depressed experience hopelessness. It is the author's contention that habitual boredom is not the same construct as unipolar depression although there may be some similarities (Goldberg et al., 2011).

## **2. A comparison between situational and habitual boredom**

Much of the current research on boredom focusses on situational or state boredom. Fahlman et al. (2013) outlined five different elements to situational boredom that have garnered significant interests: lack of engagement, low arousal boredom, high arousal boredom, slow passage of time, difficulty focusing attention. In this section, situational boredom will be contrasted with habitual boredom. Habitual Boredom is understood as a significant mental health problem because of the behaviors that the habitually bored people engage in (Tam et al., 2021). Whereas it has been suggested that situational boredom can lead to both negative (Kılıç et al., 2019) and positive outcomes (Mann and Cadman, 2014).

Situational boredom is a common experience (Chin et al., 2017), everyone has felt at some point in their life. One factor that can lead to this type of boredom is when the person finds the situation unfulfilling (Danckert et al., 2018), unengaging (Eastwood et al., 2018) or not meaningful (Chan et al., 2018; Elpidorou, 2021). O'Hanlon (1981) recognizes that different people in the same situation are not always bored so this is a subjective understanding of the event. In habitual boredom, the person has given up a meaningful project their own, without doubling their efforts first. They now find secondary project suggested to them by others as a contagion of boredom. Boredom starts with this secondary project but spreads to other areas of life (e.g., free time).

Situational boredom can contribute to the experience of low arousal, sometimes also called apathetic boredom (Fahlman et al., 2013; Goetz et al., 2014). Generally, these situations have low intensity activities, monotonous stimuli, repetitive actions that are seen as unchallenging busy work. O'Hanlon (1981) notes that most people who get out of the boring situation experience an immediate positive change in affect. In habitual boredom, more and more activities become seen as boring—some of those activities the person previously found to be quite arousing. Changing activities does not seem to alleviate habitual boredom.

Situational boredom can also manifest itself as the experience of high arousal in the form of restlessness, psychomotor agitation (O'Hanlon, 1981), frustration (Fahlman et al., 2013). These experiences possibly manifest as the boring situation becomes prolonged and the person attempts to self-stimulate to maintain some level of arousal or alertness (Danckert et al., 2018).

Failure to get out of the boring situation can create a sense of resignation that leads the person back to the low arousal experiences. In habitual boredom, the person experiences lasting bouts of apathy, futility and most importantly, passivity. Habitual boredom is a slow-motion crisis in which one's personal strength's atrophy while the person adds no new skills. In situational boredom, the person is motivated by meaninglessness to change (Elpidorou, 2021) but the habitually bored person shows a loss of will and motivation to get away from the negative prevailing story line of their life.

In situational boredom there is common experience of time moving slowly. People often report a distorted sense of how much time has passed on a given activity (Danckert and Allman, 2005). If time flies when you are having fun, then time drags when you are bored. Individuals are more likely to focus on temporal information (i.e., stare at the clock) when they are not meaningfully engaged in an activity (Chaston and Kingstone, 2004). This practice likely adds to the experience of boredom. In habitual boredom, the person feels their life is stuck. They are no longer actively becoming someone. Instead, they are in between a past that no longer exists and a future that they cannot envision. Hence, they feel stuck in neutral in a negative present where every day is just like the previous day.

The final feature of situational boredom is the difficulty of focusing one's attention when bored (Isacescu et al., 2017). This is often experienced as having poor concentration prior to recognizing the need to increase one's focus on the activity (Fahlman et al., 2013). Ongoing sustained attention to environments perceived to be unstimulating leads to individuals exerting less effort and decreased internal control of one's attention (Hartcher-O'Brien et al., 2017) and that may contribute to boredom. In habitual boredom, the person experience boredom most of the time and only feels moments of relief from boredom. In other words, they become hyper focused on the boredom itself. The rare relief from boredom comes typically in the form of dangerous, addictive behaviors (Johnston and O'Malley, 1986), or clinically relevant behaviors (Goldberg et al., 2011). Surprisingly, the habitually bored person does not take action to change their experiences in the positive direction as one might expect with situational boredom (Elpidorou, 2021). In fact, they avoid actions because they feel anything they would try to do would ultimately end up be boring to them.

### **3. Need for a scale that measures habitual boredom**

The most prolifically used scale for boredom that has been used for research in Farmer and Sundberg's (1986) Boredom Proneness Scale. This scale has admittedly advanced the study of boredom. A chief concern about the BP is that constructors of this instrument did not begin with a specific conceptual frame about what boredom proneness is (Mercer-Lynn et al., 2014), nor do they make any distinctions between situational or habitual boredom. For example, Farmer and Sundberg (1986) state, "The Boredom Proneness scale was developed to fulfill the need for a general assessment tool to measure the tendency toward experiencing boredom" (p. 14). It is only after the scale is developed that the conceptual understanding is arrived at: "From the findings of this investigation, the emerging picture of the boredom-prone person is one who experience degrees of depression, hopelessness, loneliness and distractibility..." tend to be amotivating and

display little evidence of autonomous orientation...” (p. 14). These conclusions may be accurate, but reveal very little about the dynamics of the either the person's experience or how these features may have come about.

As a general assessment tool, the BPS measures a combination of both situational and habitual boredom tendencies. “The Boredom Proneness Scale emphasizes one's connectedness with environment on many situational dimensions as well as the ability to access adaptive resources and realize competencies” (Farmer and Sundberg, 1986, p. 10). The BPS seems to operate under the assumption that the experience of situational boredom is the same as the experience of habitual boredom. But by analogy, we would not want to compare the situation of being “down in the dumps” with the experience of major depression. Clearly some of the items on the BP are experiences of situational (state) boredom. For example, item 6 which reads “Having to look someone's home movies or travel slides bores me tremendously.” Item 27 says, “It seems that the same things are on television or the movies all the time; it's getting old” (p. 6). At the same time, there are items that are also trait related or what the authors refer to as habitual boredom. For example, item 16 “I often find myself with nothing to do-time on my hands. And item 21 states, “I feel like I am working below my abilities most of the time” (p. 6). In short, home movies or television are external stimuli, states, or situations that one finds oneself in, while working below one's abilities and finding myself with time are internal experiences that speak more to habitual experiences or global evaluations of the self (Tam et al., 2021).

The importance of the distinction between situation and habitual boredom may lay in the idea that someone might be bored in many situations and yet not habitually bored. In fact, we might imagine an artist who might find almost every situation, other than his art, as boring. The assumption is that someone who experiences a tremendous amount of situational boredom might be boredom prone, but not necessarily habitually bored. Framer and Sundberg acknowledge a need for more research that distinguishes between state and trait or situational and habitual boredom. The Habitual Boredom Scale was developed to measure specifically trait or habitual boredom.

#### **4. Methods**

The present study is to address an important issue of habitual boredom in conception and measurement within the research context. It first proposes a conceptual framework of habitual boredom by discussing the difference between situational and habitual boredom. Second, the study presents the measurement of habitual boredom through the development and test of a habitual boredom scale (HBS). The HBS intends to conceptually define and empirically determine the general themes of habitual boredom for both research and clinical purposes.

Qualitative and quantitative studies were conducted to develop the scale items. As Bargdill (2000a, 2014) presents, the qualitative studies identified statements from participants' narratives to develop the scale items. For example, a participant made the following comment:

P2: So many times, my life was like a daydream. I would sit around and think about how nice it would be if I could get a job where I could travel and be the singer. I could dance. I was a real good dancer. Maybe I

could get a job with Lawrence Welk. So I fantasized that somebody might discover me someday. I'd be somebody someday. It never happened though I'm still waiting (Bargdill, 2014, p. 102).

This statement was compared with other participants' experiences and led to the formulation of the concept called "Passive hope." We see that the person still believes that the future can be positive, but it is also noticeable that the participant is waiting for someone else to discover them. That is, the participant is not actively doing the things to help them be discovered! This statement was then formed into a scale item, in this case item 26 (Passive hope 6): Someday, someone is going to discover me.

Initially 50 items were created in this fashion. Sometimes there were multiple items per theme and then those items were paired down to 28 so that the HBS would be within a similar range of items as other scales (e.g., BPS) have. The trend has been for scales to become more and more abbreviated.

Quantitative studies were also conducted to test the scale items. The first study was conducted over a three-year period at four different institutions (two community colleges, one college, and one university). The participants in the first study comprised of 62.6% female 37.4% male with a mean age of 27.84 years. A total of 104 college and community college undergraduates participated voluntarily in the study as a part of an extra credit assignment for a variety of undergraduate psychology courses. The participants were first given the Boredom Proneness Scale (BPS) and then took the Habitual Boredom Scale (HBS). It was hypothesized that there would not be a significant correlation between the two scales since our position is that boredom proneness is not the same as habitual boredom. Our analysis of the data provide support for our hypothesis. The correlation coefficient is  $-.17$  between the two scales that is not statistically significant.

In the second study, a total of 76 participants volunteered as a part of undergraduate psychology courses to participate. The participants in the second study comprised of 62.7% female 37.3% male with a mean age of 29.63 years. The participants were first given the Beck's Depression Index (BDI) and then took the Habitual Boredom Scale (HBS). It was hypothesized that habitual boredom and depression were not the same construct even though they both are seen as a negative effect. Therefore, the two scales were not expected to correlate to a high degree. Our data analysis shows that the two scales are not correlated significantly ( $r = 0.07$ ).

The next study was to assess the test-retest reliability of the Habitual Boredom Scale (HBS). A total of 41 participants who volunteered as part of two mid-level undergraduate psychology courses. The participants in the second study comprised of 56.1% female 43.8% male with a mean age of 19.2 years. The participants were given the HBS and then took the same scale once again twelve days later. It was hypothesized that since the habitual boredom was considered a trait like experience, there would be little change in a participant's evaluation on the HBS over time. Therefore, the correlation between the test-retest scores should be high. Our analysis of the data indicate that the test and re-test results are highly correlated ( $r = 0.81$  for Ambivalence items,  $0.62$  for Passive avoidance stance items,  $0.63$  for Passive hope items,  $0.77$  for Identity confusion items, and  $0.69$  for Shame items).

We analyzed the data collected from these tests and modified the items. A revised version was developed to strengthen scale based on the evolved theoretical model that included the current five implicit factors. This was done to avoid some of the problems identified with the Boredom Proneness Scale, namely, that it is neither purely evaluating state nor trait boredom. The Habitual Boredom Scale does not measure state boredom and the items refer entirely to personality self-evaluations. The word “boredom” does not appear in the scale at all, although Item 4 does use word “dull.”

The revised version has 35 items. A two-point scale was used for responses to these items: 1 = true; 0 = false. A fourth survey was conducted to test this revised version (see Appendix 1 for the survey instrument). Participants in the test were recruited from several psychology and sociology classes at a university. The recruitment yielded a total of 90 students who agreed to participant in the test. The participants contain 52.2% females and 47.8% males. The age distribution shows that 38.9% of them were in an age range of 18-19, 47.8% in 20-21, and 13.3% in 22 and above.

## 5. Results

Using data collected from this test, the present study first conducted confirmatory factor analysis to assess items that closely tap the themes with acceptable reliability, respectively. As a result, a total of 35 items has been retained with 7 items for each theme. The Cronbach alpha for each theme ranges from 0.67 to 0.80 which is relatively acceptable (see Table 1).

Table 1. Themes and measures of habitual boredom scale (HBS)

Themes	Items
Ambivalence (7items) (Cronbach alpha: 0.68)	I know I have certain abilities, but I’m trapped. I am frequently confused by my own emotional reactions. I often blame others when I ought to blame myself. I’ve begun to think that maybe I’m not made of the material thought I was. I often feel disconnected from my family and friends. I feel that I have my life on track. I rarely feel like I have “gotten in over my head.”
Passive avoidance stance (7 items) (Cronbach alpha: 0.70)	I’m more of dreamer than a do-er. I’ve unsuccessfully been trying hard to turn my life around. I go after something I want. It is not uncommon for me to start a project and then quickly lose interest in it. For many of my current projects, I find myself going through the motions. I anticipate that many activities will be dull, so I don’t bother with them. I have ideas about life improvements, but they don’t get out of the idea stage.
Passive hope (7 items) (Cronbach alpha: 0.67)	Right now, I’m waiting for the pendulum to swing back in my direction. I feel stuck and need someone to help free me. I feel that my will power is strong. Once I get past this one obstacle everything will fall into place. If you work hard, you will get the things you want. Someday, someone is going to discover me. I believe it is better to be lucky than to be good.
Identity confusion (7 items) (Cronbach alpha: 0.80)	Most of the time I go to sleep with a clear conscience. I have a strong sense of who I am. My strengths no longer seem so strong. I’m very enthusiastic about my life right now.

	I find most things I do to be interesting. I'm on my way to achieving my potential. I'm just a shadow of my former self.
Shame (7 Items) (Cronbach alpha: 0.76)	At important times I have been ashamed to ask for help. As I have gotten older my confidence has continued to grow. I frequently doubt my abilities. I'm proud of myself. I am pleased with the way my life is progressing. I have trouble "facing myself in the mirror." So far, my life has been time well spent.

Second, we used the items to create composite variables to represent the 5 themes, respectively (see Table 2 for the descriptive statistics of these composite variables). Using the structural equation modeling method with the composites, we fit a measurement model that treats habitual boredom as a latent construct and the five composites as the indicators of the five dimensions of the construct (see Figure 1). Compared with the reliability analysis with the Cronbach alphas, the measurement model allows assessing the overall model fit of the scale with different themes by taking into account the measurement errors.<sup>1</sup>

Table 2. Descriptive statistics of the composite variables

Variable	Mean	Standard deviation
Ambivalence	2.54	1.90
Passive avoidance stance	2.01	1.82
Passive hope	1.17	1.49
Identity confusion	1.59	1.94
Shame	1.70	1.87

Notes: N = 90.

The results show that the model fits the data well with  $\chi^2 = 1.64$ ,  $df = 5$ , Probability level = 0.90, NFI = 0.99, and CFI = 0.99 (see Table 3). The factor loading of each composite on the construct of habitual boredom is high (0.78 for the Ambivalence composite, 0.77 for the Passive Avoidance composite, 0.76 for the Passive Hope composite, 0.91 for the Identification Confusion composite, and 0.85 for Shame composite; see Table 3). These results provide support to the scale with five themes that are assumed different dimensions of habitual boredom.

Table 3. Parameter estimates of factor loadings for habitual boredom

Variable	Metric slope	Reliability coefficient
Ambivalence	1.00*	0.78
Passive avoidance stance	0.95	0.77
Passive hope	0.77	0.76

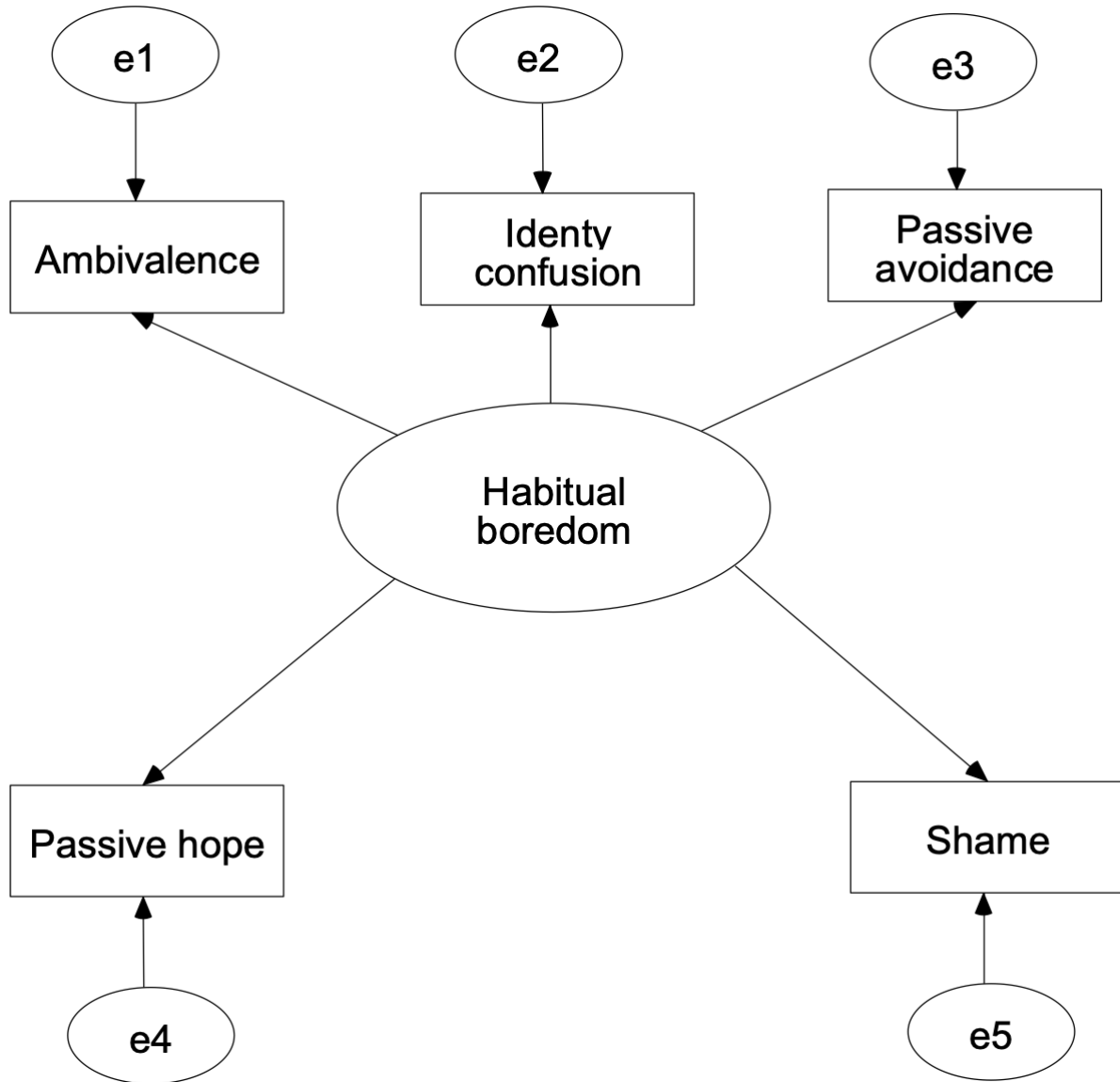
<sup>1</sup> We acknowledge the limitations of our measurement model because the five themes (indices) were directly treated as the indicators of the latent construct "Habitual boredom." Ideally, a structural equation model with habitual boredom as a higher-order latent construct should be estimated. Unfortunately, our sample size of 90 cases is too small to do so. A general rule is that every indicator variable needs 10 cases for the ratio of cases to free parameters if the indicators are not assumed as normally distributed (all our indicators are dichotomized). We have a total of 35 indicators with the five themes of habitual boredom. It means that at least a total of 350 cases is needed to estimate the model properly. Consequently, we took this compromising analytical approach to estimate the measurement model to determine the overall model fit of habitual boredom with its five themes.



Identity confusion	1.19	0.91
Shame	1.08	0.85

Notes:  $\chi^2 = 1.64$ ;  $df = 5$ ; Probability level = 0.90; Normed fit index (NFI) = 0.99; Comparative fit index (CFI) = 0.99; N = 90; \*Fixed coefficient.

Figure 1. Measurement model for habitual boredom



**6. Conclusions**

This study presents the theoretical and conceptual development of habitual boredom. It proposes five themes (i.e., ambivalence, passive avoidance stance, passive hope, and shame) of habitual boredom building upon current literature and a phenomenological investigation conducted by the senior author. Informed by the theoretical and conceptual development, a Habitual Boredom Scale (HBS) was designed for research and clinical purposes. The scale was tested through

several surveys to assess its reliability. With modification and refinement of the items in the scale, the scale has been achieved fairly acceptable reliability. The present study presents the results of our recent test of the scale using a sample of college students.

The data show that a total of 35 items in the scale are fairly reliable through confirmatory factor analysis with 7 items for each theme. Our analysis of a measurement model also indicates that the five themes measured by the 35 items fit in the central construct of habitual boredom reasonably well as we hypothesize that they are five dimensions of the construct.

Our preliminary findings suggest three important implications. First, habitual boredom is not the same construct as boredom proneness (Farmer and Sundberg, 1986). As we mentioned earlier, boredom proneness includes mostly situational/state items but also a few that relate to habitual/trait experiences of boredom. Whereas, the habitual boredom scale (HBS) is attempting to isolate the factors that the people experience when they report being bored regardless of the situation. Because the Boredom Proneness Scale and the Habitual Boredom Scale are not highly correlated as our data indicate, we feel that they must not be identical phenomena.

Second, our study offers further support that habitual boredom and depression are also not the same constructs (Bargdill, 2019, Goldberg et al, 2011) since our data also indicate that the Habitual Boredom Scale and the Beck Depression Index were not highly correlated. We believe that long term experiences of habitual boredom can, in fact, transform into depression should the habitually bored people not be able to maintain a passive sense of hope that protects them from the hopelessness of depression. At some point, people stop believing that good things (e.g., winning the lottery) are going to happen to them and then they are faced with the realization that a substantial portion of their lives has been wasted by holding such beliefs.

Finally, we feel the Habitual Boredom Scale (HBS) is a theoretically sound and multidimensional scale that may in fact provide a strong measurement of “perceived life boredom” (Tam et al., 2021). The Perceived Life Boredom scale that the authors introduce is described by them as “unidimensional” and it contains only “high face validity” items—three of the seven items use the word ‘boring’ (Tam et al., 2021, p. 834). These authors suggest that perceived life boredom “seems to most closely characterize boredom proneness” but our preliminary findings does not seem show that connection. However, we do appreciate their conclusion that “perceiving life as boring to some extent reflects perceiving life as meaningless, and hence, affects well-being” (p. 841). Habitual boredom is an experience that tends to spread from one aspect of life (e.g., work) to most, if not all, areas so that people often end up claiming to be bored with life itself.

## **7. Limitations**

The intent of our study is to provide preliminary tests of the scale that is built upon theoretical conceptualizations. Although the results are encouraging, they are not conclusive. Samples of college students were used in our several tests. These samples may limit the testing power for other populations. Also, some of the reliability coefficients of the selected items are still below 0.70 which is commonly accepted in the academic community. Finally, our sample size is small which limits us to collect sufficient data to provide a full assessment of the proposed scale with

the structural equation modeling method. As noted, our compromising analytical approach provides a preliminary test of the scale. Further research is much needed.

## References

- Bargdill, R. W. (1999). *Being Bored with One's Life: An Empirical Phenomenological Study*. Doctoral Dissertation, Duquesne University.
- Bargdill, R. W. (2000a). A Phenomenological Investigation of Being Bored with Life. *Psychological Reports*, 86, 493-494.
- Bargdill, R. W. (2000b). The Study of Life Boredom. *Journal of Phenomenological Psychology*, 31(2), 72–103. <http://dx.doi.org/10.1163/15691620051090979>
- Bargdill, R. W. (2014). Toward a Theory of Habitual Boredom. *Janus Head*, 13(2), 93–111. <http://dx.doi.org/10.5840/jh201413219>
- Bargdill, R. W. (2019). Some Qualitative Differences Between Habitual Boredom and Depression. *Journal of Humanistic Psychology*, 59(2), 294–312. <http://dx.doi.org/10.1177/0022167816637948>
- Carter, S. S. (1990). *Unipolar Clinical Depression: An Empirical-Phenomenological Study*. Doctoral Dissertation, Duquesne University, Pittsburgh.
- Chan, C. S., Van Tilburg, W. A., Igou, E. R., Poon, C. Y., Tam, K. Y., Wong, V. U., and Cheung, S. K. (2018). Situational Meaninglessness and State Boredom: Cross-Sectional and Experience-Sampling Findings. *Motivation and Emotion*, 42(4), 555–565. <https://doi.org/10.1007/s11031-018-9693-3>
- Chaston, A., and Kingstone, A. (2004). Time Estimation: The Effect of Cortically Mediated Attention. *Brain and Cognition*, 55(2), 286–289. <https://doi.org/10.1016/j.bandc.2004.02.013>
- Chin, A., Markey, A., Bhargava, S., Kassam, K. S., and Loewenstein, G. (2016). Bored in the USA: Experience Sampling and Boredom in Everyday Life. *Emotion*, 17(2), 359–368. <http://dx.doi.org/10.1037/emo0000232>
- Danckert, J. A., and Allman, A. A. (2005). Time Flies When You're Having Fun: Temporal Estimation and the Experience of Boredom. *Brain Cognition*, 59, 236–245.
- Danckert, J., Hammerschmidt, T., Marty-Dugas, J., and Smilek, D. (2018). Boredom: Under-Aroused and Restless. *Consciousness and Cognition*, 61, 24–37. <https://doi.org/10.1016/j.concog.2018.03.014>
- Eastwood, J. D., Frischen, A., Fenske, M. J., and Smilek, D. (2012). The Unengaged Mind: Defining Boredom in Terms of Attention. *Perspectives on Psychological Science*, 7(5), 482–495. <https://doi.org/10.1177/1745691612456044>
- Elpidorou, A. (2021). Is Boredom One or Many? A Functional Solution to the Problem of Heterogeneity. *Mind & Language*, 36, 491–511. <https://doi.org/10.1111/mila.12282>

- Fahlman, S. A., Mercer-Lynn, K. B., Flora, D. B., and Eastwood, J. D. (2013). Development and Validation of The Multidimensional State Boredom Scale. *Assessment*, 20(1), 68–85. <https://doi:10.1177/1073191111421303>
- Farmer, R., and Sundberg, S. D. (1986). Boredom Proneness--The Development and Correlates of a New Scale. *Journal of Personality Assessment*, 50, 4–17. [http://dx.doi.org/10.1207/s15327752jpa5001\\_2](http://dx.doi.org/10.1207/s15327752jpa5001_2)
- Giorgi, A. (2018). *Reflections on Certain Qualitative and Phenomenological Psychological Methods*. University Professors Press.
- Goetz, T., Frenzel, A. C., Hall, N. C., Nett, U. E., Pekrun, R., and Lipnevich, A. A. (2014). Types of Boredom: An Experience Sampling Approach. *Motivation and Emotion*, 38, 401–419. <https://doi:10.1007/s11031-013-9385-y>
- Goldberg, Y. K., Eastwood, J. D., LaGuardia, J., and Danckert, J. (2011). Boredom: An Emotional Experience Distinct from Apathy, Anhedonia, or Depression. *Journal of Social and Clinical Psychology*, 30(6), 647–666. <https://doi.org.proxy.library.vcu.edu/10.1521/jscp.2011.30.6.647>
- Hartcher-O'Brien, J., Soto-Faraco, S., and Adam, R. (2017). A Matter of Bottom-Up or Top-Down Processes: The Role of Attention in Multisensory Intergration. *Frontiers in Integrative Neuroscience*, 11. <https://doi.org/10.3389/fnint.2017.00005>
- Isacescu, J., Struk, A. A., and Danckert, J. (2017). Cognitive and Affective Predictors of Boredom Proneness. *Cognition and Emotion*, 31(8), 1741–1748. <https://doi.org/10.1080/0269931.2016.1259995>
- Johnston, L. D., and O'Malley, P. M. (1986). Why Do the Nation's Students Use Drugs and Alcohol: Self-Reported Reasons from Nine National Surveys. *Journal of Drug Issues*, 16, 29-66. <http://dx.doi.org/10.1177/002204268601600103>
- Kılıç, A., Van Tilburg, W. A., and Igou, E. R. (2019). Risk-Taking Increases under Boredom. *Journal of Behavioral Decision Making*, 33(3), 257–269. <https://doi.org/10.1002/bdm.2160>
- Mann, S., and Cadman, R. (2014). Does Being Bored Make Us More Creative? *Creativity Research Journal*, 26, 165–173. <https://doi.org/10.1080/10400419.2014.901073>
- Mercer-Lynn, K. B., Bar, R. J., and Eastwood, J. D. (2014). Causes of Boredom: The Person, the Situation, or Both? *Personality and Individual Differences*, 56, 122–126. <https://doi.org/10.1016/j.paid.2013.08.034>
- O'Hanlon, J. F. (1981). Boredom: Practical Consequences and a Theory. *Acta Psychologica*, 49, 53–82. [http://dx.doi.org/10.1016/0001-6918\(81\)90033-0](http://dx.doi.org/10.1016/0001-6918(81)90033-0)
- Tam, K. Y., Van Tilburg, W. A., and Chan, C. S. (2021). What Is Boredom Proneness? A Comparison of Three Characterizations. *Journal of Personality*, 89(4), 831–846. <https://doi.org/10.1111/jopy.12618>

## Appendix 1. Survey instrument of habitual boredom

Please read each statement carefully and evaluate whether it applies to you. If the statement is generally true use a pencil to color in the circle marked “a” for that question on the answer sheet. If the statement is generally not true color in the circle marked “b” for that question on the answer sheet. Although some questions might be difficult to fully evaluate positively or negatively, please choose the true (a) or false (b) answer that fits more times than not. Please do not leave any questions blank.

#	y/n	Question	thm
1	y	I am frequently confused by my own emotional reactions.	AM1
2	y	I’m just a shadow of my former self.	IC1
3	n	I feel that my willpower is strong.	PH1
4	y	I anticipate that many activities will be dull, so I don’t bother with them.	PA1
5	n	I’m proud of myself.	SH1
6	y	I often feel disconnected from my family and friends.	AM2
7	y	Right now, I’m waiting for the pendulum to swing back in my direction.	PH2
8	y	I believe it is better to be lucky than to be good.	PH3
9	y	I often avoid a problem rather than confront it.	PA2
10	y	I have ideas about “life improvements” but they don’t get out of the idea stage.	PA3
11	y	I’ve begun to think that maybe I’m not made of the material I thought I was.	AM3
12	n	I am pleased with the way my life is progressing.	SH2
13	n	I go after something I want.	PA4
14	n	As I have gotten older my confidence has continued to grow.	SH3
15	n	If you work hard, you will get the things you want.	PH4
16	y	My strengths no longer seem so strong.	IC2
17	n	So far, my life has been time well spent.	SH4
18	y	I have trouble “facing myself in the mirror.”	SH5
19	y	I know I have certain abilities, but I’m trapped.	AM4
20	n	I rarely feel like I have “gotten in over my head.”	AM5
21	n	I’m very enthusiastic about my life right now.	IC3
22	n	Most of the time I go to sleep with a clear conscience.	IC4
23	y	I feel stuck and need someone to help free me.	PH5
24	y	At important times I have been ashamed to ask for help.	SH6
25	y	I’m more of a dreamer than a do-er.	PA5
26	y	Someday, someone is going to discover me.	PH6
27	y	For many of my current projects, I find myself going through the motions.	PA6
28	n	I have a strong sense of who I am.	IC5
29	y	I frequently doubt my abilities.	SH7
30	n	I find most things I do to be interesting.	IC6
31	y	I often blame others when I ought to blame myself.	AM6
32	n	Once I get past this one obstacle everything will fall into place.	PH7
33	n	I’m on my way to achieving my potential.	IC7
34	n	I feel that I have my life on track.	AM7
35	y	It is common for me to start a project and then quickly lose interest in it.	PA7