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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.

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

26 **1. Introduction**

27 In the past decade, researchers have become increasingly interested in identifying
28 activities or behaviors that may increase subjective well-being¹ (see meta-analyses in
29 Mazzucchelli, Kane, & Rees, 2010; Sin & Lyubomirsky, 2009). The extent to which each of
30 these prescribed happiness enhancing activities is experienced as “normative” or “typical”
31 will vary depending on the individual and their personal characteristics (i.e., their traits,
32 values, goals) and present repertoire of behavior. For example, one activity prolifically
33 associated with happiness is performing acts of kindness (e.g., Schueller & Parks, 2014).
34 While this may be something that one person does on a regular basis, this behavior may be
35 considered out of the ordinary for another person. This raises an important and as yet,
36 unanswered question: Is happiness more likely to be increased by sticking with what we
37 know (i.e., enacting habitual, familiar and comfortable behaviors) or by trying something
38 novel (enacting a broader range of more varied and experimental behaviors)? Such
39 knowledge may have practical implications for optimizing the choice of well-being
40 interventions. Consequently, we present the results of two studies in which we develop and
41 validate a questionnaire that operationalizes each of these approaches (Studies 1 and 2) and
42 examines the associations between each of the resulting constructs and subjective well-being
43 (Study 2).

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

47 **1.1. Two distinct behavioral routes to well-being: Sticking with what we know or trying**
48 ***something novel***

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

52

53 **1.1.1. Sticking with what we know: A comfortable behavior style**

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

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

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

77 To date, empirical support for person-activity fit theory has been mixed. Support can
78 be found in research that has revealed that; value-environment fit is associated with higher
79 well-being (see review in Sagiv, Roccas, & Hazan, 2004); there is between-individual
80 variability in benefits gained from different happiness enhancing activities (Fordyce, 1977,
81 1983; Sergeant & Mongrain, 2011); practising signature strengths (i.e., behaving in
82 accordance with primary positive traits) can increase well-being (Seligman, Steen, Park, &
83 Peterson, 2005; Wood, Linley, Maltby, Kashdan, & Hurling, 2011); and that person-activity
84 fit indirectly affects well-being through increasing adherence to the assigned activity
85 (Sheldon & Lyubomirsky, 2006). However, support for the tenets of person-activity fit theory
86 is not evident in other research findings. Across four correlational studies, person-activity fit
87 did not significantly predict either subjective or psychological well-being (Buchanan &
88 Bardi, 2015). Participants assigned to a matched activity were not any happier than those
89 randomly assigned to an activity (Schueller, 2011; Silberman, 2007). Happiness enhancing
90 activities were most effective when they differed from an individual's dominant orientation
91 (Giannopoulos & Vella-Brodrick, 2011).

92 One of the likely reasons for these mixed findings is that researchers have differed in
93 how they have conceptualized person-activity fit. This is because an activity can fit a person
94 in number of ways, it might fit their motives, basic needs, or core values (Lyubomirsky et al.,
95 2005).

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97 **1.1.2. *Trying something novel: an experimental behavior style***

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

104 The average individual does have a tendency to display variation in their behavior in
105 addition to a habitual trait personality (McCrae & Costa, 1996). Indeed, research by Fleeson
106 (Fleeson & Gallagher, 2009) examining the density distribution of personality states
107 demonstrates that the individual tends to display a dispositional trait personality, but with
108 variation in personality states distributed around the trait personality. This tends to be
109 performed to adapt to particular situations or goals (Bleidorn, 2009; Heller, Komar & Lee,
110 2007). This is also reflected at the personality questionnaire response level, with previous
111 research (Biderman & Reddock, 2012) suggesting that within-subject standard deviations in
112 responding to particular personality traits or facets, calculated as measures of individual
113 variation in specific item ratings within a trait/facet (an index of traitedness), are related to
114 outcomes including life satisfaction and depression (Churchyard, Pine, Sharma & Fletcher,
115 2014).

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

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

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

135 *1.1.3. Which way to happiness?*

136 So on the one hand there is evidence that comfort can be found in familiarity, and
137 pleasure can be gained from practising our strengths (Seligman et al., 2005; Wood, Linley,
138 Maltby, Kashdan, & Hurling, 2011), yet on the other hand, there is also evidence that without
139 doing anything different or experimenting we cannot reasonably expect our happiness to
140 change (Buchanan & Bardi, 2010; Fletcher, Hanson, Page & Pine, 2011; Fletcher & Pine,
141 2012). Schueller (2014) discusses the question of "Which strategy to choose?" within the
142 context of person-activity fit. Schueller suggests that the decision concerning which
143 intervention strategy to use should be influenced not only by the preference of the individual,
144 but also their personality, motivation, and culture.

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

151 *1.2. Operationalizing comfortable and experimental behavior styles*

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

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

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

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

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

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

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

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

206

207 ***2.1. Study 1 Method***

208 ***2.1.1. Participants and procedure***

209 A total of 189 participants (85 male and 104 female) aged between 18 and 51 (Mean =
210 28.29, $SD = 8.09$) were recruited using a convenience sampling method to complete an online
211 survey. All were native English speakers, recruited in Great Britain. To minimize the chances
212 of finding positive spurious associations, we randomized the order in which we presented

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

215 ***2.1.2. Development of the item pool for comfortable and experimental behavior style items***

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

228 ***2.1.3. Measures***

229 *Sensation Seeking*

230 The Sensation Seeking V Scale (SSS-V Zuckerman, Eysenck, & Eysenck, 1978) is
231 comprised of 40 items. Each item contains two options and participants are required to make
232 a forced choice and select the option which most describes their likes or feelings.

233 Alternatively, in cases where neither option is liked, then participants are asked to choose the
234 item that they dislike the least. The scale produces an overall score which can be further
235 subdivided into four subscales: thrill and adventure seeking (TAS), experience seeking (ES),

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

238

239 *Impulsiveness*

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

247

248 *Behavioral Inhibition/Approach Scales (BIS/BAS).*

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

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259 **2.2. Study 1 Results**260 **2.2.1. Data screening**

261 The descriptive statistics for each item of the comfortable and experimental behavior
262 style scales were examined (see Table 1). All items used the full range of the Likert scale.
263 Tests of normality indicated that the data were approximately normally distributed for each
264 item. Specifically, the visual examinations of the box-plots (see Figure 1 in the
265 supplementary analysis), skewness and kurtosis values, as well as values of skewness and
266 kurtosis divided by their respective standard errors² all suggested that many of the items,
267 although not perfectly normally distributed, were close enough to utilise a maximum
268 likelihood estimation approach to EFA.

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

Table 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 $p < .001$.

272 2.2.2. Scale structure with exploratory factor analysis

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

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

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

308 The total scores for each of the two behavior styles were calculated. The descriptive
309 statistics for the comfortable behavior style total scores suggest an average around the
310 midpoint of the 10 to 50 total score range, with moderate deviation around this mean ($M =$
311 $30.82, SD = 6.36$). For the experimental behavior style the descriptive statistics suggest an
312 average just above the midpoint of the total score range, with moderate deviation around this
313 mean ($M = 32.53, SD = 7.14$). To determine whether sex had an impact on either of these
314 measures we conducted independent t-tests. The findings revealed only a significant
315 difference for the experimental behavior style with male participants scoring significantly
316 higher ($M = 33.85$) than female participants ($M = 31.46$), $t(187) = 2.31, p = .022$). To see
317 whether age was associated with displaying either behavior style, correlations between age
318 and each of the behavior style were conducted. Age did not significantly correlate with either
319 behavior style at the .05 alpha level.

	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

Table 2. *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.

320 **2.2.3. Convergent and Discriminant Validity**

321 Partial correlation analyses (two-tailed, partialling out sex and age³) confirmed our
322 expectations regarding the relations of experimental and comfortable styles to sensation
323 seeking, impulsiveness, and behavioral inhibition and approach (see Table 3, zero order
324 correlations are provided in Table 4 in the supplementary analysis). Specifically, sensation
325 seeking and impulsiveness were significantly negatively correlated with a comfortable style
326 and significantly positively correlated with an experimental style.

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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.

	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, * $p < .05$, ** $p < .01$, *** $p < .001$.

1 **2.3. Study 1 Discussion**

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

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

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

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

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49 **3.1. Study 2 Method**

50 **3.1.1. Participants and procedure**

51 A total of 332 participants completed a brief online survey through Amazon's
52 Mechanical Turk⁴ (MTurk) for a nominal payment. All were native English speakers, who
53 were recruited in the US. Of these, we analysed the data from only the 302 participants who
54 passed the attention response check in place. These participants were aged between 18 and 68
55 (Mean = 35.07, SD = 11.88). Of these participants, 297 chose to report their sex as either
56 male ($n = 159$) or female ($n = 138$). To minimize the chances of finding spurious
57 associations, we randomized the order in which we presented each of the measures.

58 **3.1.2. Measures**

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

65 *Subjective Well-Being.* Respondents completed measures of affective and cognitive
66 well-being. Affective well-being was assessed using the Positive and Negative Affect Scale
67 (PANAS, Watson, Clark, & Tellegen, 1988). The PANAS consists of 20 adjectives
68 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).

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

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

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

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

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

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

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

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113 3.2. *Study 2 Results*

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

117 3.2.1. *Exploratory factor analysis of the comfortable and experimental behavior items*

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

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

143 The descriptive statistics for the comfortable behavior style total scores suggest an
144 average around the midpoint of the 10 to 50 total score range, with moderate deviation
145 around this mean ($M = 30.16$, $SD = 6.04$). For the experimental behavior style total scores,
146 the descriptive statistics suggest an average just above the midpoint of the total score range,
147 with moderate deviation around this mean ($M = 28.61$, $SD = 7.04$). To determine whether sex
148 had an impact on either of these measures we conducted two independent t-tests. However,
149 we did not find significant differences in scores for either behavior style. To see whether age
150 correlated with either behavior style, we ran zero order correlations between age and each of
151 the behavior styles. Age correlated positively with the comfortable behavior style, $r(297) =$
152 $.12$, $p = .032$, and negatively with the experimental behavior style, $r(297) = -.15$, $p = .01$,
153 although both were weak correlations.

154 **3.2.2. Multiple regression analyses of convergent outcomes onto the comfortable and**
155 **experimental behavior styles**

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

160 When the comfortable behavior style total score was examined as the dependent
161 variable, the convergent measures predicted 27.3% of the variance in Comfortable behavior
162 style scores, $F(7, 291) = 16.98, p < .001$, adjusted $R^2 = .273$. The predictors of this variance
163 were Openness to experience ($\beta = -.21, p < .001$), and Boredom susceptibility ($\beta = -.34,$
164 $p < .001$).

165 When the experimental behavior style total score was considered as the dependent
166 variable, the convergent measures predicted 60% of the variance in experimental behavior
167 style scores, $F(7, 291) = 64.33, p < .001$, adjusted $R^2 = .60$. The predictors of this variance
168 were curiosity ($\beta = .38, p < .001$), openness to experience ($\beta = .09, p = .036$), experience
169 seeking ($\beta = .14, p = .004$), boredom susceptibility ($\beta = .31, p < .001$) and disinhibition ($\beta =$
170 $.15, p = .006$).

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

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176 **3.2.3. *Partial correlations of comfortable or experimental behavior styles with***
177 ***psychological outcomes***

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

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

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

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

210 3.3. *Study 2 Discussion*

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

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235 4. General Discussion

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

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

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

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

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

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

297 **4.1. *Strengths of the present research***

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

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

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

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

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317 **4.2. *Implications and future research***

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

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

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

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

349 **5. Conclusion**

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

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