Which way to well-being: "more of the same" or "trying something novel"? The association of comfortable and experimental behavior styles to well-being

Which way to well-being: More of the same or trying something novel? The association of comfortable and experimental behavior styles to well-being.

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Abstract

In this paper we describe the development of a measurement of tendency towards displaying a comfortable behavior style, and/or an experimental behavior style across two studies. A comfortable behavioral style involves sticking to habits and routines, while an experimental behavior style involves being inclined to try out new ideas, actions or experiences. Study 1 involved developing the items, and determining the factor structure of the items using a student sample (N = 189, 85 male and 104 female, aged between 18 and 51). This found the expected two factor structure, reflecting factors for a comfortable behavior style, and an experimental behavior style. Study 2 went on to further validate the measures via a second exploratory factor analysis, and establish the relationship of these measures to a variety of well-being outcomes using a sample collected via Amazon's Mechanical Turk (N = 302, 159 male and 138 female, aged between 18 and 68). The two factor structure was confirmed, and these measures were found to be related to outcomes including satisfaction with life, positive and negative affect, self-concept clarity, and sensation seeking. The potential applications for these measures are discussed.

Keywords: Comfortable, Experimental, Behavior Styles; Habit, Flexibility, Psychological Well-being.

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1. Introduction

In the past decade, researchers have become increasingly interested in identifying activities or behaviors that may increase subjective well-being[1] (see meta-analyses in Mazzucchelli, Kane, & Rees, 2010; Sin & Lyubomirsky, 2009). The extent to which each of these prescribed happiness enhancing activities is experienced as "normative" or "typical" will vary depending on the individual and their personal characteristics (i.e., their traits, values, goals) and present repertoire of behavior. For example, one activity prolifically associated with happiness is performing acts of kindness (e.g., Schueller & Parks, 2014). While this may be something that one person does on a regular basis, this behavior may be considered out of the ordinary for another person. This raises an important and as yet, unanswered question: Is happiness more likely to be increased by sticking with what we know (i.e., enacting habitual, familiar and comfortable behaviors) or by trying something novel (enacting a broader range of more varied and experimental behaviors)? Such knowledge may have practical implications for optimizing the choice of well-being interventions. Consequently, we present the results of two studies in which we develop and validate a questionnaire that operationalizes each of these approaches (Studies 1 and 2) and examines the associations between each of the resulting constructs and subjective well-being (Study 2).

[1] We follow other authors (e.g., Kahneman, Diener, & Schwartz, 1999) in using the terms" happiness" and "subjective wellbeing" interchangeably.

1.1. Two distinct behavioral routes to well-being: Sticking with what we know or trying something novel

In the following section we discuss two distinct approaches to improving well-being derived from existing theory and research: sticking with what we know (comfortable behaviors) and trying something novel (experimental behaviors).

1.1.1. Sticking with what we know: A comfortable behavior style

Within the positive psychology literature, only more recently has attention been given to the conditions needed to optimize the effectiveness of well-being interventions. According to person-activity fit theory the largest gains in happiness will be reached when there is a 'match' or 'good fit' between the type of activity and the type of person and their enduring characteristics such as their strengths, interests, values and inclinations (Lyubomirsky, King, & Diener., 2005; Lyubomirsky, 2008; Sheldon & Lyubomirsky, 2007). While there are different approaches as to what constitutes a 'match' or a 'good fit', in the positive psychology literature the dominant conceptualisation utilizes the capitalization approach (Schueller, 2014) which contends that a 'good fit' is an activity that is consistent with a person's personal characteristics (Cronbach & Snow, 1977; Lyubomirsky, 2008). Such an approach appears to advocate that well-being is more likely to be increased when a person stays within their existing behavioral range through enacting activities that fit within the scope of their characteristics (e.g., enacting kind acts will benefit someone who values kindness).

Aside from the fact that such matching hypotheses make intuitive sense and are backed by anecdotal evidence (Schueller, 2014), other literature also alludes to the benefits of "sticking with what we know". For instance, enacting habitual behavior (Verplanken & Orbell, 2003) keeps cognitive resources free for other self-regulatory activities (Baumeister,

Galliot, DeWall, & Oaten, 2006), while constructs such as self-concordance (pursuing a goal/activity that fits with one's value/interests) and authentic living (i.e., acting in accordance with one's values and beliefs) are consistently associated with higher subjective and psychological well-being (Sheldon et al., 2004; Wood, Linley, Maltby, Baliousis, & Joseph, 2008).

To date, empirical support for person-activity fit theory has been mixed. Support can be found in research that has revealed that; value-environment fit is associated with higher well-being (see review in Sagiv, Roccas, & Hazan, 2004); there is between-individual variability in benefits gained from different happiness enhancing activities (Fordyce, 1977, 1983; Sergeant & Mongrain, 2011); practising signature strengths (i.e., behaving in accordance with primary positive traits) can increase well-being (Seligman, Steen, Park, & Peterson, 2005; Wood, Linley, Maltby, Kashdan, & Hurling, 2011); and that person-activity fit indirectly affects well-being through increasing adherence to the assigned activity (Sheldon & Lyubomirsky, 2006). However, support for the tenets of person-activity fit theory is not evident in other research findings. Across four correlational studies, person-activity fit did not significantly predict either subjective or psychological well-being (Buchanan & Bardi, 2015). Participants assigned to a matched activity were not any happier than those randomly assigned to an activity (Schueller, 2011; Silberman, 2007). Happiness enhancing activities were most effective when they differed from an individual's dominant orientation (Giannopoulos & Vella-Brodrick, 2011).

One of the likely reasons for these mixed findings is that researchers have differed in how they have conceptualized person-activity fit. This is because an activity can fit a person in number of ways, it might fit their motives, basic needs, or core values (Lyubomirsky et al., 2005).

1.1.2. Trying something novel: an experimental behavior style

While the dominant notion of person-activity fit within positive psychology is based on "capitalization" (i.e., practising activities that are consistent with personal characteristic), person-activity fit may also be conceptualised as involving "compensation" defined as practising activities that overcome weaknesses or deficits and so help 'balance' an individual (Cronbach & Snow, 1977). But is it theoretically possible to behave in ways that substantially differ from our primary traits?

The average individual does have a tendency to display variation in their behavior in addition to a habitual trait personality (McCrae & Costa, 1996). Indeed, research by Fleeson (Fleeson & Gallagher, 2009) examining the density distribution of personality states demonstrates that the individual tends to display a dispositional trait personality, but with variation in personality states distributed around the trait personality. This tends to be performed to adapt to particular situations or goals (Bleidorn, 2009; Heller, Komar & Lee, 2007). This is also reflected at the personality questionnaire response level, with previous research (Biderman & Reddock, 2012) suggesting that within-subject standard deviations in responding to particular personality traits or facets, calculated as measures of individual variation in specific item ratings within a trait/facet (an index of traitedness), are related to outcomes including life satisfaction and depression (Churchyard, Pine, Sharma & Fletcher, 2014).

This capacity allows for the idea of practising compensation, to try behaviors that may be outside of the individual's behavioral norm for that situation in order to improve adaptation and well-being. Taking advantage of this capacity, Fletcher and Pine's (2012) approach to behavior change is based on giving the individual novel behavior suggestions to try that fall outside of their behavioral norm. This is in order to receive different feedback from their social environment (from the self and/or others) or to engage with completely new

environments, and break habits. It is designed to widen the individual's behavioral repertoire of responses to a variety of situations, old and new. Other researchers sharing this philosophy of expansion over habituation include Fredrickson (2001) with the Broaden and Build theory. This theory suggests that experiencing different types of positive emotions allows the individual to expand their social and psychological resources, while negative emotions are useful only for responding to threatening situations, but otherwise hold the individual back and leave them prone to stagnation and habituation.

In terms of empirical support for the "trying something new" approach to well-being, several intervention studies show that enacting novel behaviors can help increase cognitive well-being, in terms of increased life satisfaction (Buchanan & Bardi, 2010) and physical and psychological well-being, in terms of decreased BMI, anxiety and depression (Fletcher, Hanson, Page & Pine, 2011). This suggests that compensation approaches to behavior change are valid options as well as capitalization approaches.

1.1.3. Which way to happiness?

So on the one hand there is evidence that comfort can be found in familiarity, and pleasure can be gained from practising our strengths (Seligman et al., 2005; Wood, Linley, Maltby, Kashdan, & Hurling, 2011), yet on the other hand, there is also evidence that without doing anything different or experimenting we cannot reasonably expect our happiness to change (Buchanan & Bardi, 2010; Fletcher, Hanson, Page & Pine, 2011; Fletcher & Pine, 2012). Schueller (2014) discusses the question of "Which strategy to choose?" within the context of person-activity fit. Schueller suggests that the decision concerning which intervention strategy to use should be influenced not only by the preference of the individual, but also their personality, motivation, and culture.

In the present research we aim to help advance the use of assessing personality characteristics in making the choice of a familiar behavioral strengths, or increased behavioral repertoire (novelty) intervention strategy. In particular, this research presents an important and novel contribution by establishing a measure of an experimental behavior style (liking to do something different or novel) and a comfortable behavior style (liking doing more of the same).

1.2. Operationalizing comfortable and experimental behavior styles

Based on the research reviewed in this introduction, we operationalized these two psychological constructs as follows:

1. Having a comfortable behavioral style, in which people stick to habits and routines for their own comfort and predictability,

2. An experimental behavior style, in which people are inclined to try out new ideas, actions or experiences to learn from them, and are flexible in their approach to life.

When designing an item pool to measure the comfortable behavior style, we were aware of the existence of Verplanken and Orbell (2003) Self Report Habit Index (SRHI), and Fletcher and Pine's (2012) Habit Rater. Although some of the items in this pool may bear resemblance to those in these two measures, there are important conceptual differences between this item pool and these two measures. While Verplanken and Orbell's SRHI focuses on general items tailored to fit a specific habit, Fletcher and Pine's Habit Rater asks more about tendencies towards specific instances of habitual or non-habitual behavior within a more general questionnaire format, we have focused on developing a measure without the focus on specific habitual behaviors in any way. This was important to distinguish as we were looking to assess a comfortable behavior style. This is a modified measure of general habitual tendencies that

also accounts for the degree to which individuals take comfort in patterns, routines or habitual behavior, rather than focusing on assessing tendency towards specific habits. Fletcher and Pine also assess the flexibility to display different types of behavior as a separate construct, with a Behaviour Rater using a checklist format, rather than a statement based format. We also treat comfortable and experimental behavior styles as two separate and distinct constructs, rather than as opposing ends of a single dimension. In adopting this approach we acknowledge the capacity for the individual to display a balance of both behavior styles to some extent. Assessing this via the midpoint on a unidimensional scale (of total scores or specific items) may allow the individual to identify their behavior style as somewhere in between comfortable and experimental. However, treating these styles as two separate constructs allows the individual to directly identify and acknowledge that they display both behavior styles in a balance. It is also possible that the individual only weakly or strongly identifies with both styles, in cases where the individual perhaps has limited self-concept clarity with regards to their behavior style. Treating these styles as two separate constructs allows the individual opportunity to make these distinctions much more clearly in their responses. These separate constructs are also measured using the same measurement scale. This has advantages in making the two constructs more easily comparable.

2. Study 1: Developing a measure of comfortable and experimental behavior styles

In Study 1 we aimed to develop a measure of people's tendency towards comfortable and experimental behavior styles – using the aforementioned operationalisations in the introduction. Accordingly we generated an initial item pool and analyzed the results using Exploratory Factor analysis (EFA) to examine whether we would find support for the anticipated two-factor structure.

Following examination of the newly developed scale's structural integrity, we then tested the scales' convergent and discriminant validity against a selection of potentially related constructs, namely, sensation seeking (Zuckerman, Eysenck, & Eysenck, 1978), impulsiveness (Patton, Stanford, & Barratt, 1995), and behavioral approach and inhibition (Carver & White, 1994). We expected to find that a comfortable behavior style would be negatively related to sensation seeking and impulsiveness, and positively related to behavioral inhibition, while an experimental behavior style would be positively related to sensation seeking, impulsiveness and behavioral approach, and negatively related to behavioral inhibition.

2.1. Study 1 Method

2.1.1. Participants and procedure

A total of 189 participants (85 male and 104 female) aged between 18 and 51 (Mean = 28.29, *SD* = 8.09) were recruited using a convenience sampling method to complete an online survey. All were native English speakers, recruited in Great Britain. To minimize the chances of finding positive spurious associations, we randomized the order in which we presented

each of the measures. To avoid participant fatigue occurring for conceptually similar scales we presented participants with either the sensation seeking scale or the impulsiveness scale.

2.1.2. Development of the item pool for comfortable and experimental behavior style items

Items were developed in line with the operationalized definitions of comfortable and experimental behavior styles stated in the introduction to Study 1. During the scale development phase the authors generated a pool of statement items and discussed the extent to which each item accurately represented the construct in question and where necessary reworded items to avoid ambiguity. Only items that both authors agreed upon were included in the final 20 items, ten of which were expected to assess an experimental behavior style (e.g., "I would describe myself as someone who tests out new ideas") and 10 of which were expected to measure a comfortable behavior style (e.g., "I take comfort in familiarity"). Participants were asked to indicate to what extent each statement described them using a 5-point Likert scale (from 1="Not at all like me" to 5 = "Just like me"). To avoid, differing interpretations of the Likert scale each scale point was labelled (e.g., 2 referred to "Not much like me").

2.1.3. Measures

Sensation Seeking

The Sensation Seeking V Scale (SSS-V Zuckerman, Eysenck, & Eysenck, 1978) is comprised of 40 items. Each item contains two options and participants are required to make a forced choice and select the option which most describes their likes or feelings. Alternatively, in cases where neither option is liked, then participants are asked to choose the item that they dislike the least. The scale produces an overall score which can be further subdivided into four subscales: thrill and adventure seeking (TAS), experience seeking (ES),

disinhibition (Dis) and boredom susceptibility (BS). In the present study the total SSS-V score α =.83, ES α =.62, TAS α =.75 for, Dis α =.75, and BS α =.49.

Impulsiveness

The Barratt Impulsivity Scale (BIS-II; Patton, Stanford & Barratt, 1995) is a 30-item self-report measure used to assess the personality construct of impulsiveness. The items are scored on a 4-point scale (1 = "Rarely/Never", 2 = "Occasionally", 3 = "Often", 4 = "Almost always/Always") and the scale measures three facets of impulsiveness: Cognitive Impulsiveness, Motor Impulsiveness, and Non-Planning Impulsiveness (Barratt, 1985). Cronbach's alpha for the total score was α = .84, and for each of the subscales of cognitive impulsiveness α = .69, motor impulsiveness = .64, and non-planning impulsiveness =.68.

Behavioral Inhibition/Approach Scales (BIS/BAS).

The Behavioral Inhibition/Approach Scales (Carver & White, 1994) is comprised of 20 items that assess sensitivity to the behavioral inhibition system and behavioral approach system. In total, seven items measure BIS (i.e., the predisposition to avoid threatening or punishing stimuli), five items measure reward responsiveness (BAS-RR), four items measure drive (BAS-D) and four items measure fun seeking (BAS-FS). Participants indicate the degree to which they agree with statements on a Likert scale from 1="Very true for me" to 4="Very false for me". Cronbach's alpha for these scales were as follows: BIS-Total: α = .76, BAS-RR: α =.75, BAS-D: α =.77, BAS-FS: α = .75.

2.2. Study 1 Results

2.2.1. Data screening

The descriptive statistics for each item of the comfortable and experimental behavior style scales were examined (see Table 1). All items used the full range of the Likert scale. Tests of normality indicated that the data were approximately normally distributed for each item. Specifically, the visual examinations of the box-plots (see Figure 1 in the supplementary analysis), skewness and kurtosis values, as well as values of skewness and kurtosis divided by their respective standard errors[2] all suggested that many of the items, although not perfectly normally distributed, were close enough to utilise a maximum likelihood estimation approach to EFA.

[2] The values for asymmetry and kurtosis between -2 and +2 are considered acceptable in order to prove normal univariate distribution (George & Mallery, 2010).

Insert table 1 here.

2.2.2. Scale structure with exploratory factor analysis

To assess the structural integrity of the comfortable and experimental behavior styles scale we first conducted parallel analysis (PA; Horn, 1965) using the SPSS syntax developed by O'Connor (2000) to determine how many factors to extract. Previous studies have found that PA is one of the most accurate methods for deciding how many factors to retain (e.g., Zwick & Velicer, 1986). We performed PA to generate 1000 random data sets that had the same number of cases (N =189) and variables (N =20) as our sample. The results showed that only the first two mean eigenvalues of our data were substantively greater than the first two mean eigenvalues in the randomly generated data set, indicating a two-factor solution. Further support for the two factor structure was obtained by running Velicer's MAP test (O'Connor, 2000; Velicer, Eaton, & Fava, 2000). The findings showed that the smallest average squared partial correlation (.0153) was associated with the second component, providing further support for a two factor solution.

As our data was approximately normally distributed we conducted maximum likelihood estimation and on the basis of the PA and scree plot (see Figure 2 in the supplementary analysis), we specified a two factor solution. We also applied an oblimin rotation on the basis that the two components were likely to be empirically related. The results of Bartlett's test (χ^2 (190) =1270.15, p <.001) and the Kaiser-Meyer-Olkin (.84) test indicated that the data were suitable for EFA. The extracted eigenvalue for the first factor using maximum likelihood estimation was 4.52 and accounted for 22.58% of the variance. The eigenvalue for the second factor was 2.77 and this accounted for an additional 13.87% of the variance. After the oblimin rotation the eigenvalue for the first factor became 4.25, and the eigenvalue for the second factor became 3.24. In the oblimin rotated solution, the first factor represented an experimental behavior style and the second factor represented a comfortable behavior style. Table 2 displays the pattern and structure matrices from the

oblimin rotated solution, as well as the item-total correlations for each subscale. All items loaded at .40 or close to .40 on the expected factors in the pattern and structure matrices. In the one case where the item "I often do things on autopilot without even realizing" loaded close to .40, the Cronbach alpha if the item was deleted and corrected item-total correlations were also examined. This suggested that no improvements of substance (of .005 or greater) could be made to the comfortable behavior style factor by removing the item. The corrected item-total correlations suggested that this item also demonstrated a reasonable item-total correlation (greater than .30), indicating that it could be retained in the final measure. The internal consistencies of each behavior subscale were good (experimental: $\alpha = .86$; comfortable: $\alpha = .81$). The factor correlation after oblimin rotation (r (190)= -.14, $p = .054$) suggests a borderline significant relationship between the two factors.

The total scores for each of the two behavior styles were calculated. The descriptive statistics for the comfortable behavior style total scores suggest an average around the midpoint of the 10 to 50 total score range, with moderate deviation around this mean (M = 30.82, SD = 6.36). For the experimental behavior style the descriptive statistics suggest an average just above the midpoint of the total score range, with moderate deviation around this mean (M = 32.53, SD = 7.14). To determine whether sex had an impact on either of these measures we conducted independent t-tests. The findings revealed only a significant difference for the experimental behavior style with male participants scoring significantly higher (M = 33.85) than female participants (M = 31.46), t(187)= 2.31, $p = .022$). To see whether age was associated with displaying either behavior style, correlations between age and each of the behavior style were conducted. Age did not significantly correlate with either behavior style at the .05 alpha level.

Insert table 2 here

2.2.3. Convergent and Discriminant Validity

Partial correlation analyses (two-tailed, partialling out sex and age[3]) confirmed our expectations regarding the relations of experimental and comfortable styles to sensation seeking, impulsiveness, and behavioral inhibition and approach (see Table 3, zero order correlations are provided in Table 4 in the supplementary analysis). Specifically, sensation seeking and impulsiveness were significantly negatively correlated with a comfortable style and significantly positively correlated with an experimental style.

[3] Age was partialled out in all these analyses as well as sex, as age was found to significantly correlate in zero order correlations with cognitive impulsiveness, $r(124) = -.32$, $p < .001$, and non-planning impulsiveness, $r(124) = -.26$, $p = .001$. Sex was partialled out, as a significant difference in experimental behavior style scores was found between male and female participants.

Insert Table 3 here.

2.3. Study 1 Discussion

In Study 1 we aimed to validate our measure of comfortable and experimental behavior styles. Analyses showed that the scale consisted of the expected two factors. All items loaded on the anticipated factors and there were no substantive cross loadings in the pattern matrix. The two factors were also found to have good internal consistency and the findings from the partial correlation analyses provide support for the scales convergent and discriminant validity.

3. Study 2: Establishing relationships between a comfortable style, an experimental style, openness to experience and psychological well-being

In Study 1 we developed a questionnaire to measure both comfortable and experimental behavior styles as discriminant constructs. In Study 2, we had two aims. First, we sought to further test the structural integrity of our newly developed scale with EFA to see whether the two-factor structure would be replicated in a second sample. Second, we aimed to examine the relations of experimental and comfortable behavior to a selection of psychological well-being outcomes. In doing so, we sought to test our hypothesis that both behavior styles would be positively correlated with positive psychological outcomes (positive affect, satisfaction with life, self-concept clarity) and negatively correlated with negative psychological outcomes. We anticipated these correlations on the basis that intervention studies that encourage either an experimental behavior style (e.g., performing acts of novelty) or a comfortable behavior style (e.g., practising signature strengths) have been found to increase well-being (Buchanan & Bardi, 2010; Fletcher et al., 2011; Seligman et al., 2005).

In addition, in Study 2 we improved on Study 1 by measuring traitedness. We calculated the conceptual standard deviation in within-person item responses for items tapping into the comfortable behavior style, and also the experimental behavior style, referred to as the within subject standard deviations (WSSD).

3.1. Study 2 Method

3.1.1. Participants and procedure

A total of 332 participants completed a brief online survey through Amazon's Mechanical Turk[4] (MTurk) for a nominal payment. All were native English speakers, who were recruited in the US. Of these, we analysed the data from only the 302 participants who passed the attention response check in place. These participants were aged between 18 and 68 (Mean = 35.07, *SD* = 11.88). Of these participants, 297 chose to report their sex as either male (*n* = 159) or female (*n* = 138). To minimize the chances of finding spurious associations, we randomized the order in which we presented each of the measures.

3.1.2. Measures

Comfortable and Experimental Behavior Styles scale. This was the final version of the measure we designed in Study 1. This consisted of 10 items to tap into a comfortable behavior style (e.g., "I take comfort in familiarity"), and 10 items to tap into an experimental behavior style (e.g., "I would describe myself as someone who tests out new ideas"). Participants were asked to indicate to what extent each statement described them using a Likert scale from from 1="Not at all like me" to 5="Very much like me"

Subjective Well-Being. Respondents completed measures of affective and cognitive well-being. Affective well-being was assessed using the Positive and Negative Affect Scale (PANAS, Watson, Clark, & Tellegen, 1988). The PANAS consists of 20 adjectives comprising two subscales, positive affect and negative affect. Participants used a 5-point

[4] Past research suggests that the data obtained from M-turk is at least as reliable as the data obtained via traditional methods, and reflect a more diverse sample than either internet or college student samples (Buhrmester, Kwang, & Gosling, 2011; Mason & Suri, 2012; Paolacci, Chandler, & Ipeirotis, 2010; Rand, 2012).

scale, from 1("Very slightly") to 5 ("Extremely"), to indicate the extent to which they currently felt this way.

Cognitive well-being was assessed using the Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985). The SWLS consists of 5 unidirectional attitude expressions (e.g., "The conditions of my life are excellent") conveying cognitive evaluations of global happiness. Participants rated the expressions using a 7-point Likert scale, rfrom 1 ("Strongly disagree") to 7 ("Strongly agree"). Both the PANAS and SWLS had excellent reliability (PA $\alpha = .92$, NA $\alpha = .94$, SWLS $\alpha = .93$).

Self-Concept Clarity. The self-concept clarity (SCC) scale consists of 12 statements which measure the extent to which self-beliefs are clearly and confidently defined, internally consistent, and stable (Campbell, Trapnell, Heine, Katz, Lavallee, & Lehman, 1996). Participants used a 5-point rating scale from 1 ("Strongly disagree") to 5 ("Strongly agree"). The SCC scale displayed good reliability ($\alpha = .85$).

Trait Openness to Experience. Openness to experience will be measured using the 20 item International Personality Item Pool (IPIP, Goldberg et al., 2006) version of the openness to experience questionnaire based on the NEO-PI-R broad trait (Costa & McCrae, 1992). Participants used a 5-point scale, from 1 ("Very inaccurate") to 5 ("Very accurate"). The OTE had excellent reliability ($\alpha = .91$).

Sensation Seeking. We assessed sensation seeking using the eight item Brief Sensation Seeking Scale (BSSS; Hoyle, Stephenson, Palmgreen, Lorch, & Donohew, 2002). Participants used a 5-point scale, from 1 ("Strongly disagree*"*) to 5 ("Strongly agree*"*). Two items each are included to measure experience seeking, boredom susceptibility, thrill and adventure seeking and disinhibition. The BSSS had good reliability ($\alpha = .87$).

Curiosity. The Curiosity and Exploration inventory-II contains 10 items (Kashdan et al. 2009). Five items assess stretching (motivation to seek new knowledge and experiences)

and five items assess embracing (willingness to embrace the uncertain and unpredictable nature of everyday life). Responses are given on a 5-point scale from 1 (“Very slightly”) to 5 (“Extremely”). The scale had excellent reliability ($\alpha = .91$).

3.2. Study 2 Results

We first determined whether the two factor solution found in Study 1 could be replicated with the data collected from Study 2 by performing an EFA using the same strategy applied in Study 1.

3.2.1. Exploratory factor analysis of the comfortable and experimental behavior items

As our data was approximately normally distributed we conducted maximum likelihood estimation. On the basis of the findings from Study 1, we specified a two factor solution. We also applied an oblimin rotation on the basis that the two components were likely to be empirically related, even if only weakly as suggested by Study 1. The results of Bartlett's test (χ^2 (190) =2743.39, p <.001) and the Kaiser-Meyer-Olkin (.92) test indicated that the data were suitable for EFA. The extracted eigenvalue for the first factor using maximum likelihood estimation was 7.13 and accounted for 35.67% of the variance. The eigenvalue for the second factor was 1.77 and this accounted for an additional 8.84% of the variance. After the oblimin rotation the eigenvalue for the first factor became 5.98, and the eigenvalue for the second factor became 5.69. In the oblimin rotated solution, the first factor represented an experimental behavior style and the second factor represented a comfortable behavior style. Table 2 displays the pattern and structure matrices from the oblimin rotated solution, as well as the item-total correlations for each subscale. All items loaded at .40 on the expected factors in the pattern matrix, except for the "I often do things on autopilot without even realizing" item. Removing this item would increase the Cronbach alpha by .01, and the corrected item-total correlation suggested that this item did not demonstrate an adequate item-total correlation (lower than .30). This item was not retained in the final measure. A strong negative factor correlation was found after oblimin rotation (r(190)= -.52, p<.001), suggesting it was correct to follow the two factor solution with oblimin rotation strategy

utilised in Study 1. Based on the second EFA conducted, it is apparent that a broad nine item comfortable style factor and ten item experimental style factor solution provides the strongest model fit, whilst maintaining validity of the measures. Accordingly, we report all subsequent analyses using the nine item measure for comfortable behavior style and the ten item measure for the experimental behavior style. The reliability of each behavior style subscale was good (experimental: $\alpha = .89$; comfortable: $\alpha = .88$).

The descriptive statistics for the comfortable behavior style total scores suggest an average around the midpoint of the 10 to 50 total score range, with moderate deviation around this mean ($M = 30.16$, $SD = 6.04$). For the experimental behavior style total scores, the descriptive statistics suggest an average just above the midpoint of the total score range, with moderate deviation around this mean ($M = 28.61$, $SD = 7.04$). To determine whether sex had an impact on either of these measures we conducted two independent t-tests. However, we did not find significant differences in scores for either behavior style. To see whether age correlated with either behavior style, we ran zero order correlations between age and each of the behavior styles. Age correlated positively with the comfortable behavior style, $r(297) = .12$, $p = .032$, and negatively with the experimental behavior style, $r(297) = -.15$, $p = .01$, although both were weak correlations.

3.2.2. Multiple regression analyses of convergent outcomes onto the comfortable and experimental behavior styles

We next conducted analyses to determine the variance in each behavior style explained by the convergent measures: openness to experience, curiosity, and the four sensation seeking subscales (experience seeking, boredom susceptibility, disinhibition). As age was correlated with each behavior style we included it as a predictor.

When the comfortable behavior style total score was examined as the dependent variable, the convergent measures predicted 27.3% of the variance in Comfortable behavior style scores, $F(7, 291) = 16.98$, $p<.001$, adjusted $R^2 = .273$. The predictors of this variance were Openness to experience ($\beta = -.21$, $p<.001$), and Boredom susceptibility ($\beta = -.34$, $p<.001$).

When the experimental behavior style total score was considered as the dependent variable, the convergent measures predicted 60% of the variance in experimental behavior style scores, $F(7, 291) = 64.33$, $p<.001$, adjusted $R^2 = .60$. The predictors of this variance were curiosity ($\beta = .38$, $p<.001$), openness to experience ($\beta = .09$, $p = .036$), experience seeking ($\beta = .14$, $p = .004$), boredom susceptibility ($\beta = .31$, $p<.001$) and disinhibition ($\beta = .15$, $p = .006$).

This suggests that portions of the variance can be explained by other convergent measures, however as only a maximum of 60% was explained there is still variance in each behavior style that remains unique.

3.2.3. Partial correlations of comfortable or experimental behavior styles with psychological outcomes

Partial correlation analyses were conducted to determine the relationships between the total scores of the behavior style scales (the final versions), indices of traitedness (WSSDs) the behavior styles measures and the psychological outcomes measured (positive and negative affect, satisfaction with life, and self-concept clarity). Based on the findings of the analyses across Studies 1 and 2, age, sex, and the convergent measures collected in Study 2 were all partialled out of these correlations. This was performed to ensure the findings of any correlation analyses could be considered independent of the potential impact of other convergent measures. The results are shown in Table 3. The comfortable behavior style correlated at the $p<.001$ alpha level with the experimental behavior style negatively, and the experimental behavior style WSSD positively. The comfortable behavior style was also positively correlated with positive affect and satisfaction with life at $p<.05$. The experimental behavior style correlated negatively at the $p<.001$ alpha level with self-concept clarity. The experimental behavior style was also positively correlated with negative affect, and negatively correlated with satisfaction with life at $p<.05$. The comfortable behavior style WSSD and experimental behavior style WSSD were positively correlated at $p<.001$. When the comfortable style WSSD was examined, it was found to positively correlate at the $p<.05$ alpha level with positive affect.

When the behavior style total score partial correlations are compared to the zero-order correlations (provided in Table 5 of the supplementary analysis), this found that a significant correlation surfaced between the comfortable behavior style and positive affect only after partialling out the previously mentioned variables. Significant correlations between the experimental behavior style with negative affect, and also with satisfaction with life only surface after partialling out the previously mentioned variables. However, a zero order

correlation between the experimental behavior style and positive affect ($r(300)= .24$, $p<.001$) lost significance when the previously mentioned variables were partialled out.

An interaction variable between the comfortable and experimental behavior style total scores was computed to see if the possibility of displaying both styles was related to psychological well-being (the same convergent measures, age, sex and also the total scores of each behavior style were partialled out). This found that an interaction of the two styles was related to self-concept clarity ($r(287)= -.15$, $p = .012$). This interaction was also found to positively correlate with the experimental behavior style WSSD ($r(287)= .18$, $p = .002$) and negatively with the comfortable behavior style WSSD ($r(287)= -.19$, $p = .001$).

3.3. Study 2 Discussion

Study 2 found through EFA that a nine item comfortable behavior style measure, and a 10 item experimental behavior style measure provided a superior solution for these measures. Total scores and traitedness indices based on these measures were then examined in relation to a variety of psychological outcomes, when partialling out sex, age and other convergent outcomes. Some unique correlations to other psychological outcomes surfaced for both comfortable (positive affect and satisfaction with life), and experimental behavior styles (negative affect, satisfaction with life and self-concept clarity), independent of the convergent outcomes. These will also be discussed in comparison to findings when zero-order correlations were conducted between behavior styles and the well-being outcomes.

4. General Discussion

In this research we aimed to develop a measure of comfortable and experimental behavior styles, and examine how these constructs are related to psychological well-being. In Study 1, we developed a pool of 20 items, and then administered it to participants. The findings from Study 1 supported a two factor structure, with two 10 item measures assessing comfortable and experimental behavior styles. Study 2 provided further validity for these measures, and found relationships to several psychological well-being outcomes.

In Study 1 the two constructs were found to be only weakly negatively correlated, in comparison to Study 2 where they were displayed a strong negative correlation. Although we have developed measures of comfortable and experimental behavior styles as separate, but comparable constructs, we tested the idea in Study 2 that it is possible for people to potentially act with a balance of both comfortable and experimental styles. Calculating an interaction variable between the two styles in Study 2 found a negative relationship to self-concept clarity, suggesting that those who display both styles to some degree may lack a stable self-concept. However, culture may have an influence on the strength of the correlations between the two constructs, as Study 1 used a British sample, while Study 2 used an American sample. This suggests that the British sample may display more of a balance of comfortable and experimental behavior styles, while the American sample are more likely to display either a comfortable or an experimental behavior style, with it being less likely that there is an interaction between the two behavior styles. Further research in both British and American samples using this measure is required to see if an interaction of the two styles has any wider ranging impact on psychological well-being outcomes. One good reason for displaying a balance of the two styles is that we found each behavior style to be related to different aspects of well-being in Study 2. The comfortable behavior style related to positive affect and satisfaction with life (when other convergent measures were

partialled out), while the experimental behavior style related only to positive affect, but only when other convergent outcomes were not partialled out. A significant positive relationship was found between the experimental behavior style and negative affect, and a significant negative relationship with satisfaction with life, but only when the other convergent outcomes were partialled out. This suggests partialling out the convergent outcomes may be removing the positive components of displaying an experimental behavior style, and merely leaving the instability element of experimenting with new behaviors.

Indeed, in line with this explanation the experimental behavior style also negatively correlated with self-concept clarity. Overall, this suggests that those with an experimental behavioral style may be at a stage where they are testing out new ideas and behaviors as a form of self-discovery. However, self-concept clarity was not found to be positively (or negatively) related to a comfortable behavior style. This suggests that those with a routine, invariable behavior style are not guaranteed to also have a clear understanding of their self-concept. The fact that neither behavior style has a clear relationship to greater self-concept clarity may have implications for person-activity fit. Having a preferred behavior style will lead to certain activities, but this does not mean that these person-activity relationships alone are enough for a fuller understanding of the self. Trying out a different behavior style could impact upon our sense of self-understanding in the short-term, but perhaps only by trying activities associated with an opposing behavior style can the individual develop a greater long-term understanding of themselves. Across Studies 1 and 2 the expected associations were found for both behavioral styles to sensation seeking, impulsiveness, curiosity and openness to experience with a comfortable behavior style being negatively related, and an experimental behavior style being positively related to sensation seeking and impulsiveness. This was expected as those who are experimental feel the need to seek new

sensations or experiences, and act on impulse, while those who are comfortable with their behavior patterns feel less need to seek sensation or act impulsively.

When the WSSD indices were calculated as measures of traitedness for the comfortable and experimental behavior style constructs, the comfortable behavior style was positively related to positive affect. This further supports traitedness indices as being a valid option for assessing within-person variability in display of behavior for a particular behavioral trait (Biderman & Reddock, 2012; Churchyard, Pine, Sharma & Fletcher, 2014). The association of the comfortable behavior style WSSD with positive affect suggests that some variability in our behavioral style is needed to maintain positive affect. One possibility is that this reflects the need for a balance of comfortable behavioral style to maintain comfort, but also an experimental behavioral style in order to try out new ideas or behaviors, with a comfortable style to return to if the experience does not end as desired.

4.1. Strengths of the present research

In developing and validating a measure that assesses both comfortable and experimental behavior styles within the same measure we were able to go beyond past research which has often examined person-activity fit theory at a far more specific level. E.g., Buchanan and Bardi (2015) looked for evidence of person-activity fit by examining whether interactions between agency values and agency behaviors predicted well-being, while Sergeant and Mongrain (2011) examined the moderating role of depressive personality styles in influencing the efficacy of positive psychology exercises.

This specificity of past person-activity fit investigations may mean they say more about the moderating role of the exact constructs investigated (e.g., agency, depressive personality styles) as opposed to person-activity fit per se. In contrast, the non-specificity of

our newly developed measure enables examination of person activity fit at a broader level while also allowing us to distinguish between conceptualisations of fit as capitalization (i.e., a comfortable behavior style) or as compensation (i.e., an experimental behavior style).

Another strength of this research is that we collected large samples for both the development and validation stages of the measure development. These two samples were reasonably well-balanced for sex and age characteristics. This suggests that the measures are suitable for general use in an adult population. Furthermore, we confirmed the existence of the two constructs across two different populations (British and American).

4.2. Implications and future research

The findings from this research have implications for determining what type of intervention an individual should choose to engage with. Cronbach and Snow (1977) described the two main approaches to interventions are “capitalization” (taking advantage of current behavioral strengths) and “compensation” (attempting to balance out the individual by tackling behavioral weaknesses). Those with a comfortable behavior style may be more suited to interventions utilizing capitalization approaches, while those with an experimental behavior style may be more suited to compensation approaches. The measure we developed could be used to help determine what type of intervention the individual should be administered, prior to the individual taking part in any intervention. Furthermore, these findings have implications for what type of intervention should be administered to improve particular aspects of well-being. For example, those wishing to boost their positive affect may benefit more from participating in interventions that suit their particular behavior style, as both styles were found to be positively related to positive affect, although under different circumstances.

Future research should consider using a diary study with a multi-level modelling approach to study the effect of displaying comfortable or experimental behavior on well-being across repeated time occasions. This would allow for the assessment of both between individual variation and context-specific individual variation in displaying a comfortable or experimental behavior style. This would enable further understanding of when and why the individual may choose to display a more comfortable or experimental behavior style.

An intervention study could also be conducted in which participants are assigned to either a capitalization or compensation based intervention approach, depending on whether the individual reports a predominantly comfortable or experimental behavior style. These two groups would be examined in contrast to a group in which the intervention choice is administered randomly as a control group. This would help determine whether interventions chosen on the basis of person-fit are more successful than those assigned without predetermining this preference.

The measures will also need to be validated against a selection of measures of specific habits and routine such as the SRHI (Verplanken & Orbell, 2003) and the Habit Rater (Fletcher & Pine, 2012), as in this study they have only been validated against measures of pursuing more novel stimuli such as sensation seeking, curiosity and OTE.

5. Conclusion

In this paper we developed and validated a measure of comfortable and experimental behavior styles across British and American samples. Comfortable and experimental behavior styles were found to be related to a selection of relevant psychological outcomes including sensation seeking, satisfaction with life, self-concept clarity and both positive and negative affect. We hope that this measure will be utilised in future research to help determine the suitability of specific individuals to take particular intervention strategies.

References

Barratt, E. S. (1985). Impulsiveness subtraits: Arousal and information processing. *Motivation, Emotion, and Personality*, *5*, 137-146.

Baumeister, R. F., Gailliot, M., DeWall, C. N., & Oaten, M. (2006). Self-regulation and personality: How interventions increase regulatory success, and how depletion moderates the effects of traits on behavior. *Journal of Personality*, *74*(6), 1773-1802.

Biderman, M. D., & Reddock, C. M. (2012). The relationship of scale reliability and validity to respondent inconsistency. *Personality and Individual Differences, 52,* 647-651.

Bleidorn, W. (2009). Linking personality states, current social roles and major life goals. *European Journal of Personality*, *23*(6), 509-530.

Buchanan, K., & Bardi, A. (2015). The roles of values, behavior, and value-behavior fit in the relation of agency and communion to well-being. *Journal of Personality*, *83*(3), 320-333.

Buchanan, K. E., & Bardi, A. (2010). Acts of kindness and acts of novelty affect life satisfaction. *Journal of Social Psychology, 150,* (3), 235-237.

Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's Mechanical Turk a new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science*, *6*(1), 3-5.

Campbell, J. D., Trapnell, P. D., Heine, S. J., Katz, I. M., Lavallee, L. F., & Lehman, D. R. (1996). Self-concept clarity: Measurement, personality correlates, and cultural boundaries. *Journal of Personality and Social Psychology, 70,* 141-156.

Carver, C. S., & White, T. L. (1994). Behavioral inhibition, behavioral activation, and affective responses to impending reward and punishment: The BIS/BAS scales. *Journal of Personality and Social Psychology, 67*, 319-333.

Churchyard, J., Pine, K. J., Sharma, S., & Fletcher, B. (C). (2013). Same traits, different variance: Item-level variation within personality measures. *SAGE Open, 4* (1), 1-11.

Costa, P. T. Jr., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO PI-R™) and NEO Five-Factor Inventory (NEO-FFI) professional manual*. Odessa, FL: Psychological Assessment Resources.

Cronbach, L. J., & Snow, R. E. (1977). *Aptitudes and instructional methods: A handbook for research interactions.* New York: Irvington Publishers, Inc.

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment, 49* (1), 71–75.

Fleeson, W., & Gallagher, P. (2009). The Implications of big five standing for the distribution of trait manifestation in behavior: Fifteen experience-sampling studies and a meta-analysis. *Journal of Personality and Social Psychology, 97* (6), 1097-1114.

Fletcher, B (C), Hanson, J., Pine, K. J., & Page, N. (2011). FIT- do something different: A new psychological intervention tool for facilitating weight loss. *Swiss Journal of Psychology, 70*(1), 25-34.

Fletcher, B. (C)., & Pine, K. J. (2012). *Flex: How to use the other 9/10ths of your personality*. Hatfield: University of Hertfordshire Press.

399 Fordyce, M. W. (1977). Development of a program to increase personal happiness. *Journal of*
400 *Counseling Psychology, 24*(6), 511-521.

401 Fordyce, M. W. (1983). A program to increase happiness: Further studies. *Journal of*
402 *Counseling Psychology, 30*(4), 483-498.

403 Fredrickson, B. L. (2001). The Role of Positive Emotions in Positive Psychology: The
404 Broaden-and-Build Theory of Positive Emotions. *American Psychologist, 56*(3), 218-
405 224.

406 George, D., & Mallery, M. (2010). *SPSS for Windows Step by Step: A Simple Guide and*
407 *Reference, 17.0 update* (10a ed.) Boston: Pearson.

408 Giannopoulos, V. L., & Vella-Brodrick, D. A. (2011). Effects of positive interventions and
409 orientations to happiness on subjective well-being. *The Journal of Positive*
410 *Psychology*, *6*(2), 95-105.

411 Goldberg, L. R., Johnson, J. A., Eber, H. W., Hogan, R., Ashton, M. C., Cloninger, C. R., &
412 Gough, H. C. (2006). The International Personality Item Pool and the future of public-
413 domain personality measures. *Journal of Research in Personality, 40*, 84-96.

414 Heller, D., Komar, J., & Lee, W. B. (2007). The dynamics of personality states, goals, and
415 well-being. *Personality and Social Psychology Bulletin, 33*(6), 898-910.

416 Horn, J. L. (1965). A rationale and test for the number of factors in factor
417 analysis. *Psychometrika*, *30*(2), 179-185.

418 Hoyle, R. H., Stephenson, M. T., Palmgreen, P., Lorch, E. P., & Donohew, R. L. (2002).
419 Reliability and validity of a brief measure of sensation seeking. *Personality and*
420 *Individual Differences, 32*, 401-414.

Kahneman, D., Diener, E., & Schwarz, N. (Eds.). (1999). *Well-being: Foundations of hedonic psychology*. Russell Sage Foundation.

Kashdan, T. B., Gallagher, M. W., Silvia, P. J., Winterstein, B. P., Breen, W. E., Terhar, D., & Steger, M. F. (2009). The curiosity and exploration inventory-II: Development, factor structure, and psychometrics. *Journal of Research in Personality, 43*, 987–998.

Lyubomirsky, S. (2008). *The how of happiness: A scientific approach to getting the life you want*. New York: Penguin Press.

Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? *Psychological Bulletin, 131,* 803–855.

Mason, W., & Suri, S. (2012). Conducting behavioral research on Amazon's Mechanical Turk. *Behavior Research Methods, 44*(1), 1-23.

Mazzucchelli, T. G., Kane, R. T., Rees, C. S. (2010). Behavioral activation interventions for well-being: A meta-analysis. *The Journal of Positive Psychology, 5*(2), 105-121.

McCrae, R. R., & Costa, P. T. Jr. (1996). Toward a new generation of personality theories: Theoretical contexts for the five-factor model. In J. S. Wiggins (Ed.), *The five-factor model of personality: Theoretical perspectives* (pp. 51-87). New York: Guilford Press.

O'Connor, B. P. (2000). SPSS and SAS programs for determining the number of components using parallel analysis and Velicer's MAP test. *Behavior Research Methods, Instrumentation, and Computers, 32*, 396 – 402.

Paolacci, G., Chandler, J., & Ipeirotis, P. (2010). Running experiments on amazon mechanical turk. *Judgment and Decision Making, 5* (5), 411-419.

Patton, J. H., Stanford, M. S., & Barratt, E.S. (1995). Factor structure of the Barratt impulsiveness scale. *Journal of Clinical Psychology, 51* (6), 768-774.

Rand, D. G. (2012). The promise of mechanical turk: How online labor markets can help theorists run behavioral experiments. *Journal of Theoretical Biology,299,* 172-179.

Sagiv, L., Roccas, S., & Hazan, O. (2004). Value pathways to well-being: Healthy values, valued goal attainment, and environmental congruence. In: A. Linley., & J. Stephen (Eds.), *Positive psychology in practice*. NY: John Wiley.

Schueller, S. M. (2011). To each his own well-being boosting intervention: Using preference to guide selection. *Journal of Positive Psychology,6,* 300-313.

Schueller, S. M. (2014). Person–activity fit in positive psychological interventions. In A. C. Parks and S. M. Schueller (Eds.) *The Wiley Blackwell Handbook of Positive Psychological Interventions* (pp 385-402). Blackwell Reference Online. Doi: 10.1111/b.9781119950561.2014.00023.x

Schueller, S. M., & Parks, A. C. (2014). The science of self-help: Translating positive psychology research into increased individual happiness. *European Psychologist, 19,* 145-155. http://dx.doi.org/10.1027/1016-9040/a000181

Seligman, M. E. P., Steen, T. A., Park, N., & Peterson, C. (2005). Positive psychology progress: Empirical validation of interventions. *American Psychologist, 60*(5), 410-421.

Sergeant, S., & Mongrain, M. (2011). Are positive psychology exercises helpful for people with depressive personality styles?. *The Journal of Positive Psychology, 6*(4), 260-272.

Sheldon, K. M., Elliot, A. J., Ryan, R. M., Chirkov, V., Kim, Y., Wu, C., ... & Sun, Z. (2004). Self-concordance and subjective well-being in four cultures. *Journal of Cross-Cultural Psychology, 35*(2), 209-223.

Sheldon, K. M., & Lyubomirsky, S. (2006). Achieving sustainable gains in happiness: Change your actions, not your circumstances. *Journal of Happiness Studies, 7*, 55-86.

Sheldon, K. M., & Lyubomirsky, S. (2007). Is it possible to become happier? (And if so, how?). *Social and Personality Psychology Compass, 1* (1), 129-145.

Silberman, J. (2007). Positive intervention self-selection: Developing models of what works for whom. *International Coaching Psychology Review, 2* (1), 70-77.

Sin, N. L., & Lyubomirsky, S. (2009). Enhancing well-being and alleviating depressive symptoms with positive psychology interventions: A practice-friendly meta-analysis. *Journal of Clinical Psychology, 65* (5), 467-487.

Velicer, W. F., Eaton, C. A., & Fava, J. L. (2000). *Construct explication through factor or component analysis: A review and evaluation of alternative procedures for determining the number of factors or components.* In R. D. Goffin & E. Helmes (Eds.), Problems and solutions in human assessment: Honoring Douglas N. Jackson at seventy. Norwell, MA: Kluwer Academic.

Verplanken, B., & Orbell, S. (2003). Reflections on past behavior: A self-report index of habit strength. *Journal of Applied Social Psychology, 33*(6). 1313-1330. doi: 10.1111/j.1559-1816.2003.tb01951.x

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54,* 1063-1070.

Wood, A. M., Linley, P. A., Maltby, J., Baliousis, M., & Joseph, S. (2008). The authentic personality: a theoretical and empirical conceptualization and the development of the Authenticity Scale. *Journal of Counseling Psychology,55* (3), 385-399.

Wood, A. M., Linley, P. A., Maltby, J., Kashdan, T. B., & Hurling, R. (2011). Using personal and psychological strengths leads to increases in well-being over time: A longitudinal study and the development of the Strengths Use Questionnaire. *Personality and Individual Differences, 50,* 15-19.

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.

Zwick, W. R., & Velicer, W. F. (1986). Comparison of five rules for determining the number of components to retain. *Psychological Bulletin*, *99* (3), 432.

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Table 1: *Descriptive statistics for each of the 20 item pool (Study 1).*

Table 2: *Exploratory Factor Analysis on the Experimental and Comfortable Behavior Style Items using Oblimin Rotation, and the Corrected Item-Total correlations for each Item on the Expected Factor in Studies 1 and 2.*

Table 3: *Partial Correlation Analyses of the Comfortable and Experimental Behavior Styles total scores in Studies 1 and 2.*

Table 1: *Descriptive statistics for each of the 20 item pool (Study 1).*

	Mean	S.D.	Skewness	Kurtosis
1. I have a daily routine that I stick to.	2.94	1.12	.08	-.71
2. My day to day routine varies little.	3.05	1.00	-.14	-.26
3. My friends say that I am predictable.	2.59	1.02	.23	-.49
4. I like to stick to the things that I know.	3.18	1.02	-.03	-.52
5. My views and preferences rarely change.	3.03	1.13	.02	-.65
6. I take comfort in familiarity.	3.52	.99	-.15	-.45
7. I frequently do what is expected of me.	3.42	1.02	-.37	-.28
8. I often do things on autopilot without even realizing.	3.17	1.05	.04	-.76
9. I tend to know exactly what I will be doing at any given time.	3.00	1.13	.07	-.74
10. I can easily predict what each new day will bring.	2.93	.98	-.09	-.50
11. I like to explore new ways of doing things.	3.58	1.02	-.44	-.39
12. I get bored when every day is the same.	3.62	1.20	-.49	-.80
13. I do things on the spur of the moment.	3.21	1.05	.07	-.73
14. I would describe myself as someone who tests out new ideas.	3.47	1.03	-.18	-.60
15. I believe that variety is the spice of life.	3.59	1.08	-.38	-.57
16. I welcome change in my life.	3.42	1.06	-.27	-.47
17. I actively pursue experiences that I've not had before.	3.42	1.09	-.14	-.78
18. My friends are always surprised by my choices.	2.70	1.00	.66	-.15
19. It would be unusual for me to follow a routine.	2.54	1.07	.54	-.33
20. I can never be sure what will happen tomorrow.	2.98	1.13	.21	.35

Note: Skewness SE = .18, Kurtosis SE = .35. Kolmogorov-Smirnov test for all items is significant at $p<.001$.

Table 2: *Exploratory Factor Analysis on the Experimental and Comfortable Behavior Style Items using Oblimin Rotation, and the Corrected Item-Total correlations for each Item on the Expected Factor in Studies 1 and 2.*

	Pattern matrix (Study 1)		Pattern matrix (Study 2)		Structure matrix (Study 1)		Structure matrix (Study 2)		Corrected item-total correlations (Study 1)		Corrected item-total correlations (Study 2)	
	1	2	1	2	1	2	1	2	1	2	1	2
I believe that variety is the spice of life.	**.784**		**.795**		**.785**	-.119	**.756**	-.334	.701		.694	
I actively pursue experiences that I've not had before.	**.760**		**.710**		**.755**		**.706**	-.360	.681		.654	
I would describe myself as someone who tests out new ideas.	**.729**	.125	**.721**		**.711**		**.719**	-.367	.627		.646	
I like to explore new ways of doing things.	**.719**	.110	**.822**	.133	**.704**		**.753**	-.291	.609		.658	
I get bored when every day is the same.	**.597**		**.534**	-.160	**.604**	-.135	**.617**	-.*436*	.562		.599	
I welcome change in my life.	**.595**		**.739**		**.598**	-.108	**.743**	-.390	.562		.681	
I do things on the spur of the moment.	**.544**		**.525**	-.212	**.551**	-.130	**.635**	-.*483*	.537		.635	
My friends are always surprised by my choices.	**.530**		**.500**	-.129	**.528**		**.566**	-.387	.504		.565	
It would be unusual for me to follow a routine.	**.453**	-.179	**.447**	-.274	**.478**	-.242	**.588**	-.*505*	.462		.591	
I can never be sure what will happen tomorrow.	**.441**		**.625**		**.450**	-.124	**.612**	-.297	.459		.597	
I take comfort in familiarity.		**.682**		**.741**		**.679**	-.*425*	**.763**		.597		.699
I like to stick to the things that I know.	-.260	**.674**	-.137	**.720**	-.354	**.710**	-.*509*	**.791**		.619		.732

I have a daily routine that I stick to.	-.154	**.612**	-.110	**.722**	-.240	**.633**	-.*482*	**.778**	.557	.710
My views and preferences rarely change.		**.558**		**.590**	-.152	**.568**	-.304	**.590**	.534	.553
I tend to know exactly what I will be doing at any given time.		**.549**		**.712**		**.549**	-.334	**.695**	.493	.639
I frequently do what is expected of me.		**.525**		**.645**	-.101	**.529**	-.302	**.629**	.470	.574
My day to day routine varies little.	.110	**.488**	-.241	**.492**		**.472**	-.*495*	**.616**	.426	.579
My friends say that I am predictable.	-.188	**.490**		**.562**	-.257	**.516**	-.382	**.609**	.479	.584
I can easily predict what each new day will bring.		**.486**		**.535**		**.462**	-.287	**.541**	.395	.510
I often do things on autopilot without even realizing.	.230	**.384**		**.304**	.176	**.352**		**.270**	.314	.289

Note. Maximum likelihood estimation was applied as the initial extraction method in both studies. Loadings in bold are target loadings. Loadings Italicised are double loadings greater than .40. Loadings smaller than .10 are not shown.

Table 3: *Partial Correlation Analyses of the Comfortable and Experimental Behavior Styles total scores in Studies 1 and 2.*

	Comfortable total	**Experimental total**	**Comfortable WSSD**	**Experimental WSSD**
Study 1 (partialling out sex and age)				
Sensation Seeking Scale Total (SSS-V, n = 122)	-.42***	.39***		
Experience Seeking (ES)	-.43***	.26**		
Thrill and Adventure Seeking (Tas)	-.27**	.35***		
Disinhibition (Dis)	-.25**	.38***		
Boredom susceptibility (Bs)	-.28**	.07		
Barrett Impulsiveness Scale Total (BIS-II, n = 126)	-.39***	.36***		
Cognitive Impulsiveness	-.26**	.19*		
Motor Impulsiveness	-.26**	.38***		
Non Planning Impulsiveness	-.49***	.38***		
Behavioral Inhibition System (BIS, n = 185)	.23**	-.14		
BAS Drive (n = 185)	-.04	.32***		
BAS Fun Seeking (n = 185)	-.21**	.57***		
BAS Reward Responsiveness (n = 185)	.21**	.19*		
Study 2 (partialling out sex, age, curiosity, OTE, Experience seeking, Thrill and adventure seeking, Boredom susceptibility and Disinhibition)				
Comfortable behavior style total	1			
Experimental behavior style total	-.34***	1		
Comfortable behavior style WSSD	.02	.07	1	

Experimental behavior style WSSD	.25***	.08	.28***	1
Positive Affect	.12*	-.01	.13*	.03
Negative Affect	.11	.12*	.08	.08
Satisfaction with life	.16**	-.15*	.01	.00
Self-concept clarity	-.04	-.23***	.05	.05

Note. **In Study 1** to avoid participant fatigue occurring for conceptually similar scales we presented participants with either the sensation seeking scale or Barrett's impulsiveness scale, resulting in different sample sizes for correlations using these measures. **In Study 2**, all $N = 302$. WSSD = Within subject standard deviation (i.e., traitedness indices), OTE = openness to experience, *$p<.05$, **$p<.01$, ***$p<.001$.