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## THE DEVELOPMENT AND INITIAL VALIDATION OF THE WELLBEING BENEFITS OF EVERYDAY ACTIVITIES SCALE (WBEAS) AND THE HAIRSTYLIST VISIT QUESTIONNAIRE (HVQ): A SHORT REPORT.

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**Background:** In general, men seek psychological help less than women do. It could be that men find mental health benefits in other, more everyday, activities e.g. talking with their barber. This study aimed to develop questionnaires to measure the psychological benefits of (a) everyday activities of various kinds, and (b) visiting a hairstylist.

**Methods:** Cross-sectional online survey. 242 adults completed the questionnaires. Responses were analysed using standard questionnaire development methodology.

**Results:** The two questionnaires showed good psychometric properties in terms of good factor structure, internal reliability and construct validity.

**Conclusions:** The two new questionnaires have been successfully applied to an online sample (see Roper & Barry, 2016). The WBEAS may prove useful in the assessment of various everyday activities such as Men's Sheds.

**Keywords:** questionnaire development; factor analysis; gender; ethnicity; barber

## INTRODUCTION

Despite being more at risk of suicide than women (Office of National Statistics, 2015), men are less likely to seek psychological help than women do from psychologists (Addis & Mahalik, 2003). There is evidence that compared to women, men are less inclined to deal with stress by talking about their emotions (Tamres et al., 2002) and it has been suggested that men do not seek talking cures because they prefer to deal with emotional problems in more action-orientated ways (Kingerlee et al., 2014). For example, *Men's Sheds* may provide a kind of community mental health support through basic human interactions while engaging in activities such as making garden furniture (Wilkins, 2010). This notion is lent credence by the success of *behavioural activation* (Richards et al., 2016), a therapy which encourages people to engage in everyday activities that they enjoy rather than engaging in overtly therapeutic activities such as cognitive restructuring (Jacobsen et al., 2001). However, the evidence to date for the psychological / wellbeing benefits for Men's Sheds is uncertain because assessments of Shed projects have usually been measured using subjective and non-validated measures (Milligan et al., 2013).

The purpose of this study was to validate two questionnaires: one for assessing the mental health benefits of engaging in various everyday activities, and another for assessing the mental health benefits of visiting the hairstylist.

## METHOD

Ethical approval for this study was granted by the University College London Research Ethics Committee, and participants gave their informed consent prior to participation. All procedures were conducted according to the Declaration of Helsinki (WMA Declaration of Helsinki, 2008).

This paper describes firstly the development of the questionnaires and secondly the initial validation of the questionnaires. The term 'barber' is used to indicate a hairstylist for men, 'hairdresser' indicates hairstylist for women, and 'hairstylist' indicates barbers or hairdressers of any kind e.g. who have male and female customers.

## PHASE 1: DEVELOPMENT

### Development of the Questionnaires

Items for the two questionnaires were developed through discussion between TR (a Mixed White and Black Caribbean female psychology graduate) and JB (a White male chartered psychologist). In discussions of the types of experiences that would be salient to people visiting a hairstylist, two main themes emerged: specific issues related to visiting a hairstylist, and general issues that might be applied to most situations. These various experiences were listed and then phrased into the form of questions, with appropriate Likert scales added. Through this process, items that formed the basis of two questionnaires were derived: the *Wellbeing Benefits of Everyday Activities Scale (WBEAS)* with 30 items, and the *Hairstylist Visit Questionnaire (HVQ)* with 11 items. Six-point Likert scales were used, with lower scores indicating less agreement with the item e.g. *Strongly Disagree (score = 1), Disagree, Somewhat Disagree, Somewhat Agree, Agree, Strongly Agree (score = 6)*.

An exploratory factor analysis of each of the two questionnaires (*WBEAS and HVQ*) was conducted to examine their factor structure. In each case the factor analysis used Varimax rotation and Kaiser normalization, with extraction by maximum likelihood estimation. Missing values were deleted pairwise. Extraction and retention of factors was based on visual examination of the scree plot (Cattell, 1966) and eigenvalues of  $> 1.0$  were retained (Kaiser, 1960). The threshold for the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy was 0.6, as suggested by Tabachnick & Fidell (2001). The minimum number of participants for factor analysis is 5 participants per item (Nunnally & Bernstein, 1994), thus for 12 to 30 items the sample sizes ( $N = 216$  for *WBEAS* and  $N = 242$  for *HVQ*) provided adequate statistical power. To measure the internal reliability of the questionnaires the Cronbach's  $\alpha$  coefficients were assessed (Cronbach, 1951), with the threshold for acceptability at 0.7 (Nunnally & Bernstein, 1994). A factor loading threshold of 0.60 was applied to enhance the strength of factors, so only items of this strength were retained, unless crossloaded with another factor at a strength of .45 or more.

## PHASE 2: INITIAL VALIDATION

### Initial Validation of Questionnaires

For the initial validation of the questionnaires, participants were recruited from various online sources and the websites of high street hairstylists. The online sources included general websites (e.g. *Psychological Research on The Net*), sites focused on men (e.g. Men's Health Forum) in order to ensure sufficient numbers of male participants, and hairstyling-orientated sites (e.g. <http://barbershopsnearme.com>). Invitation emails were sent out to 430 UK high street hairstylists and online hairstylist groups, which were found online with search terms such as, 'barber', 'hairstylist' and 'hairdresser'. Other participants were recruited through social media (e.g. the *Male Psychology Network's* Twitter™ and Facebook™ pages).

Of the 304 who started the questionnaire, 216 completed all of it (a completion rate of 71%) and 242 completed most of it (a completion rate of 80%). Questionnaires were considered acceptable for inclusion if at least the first section, which included the *HVQ* questions, was completed.

#### *Participants*

The mean (SD) age of participants was 32.73 (12.32), ranging from 18 to 72. Regarding ethnicity, 149 (62%) of the group were white, 53 (22%) were black, 13 (5%) were Asian, and the remaining 27 (11%) were of other or mixed ethnicity. The socioeconomic background of the sample was mostly managerial (101, or 42%), with 36 (15%) manual and 52 (21%) intermediate. 53 (22%) participants did not give sufficient information for their socioeconomic background to be assessed.

### Initial Validation Analysis

As a first step in validating the two questionnaires, the construct validity of the questionnaire was tested by assessing differences in scores between groups known to be different in relevant ways. In the present study we decided *post hoc* to compare the *WBEAS* and *HVQ* scores of those who expressed, in free text responses, that they felt positively about visiting the hairstylist compared to those who expressed a negative view. These two groups were compared using independent groups t-tests. All statistical analyses were carried out using SPSS statistical software for Windows, Version 22 (Armonk, NY: IBM Corp).

Missing data were deleted pairwise, so if a participant completed most but not all of the questionnaire, their answers were still included in the analysis.

## RESULTS

### Development of Final Questionnaires

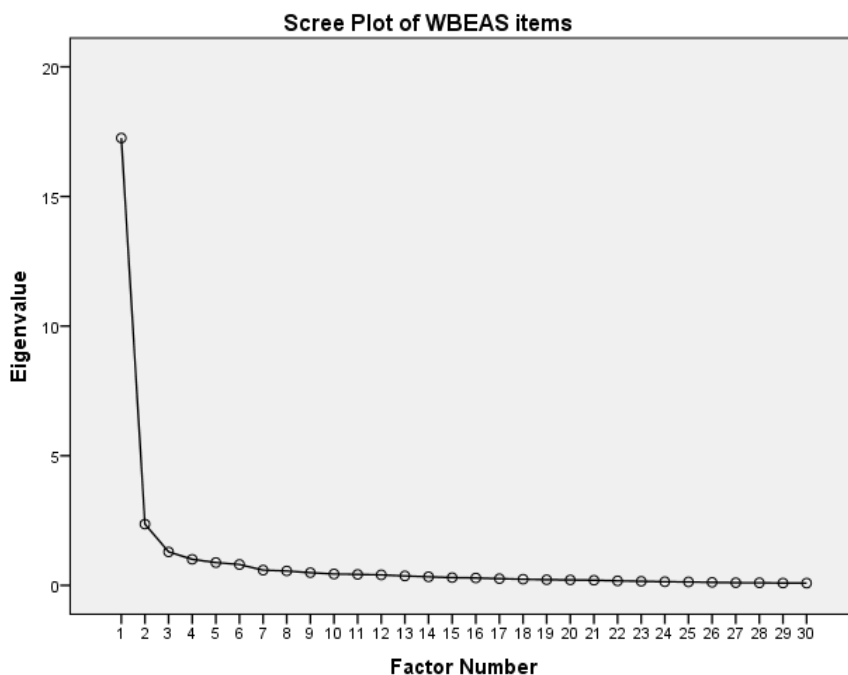
#### *Development of the WBEAS*

The WBEAS consisted of 30 items. The stimulus question was “Please say how much you agree with the following statements”, with responses on a 6-point Likert scale from 1 = *Strongly disagree*, to 6 = *Strongly agree*. The items are shown in Table 1.

#### *Factor structure of the WBEAS*

After incomplete responses to the WBEAS items were eliminated, there were 215 participants in this analysis. The principal components extraction resolved in nine iterations and the scree plot (Fig 1) shows that three factors were found. Together, these accounted for 68.30% of the variance in scoring after extraction. The observed KMO of 0.955 indicated sound underlying factors. Bartlett's Test of Sphericity was significant ( $\chi^2 = 6858.329$ ;  $df = 435$ ;  $P < .01^{-250}$ ) indicating good factorability of the correlation matrix. 17 of the 30 variables had factor loadings of over .6 that were not also crossloaded, and thus were retained (Table 1). The Cronbach's  $\alpha$  reliability coefficient for all 17 items together was 0.95.

**Figure 1.** Scree plot of the initial items of the Wellbeing Benefits of Everyday Activities Scale (WBEAS)



**Table 1.** The items of the Wellbeing Benefits of Everyday Activities Scale (WBEAS) and their factor loadings. The type of everyday activity in this study was visiting a hairstylist.

Subscale	Item	Factor Loading
<i>Positive outlook</i>	I feel more optimistic when I visit the barber/hairdresser	0.828
	I feel more stable when I visit the barber/hairdresser	0.807
	I feel more motivated when I visit the barber/hairdresser	0.795
	I feel more in control when I visit the barber/hairdresser	0.726
	I feel more clear-minded when I visit the barber/hairdresser	0.707
	I feel better when I visit the barber/hairdresser	0.600*
	I feel more positive when I visit the barber/hairdresser	0.590
	I feel physically better when I visit the barber/hairdresser	0.589
	I feel a sense of purpose when I visit the barber/hairdresser	0.577
	I feel increased wellbeing when I visit the barber/hairdresser	0.551
	I feel a sense of accomplishment when I visit the barber/hairdresser	0.538
<i>Socialise &amp; talk</i>	I feel a greater sense of community when I visit the barber/hairdresser	0.808
	I would miss the social connection if I didn't regularly visit the barber/hairdresser	0.774
	I feel more connected with other people when I visit the barber/hairdresser	0.763
	I can <i>discuss my health</i> when I visit the barber/hairdresser	0.720
	Visiting the barber/hairdresser is a good place to meet other people	0.664
	I feel included when I visit the barber/hairdresser	0.657
	I feel a sense of social engagement when I visit the barber/hairdresser	0.656
	I enjoy the social aspect of visiting the barber/hairdresser	0.645
	I can <i>discuss personal issues</i> more at the barber/hairdresser than at other places	0.644
	I like to spend time at the barber/hairdresser	0.600*
	I feel more accepted when I visit the barber/hairdresser	0.569
I feel like I am valued when I visit the barber/hairdresser	0.500	
<i>Enjoyable distraction</i>	I enjoy it when I visit the barber/hairdresser	0.765
	I feel more happy when I visit the barber/hairdresser	0.681
	Visiting the barber/hairdresser helps take my mind off things	0.600
	I feel more relaxed when I visit the barber/hairdresser	0.590*
	I feel more confident when I visit the barber/hairdresser	0.581
	My self-image improves when I visit the barber/hairdresser	0.547
	My self-esteem improves when I visit the barber/hairdresser	0.513

\* Removed due to crossloading

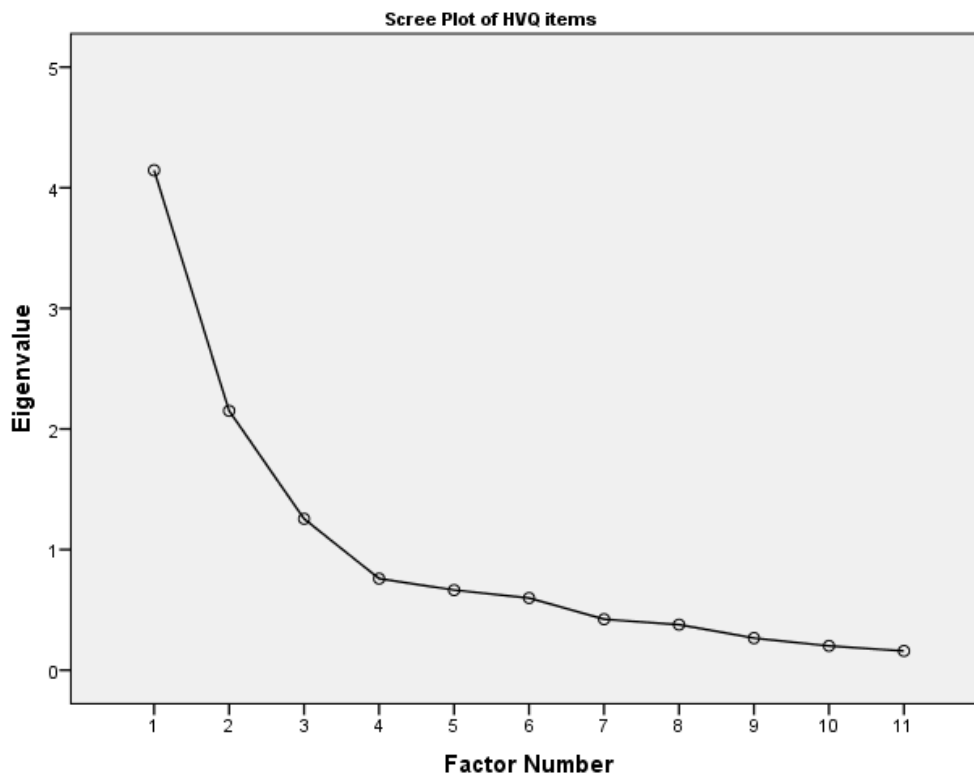
## Development of the HVQ

The HVQ consisted of 11 items. The stimulus question was “Please say how much you agree with the following statements” with responses on a 6-point Likert scale from 1 = *Strongly disagree*, to 6 = *Strongly agree*. The items are shown in Table 2.

### Factor structure of the HVQ

After incomplete responses on the NVQ were eliminated, there were 242 participants in this analysis. The maximum likelihood estimation resolved in five iterations. The scree plot (Fig 2) shows that three factors were found. Together, these accounted for 60.96% of the variance in scoring after extraction. The observed KMO of 0.794 indicated sound underlying factors. Bartlett's Test of Sphericity was significant ( $\chi^2 = 1308.813$ ;  $df = 55$ ;  $P < .01^{236}$ ) indicating good factorability of the correlation matrix. The factor loadings are shown in Table 2. Nine of the 11 variables had factor loadings of over .6 that were not also crossloaded, and thus were retained (Table 3). The Cronbach's  $\alpha$  reliability coefficient for all 9 items together was 0.73. The 'booking' subscale was not used further in the analysis below.

**Figure 2.** Scree plot of the initial items of the Hairstylist Visit Questionnaire (HVQ)



**Table 2.** The items of the Hairstylist Visit Questionnaire (HVQ) and their factor loadings

Subscale	Item	Factor loading
<i>Chat with stylist</i>	I often talk to my barber/hairdresser about personal matters	0.822
	I often talk to my barber/hairdresser about general matters	0.757
	I often find that I am able to 'get things off my chest' when I visit the barber/hairdresser	0.752
	There is often humour in the barbershop/hairdresser	0.597
	I visit the barber/hairdresser often	0.530
<i>Not here for the hair</i>	I often go to the barber/hairdresser just because I have a problem and I want to speak to my barber/hairdresser about it	0.944
	I often go to the barber/hairdresser with the intention of not getting a haircut/hairdo/shave	0.841
	I often partake in other activities (i.e. reading books/magazines, watching TV, listening to music, talking etc.) at the barber/hairdresser without getting a haircut/hairdo/shave	0.675
	I often use other community based places (e.g. pubs, bars, Church etc.) to speak to people specifically when I have a problem I want to talk about	0.475
<i>Booking</i>	I walk in to the barbershop/hairdresser without booking an appointment	-0.986
	I book my appointments in advance	0.620

The above analyses resulted in final *WBEAS* and *HVQ* questionnaires containing 17 and 8 includable items, respectively. Table 3 shows the mean scores for the subscales. Tables 4 and 5 show the final questionnaires, and give instructions for their delivery and scoring.

**Table 3.** Descriptive statistics for the participant groups for the outcome measures.

Scale	Subscale	Black		White		Mean
		Male (N=25)	Female (N=28)	Male (N=33)	Female (N=116)	
HVQ	<i>Chat with hairstylist</i>	3.66 (1.12)	3.40 (1.42)	2.84 (1.13)	3.60 (1.27)	3.45 (1.27)
WBEAS	<i>Socialise and talk</i>	3.40 (1.21)	2.78 (1.16)	2.18 (1.09)	2.78 (1.24)	2.75 (1.24)
WBEAS	<i>Enjoyable distraction</i>	4.00 (1.19)	3.58 (1.30)	3.38 (1.38)	3.81 (1.38)	3.73 (1.35)
HVQ	<i>Not here for the hair*</i>	2.00 (1 – 6)	1.67 (1 – 3.7)	1.00 (1 – 4)	1.00(1 – 6)	1.00 (1 – 6)
WBEAS	<i>Positive outlook</i>	3.26 (1.47)	3.03 (1.08)	3.01 (1.46)	3.12 (1.29)	3.11 (1.31)
HVQ	<i>Booking</i>	3.50 (1 – 6)	3.50 (1 – 6)	2.00 (1 – 6)	5.00 (1 – 6)	4.08 (1.67)
(Single item)	<i>Humour</i>	3.38 (1.50)	3.18 (1.52)	2.66 (1.89)	3.12 (1.50)	3.09 (1.54)

\* Median and range



**Table 4.** The items for the final Wellbeing Benefits of Everyday Activities Scale (WBEAS), with instructions for participants and scoring instructions.

Subscale	Item
Positive outlook	<p>I feel more optimistic when I [insert description of activity]</p> <p>I feel more stable when I [insert description of activity]</p> <p>I feel more motivated when I [insert description of activity]</p> <p>I feel more in control when I [insert description of activity]</p> <p>I feel more clear-minded when I [insert description of activity]</p>
Socialise & talk	<p>I feel a greater sense of community when I [insert description of activity]</p> <p>I would miss the social connection if I didn't regularly [insert description of activity]</p> <p>I feel more connected with other people when I [insert description of activity]</p> <p>I can discuss my health when I [insert description of activity]</p> <p>[Insert description of activity] is a good place to meet other people</p> <p>I feel included when I [insert description of activity]</p> <p>I feel a sense of social engagement when I [insert description of activity]</p> <p>I enjoy the social aspect of [insert description of activity]</p> <p>I can discuss personal issues more at [insert description of activity] than at other places</p>
Enjoyable distraction	<p>I enjoy it when I [insert description of activity]</p> <p>I feel more happy when I [insert description of activity]</p> <p>[Insert description of activity] helps take my mind off things</p>

**Note:** This scale is designed to be adapted to different activities by altering the part of each item that is shown in square brackets. For example, instead of “when I visit the barber/hairdresser” (as in Table 1), the item might state “when I play football” or “when I talk with my friends”. The stimulus question for participants is: “Please say how much you agree with the following statements. Please choose one answer”: [The response scale is:] *Strongly Disagree* [score = 1]; *Disagree* [score = 2]; *Somewhat Disagree* [score = 3]; *Somewhat Agree* [score = 4]; *Agree* [score = 5]; *Strongly Agree* [score = 6]. [Scoring instructions: calculate the mean score for each subscale.]

### Initial validation of the WBEAS and HVQ questionnaires

The construct validity of a questionnaire can be tested by assessing differences in the outcome between two groups known to be different in a relevant way (the ‘known groups’ method). In the present study we decided *post hoc* to compare, using independent groups t-tests, the WBEAS and HVQ scores of those who expressed in free text that they felt positively about visiting the hairstylist (N = 33) to those who expressed a negative view (N = 23). We found that for all five subscales, the scores were significantly lower (indicating lower satisfaction) in the group who didn't like visiting the hairstylist at a minimum of  $p < .005$ .

**Table 5.** The items for the final Hairstylist Visit Questionnaire (HVQ), with instructions for participants and scoring instructions.

Subscale	Item
<i>Chat with stylist</i>	I often talk to my barber/hairdresser about personal matters I often talk to my barber/hairdresser about general matters I often find that I am able to 'get things off my chest' when I visit the barber/hairdresser
<i>Not Here for the Hair</i>	I often go to the barber/hairdresser just because I have a problem and I want to speak to my barber/hairdresser about it I often go to the barber/hairdresser with the intention of not getting a haircut/hairdo/shave I often partake in other activities (i.e. reading books/magazines, watching TV, listening to music, talking etc.) at the barber/hairdresser without getting a haircut/hairdo/shave
<i>Booking</i>	I walk in to the barbershop/hairdresser without booking an appointment I book my appointments in advance

**Note:** The stimulus question for participants is: "Please say how much you agree with the following statements. Please choose one answer": [The response scale is:] *Strongly Disagree* [score = 1]; *Disagree* [score = 2]; *Somewhat Disagree* [score = 3]; *Somewhat Agree* [score = 4]; *Agree* [score = 5]; *Strongly Agree* [score = 6]. [Scoring instructions: calculate the mean score for each subscale.].

## DISCUSSION

In this study we describe the development of two new questionnaires, one for making general assessments of the psychological benefits of engaging in everyday activities and another for assessing opinions about visiting a hairstylist. Both scales show good construct validity. This paper also describes norms by which other studies may compare their findings (see Table 3).

Future researchers are invited to revalidate the measures – testing for concurrent validity with a validated measure relevant to the activity - and to test the replicability of our findings. Our scales are freely available for research, service evaluation, and similar activities. The *WBEAS* can be adapted to fit a wide variety of contexts and populations, and is simple enough to be used by a variety of researchers (students, psychologists, charity workers, market researchers etc.). The questionnaires have already been used in a survey of the benefits of an everyday activity, which found that black men socialise and talk while at the hairstylist's significantly more than white men or black or white women (Roper & Barry, 2016).

A weakness of this study was that it did not test for concurrent validity i.e. how much the new questionnaires were in agreement with existing validated measures measuring similar constructs. However, this was not possible because no validated scale regarding wellbeing

benefits of visiting the hairstylist existed before the present study.

## CONCLUSIONS

The scales validated in this study are potentially useful for other studies. The *WBEAS* can be adapted to assess the wellbeing impact of a wide variety of experiences which are not overtly related to therapy. Given that - at present - men appear to be relatively reluctant to seek help from mental health professionals, the *WBEAS* might be especially useful in exploring the wellbeing benefits of modalities other than traditional talking therapies which might have benefits for men's psychological health.

## ACKNOWLEDGEMENTS

We would like to thank all of the people who filled in the survey. We would also like to thank those who helped with recruitment - big thanks to Moses - and the website administrators who posted the survey, especially Prof John Krantz at *Psychological Research on the Net*, Jim Pollard at the *Men's Health Forum*, and Dr Kathryn Gardner at *Online Psychology Research*.

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Since 2010, John has published around 50 papers in various peer-reviewed journals, including in international-standard journals in gynaecology, cardiology and ophthalmology. Prompted by the considerable suicide rates among men and the establishment's inertia in dealing with men's mental health problems, in 2011 John helped initiate a research programme investigating the mental health needs of men and boys; the present paper is part of this programme. John specialises in research methods (especially surveys and questionnaire development) and statistical analysis (e.g. meta-analysis, meta-regression).

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