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Psychometric Analysis of the Turkish Brief Hospitality Scale

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Abstract

Brief Hospitality Scale (BHS) is a short self-reported instrument for measuring hospitality at the global level. The aim of this study was to examine for the first time the psychometric properties of the BHS in three Turkish-speaking samples (Sample 1, n = 139, mean age = 20.68 ± 1.68 years; Sample 2, n = 160, mean age = 22.10 ± 3.35 years; Sample 3, n = 105, mean age = 31.67 ± 7.51 years). Participants completed measures of hospitality, life satisfaction, and personality traits. Our results showed that the Turkish version of the BHS has excellent levels of internal consistency reliability. The exploratory and confirmatory factor analyses indicated that a one-factor solution of the BHS had a good model fit. Additionally, the scale had acceptable criterion-related validity in relation to satisfaction with life and personality traits. Furthermore, the BHS contributed additional variance to the prediction of satisfaction with life over and above the personality traits. There were no gender and socioeconomic status differences in the hospitality scores across the studies. The Turkish BHS is a promising scale that should be used preferably for exploratory purposes in research and practice.

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Introduction

For many years, scholars have focused on the understanding of how people maintain their social relationships with and contribute to the development of community. In general, people tend to be more social and cooperative when compared with mammals and their own ancestors (Helliwell et al., 2018). With this tendency, they are able to adapt to different social contexts and produce pro-social behaviours (Shultz & Dunbar, 2007). Pro-social behaviours have been found as a great source of well-being (Diener & Seligman, 2002; Helliwell et al., 2018; Sandstrom & Dunn, 2014). Hospitality is also considered as a distinct, yet multi-faceted, aspect of pro-social behaviour that exists across cultures, economic status, and throughout history. Being able to engage in pro-social behaviours like hospitality is a valuable skill in maintaining mental health (Biswas-Diener et al., 2019).

Hospitality is defined as people's behaviours and attitudes to engage in sharing of personal resources between a host, and guest and demonstrating a quality of personality (Biswas-Diener et al., 2019). According to Biswas-Diener et al. (2019), there are two main characteristics of hospitality; (a) a physical location of the pro-social interaction where sharing takes place within the context of the host's home with a face-to face interaction and (b) the social and emotional aspects of interactions that help to stimulate a relaxed and positive environment. As being a complex phenomenon, hospitality does not mean sharing resources on a permanent basis, it can happen on a temporary basis depending on the contexts where the hospitality occurs such as offering free temporary housing.

Research into the effects of hospitality on human well-being has grown during the past decades. By and large, the extant research has demonstrated the positive effects of hospitality on well-being of individuals (Biswas-Diener et al., 2019). Such positive effects pertaining to hospitality can include, for example, increased levels of satisfaction with life, positive affect, optimism, flourishing, social support, trust, respected, belonging, and helping community and decreased levels of negative affect and loneliness (Biswas-Diener et al., 2019).

Researchers have highlighted that measuring the concepts such as hospitality and the experience of hospitality are complex and challenging due to wide range of influencing factors including cultural, situational, and personal factors (Tasci & Semrad, 2016). Nevertheless, researchers have endeavoured to assess such constructs in instruments. For example, the Experience of Hospitality Scale

(Pijls et al., 2017) was developed to measure hospitality from a broader perspective such as the experience of inviting, the experience of care, and the experience of comfort. However, such instruments were arguably lengthy and impractical in nature as they included a relatively large pool of items. To address these shortcomings, the Brief Hospitality Scale (BHS; Biswas-Diener et al., 2019) was developed to capture hospitality at a general level with a few items that are appropriate for use in a large-scale survey. The BHS was constructed in an empirical study that comprised of 1,623 people from a heterogeneous sample across 11 nations. Good psychometric properties (i.e., reliability and validity) were reported for the scale (Biswas-Diener et al., 2019).

As, to date, the original study (Biswas-Diener et al., 2019) is the only study which has evaluated the psychometric features of the BHS, further psychometric investigation of the BHS is obviously warranted. In addition, using an online data collection tool, the original development of the BHS relied on samples of people living in the United States (Biswas-Diener et al., 2019). Although a Turkish sample was also used in the original development of the scale, it may not entirely represent the whole people who live in Turkey and abroad, thus limiting its generalizability to whole Turkish population. This is a new measure which needs further examination to fully analyse its psychometric features in different cultures. Moreover, as hospitality is relatively neglected within handbooks of positive psychology (e.g., Snyder et al., 2011), research on hospitality received less attention in Turkey and translation of the BHS can be fruitful both to investigate this aspect of pro-social behaviours in the Turkish population and to compare research outcomes across cultures.

In the light of above-mentioned rationales, this study aimed to validate the BHS in the Turkish context and examine its psychometric features among three samples. We particularly aimed at testing the construct validity of the BHS using both exploratory and confirmatory factorial analysis procedures. We also sought to examine criterion-related validity and incremental validity of the BHS with the constructs of life satisfaction and personality traits. Furthermore, we studied the internal consistency reliability of the BHS and differences in the hospitality scores across gender and socioeconomic status.

Method

Samples

We collected data from three samples. The first sample included 139 undergraduate students (62 males and 77 females) who enrolled in university courses over a four-year period. The participants ranged in age from 18 to 25 years ($M = 20.68$, $SD = 1.68$ years). They were predominantly freshmen and junior (36.7% for each group) followed by senior (13.7%) and sophomore (12.9%).

Participants self-identified themselves as having different socioeconomic status (below average = 5%, average = 67.6%, above average = 27.3%).

The second sample was a subset of a larger dataset investigating individual differences in aversion to happiness and well-being. This sample included 160 undergraduate students (75 males and 85 females). Their age ranged between 18 and 44 years ($M = 22.10$, $SD = 3.35$ years). Of participants, 41.88% of them were junior, 29.38% senior, and 28.75% sophomore. Concerning their socio-economic status, participants self-identified themselves as having different socio-economic status (below average = 7.5%, average = 61.3%, above average = 30.6%), with one participant declining to give information about this question.

The third sample comprised 105 Turkish adults (29 males and 76 females) drawn from the general public. Participants ranged in age between 19 and 60 years ($M = 31.67$, $SD = 7.51$ years). The majority of participants were single (63.8%) followed by married (34.3%) and widowed/divorced (1.9%) individuals. Participants self-identified themselves as having different socioeconomic status (below average = 11.4%, average = 58.1%, and above average=30.5%).

Measures

The Brief Hospitality Scale (BHS; Biswas-Diener et al., 2019). The BHS is a 4-item self-reported instrument describing affective and attitudinal hospitality. The responses were recorded on a 7-point Likert scale ranging from 1 (total disagreement) to 7 (total agreement). A sample item is "I enjoy hosting others." A total score is obtained by adding all items, with higher scores indicating respondents viewing themselves as a more hospitable person. In this study, we aimed to provide primary evidence of its reliability and validity in Turkish context.

The Satisfaction with Life Scale (SWLS; Diener et al., 1985). The SWLS was used to measure perceived global satisfaction with life. The SWLS comprises of 5 items, each rated on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). A sample item includes "In most ways, my life is close to my ideal." A total score can be computed by summing all items, with higher scores representing greater satisfaction with life. Turkish translation of the SWLS produced good evidence for reliability and validity (Durak et al., 2010; Yildirim & Aziz, 2017).

The Ten-Item Personality Inventory (TIPI; Gosling et al., 2003). The TIPI includes 10 items that split into five domains: extraversion, agreeableness, conscientiousness, emotional stability, and openness to a new experience. Each domain is measured by two items. The participants responded to each question using a 7-point Likert scale ranging from 1 (disagree strongly) to 7 (agree strongly), with higher scores referring to higher levels of associated domains. Sample items include "extraverted, enthusiastic" (extraversion), "critical, quarrelsome" (agreeableness), "anxious, easily upset" (emotional stability),

"dependable, self-disciplined" (conscientiousness), and "openness to new experience, complex" (openness to new experience). Turkish translation of this scale was evaluated by Atak (2013). The observed internal consistency reliability coefficients in our sample were relatively low which is expected when there are a few numbers of items on a scale (Tavakol & Dennick, 2011).

Procedure

For the translation of the BHS into Turkish, we followed several steps recommended in the literature (Sousa & Rojjanasrirat, 2010). For forward translation, the four items of the scale were independently translated from English to Turkish by three bilingual academics who had a good command over English. All academics then compared their forward versions with the original scale and discussed any discrepancies between the two languages for reconciliation. Afterwards, another bilingual person who had a good command over both English and Turkish back translated the reconciled version from Turkish to English. In the final step, the original and back-translated forms were assessed again. The back translation of the scale was compared with the original version of the scale to identify whether there were discrepancies between the English and Turkish versions by assessing item-by-item consistency in terms of linguistic equivalence such as meaning, structure, grammar, and coherence. After reaching a consensus that the translated version of the scale was the best representation of the meaning of the items in Turkish, it was administered in this study.

Sample 1 and Sample 2 were collected with the help of colleagues who voluntarily administered the questionnaires battery to students during regular class hours. Participants completed a battery of questionnaires using a paper-pencil format on a voluntary basis. Sample 3 was recruited via online using social media platforms. Participants have not received any incentive for their involvement. A letter was included in the first page of the questionnaire battery to inform all the participants about the aims of the study. The protocol for this study was approved by the Institutional Review Boards of the Agri Ibrahim Cecen University where the study was conducted. All participants provided written permission and signed informed consent forms voluntarily after being aware of the purpose of this study. They were assured about confidentiality and anonymity of their personal information and responses.

Data analysis

We screened the data to find out any missing values within the datasets. We found some missing values in Sample 1 in which some participants (4.2%) did not answer some questions on the personality inventory. To address this issue, we excluded the participants with missing values from the further analyses as the results were not substantially different between the missing data and without

missing data. Reliability analysis was performed to find out whether the items on the BHS were internally coherent across the samples. Correlation analysis was performed to explore the relationship between the study variables while hierarchical regression analysis was conducted to provide evidence of the incremental value of the BHS in predicting satisfaction with life over and above personality traits.

Exploratory and confirmatory factor analyses were carried out to examine the factor structure of the BHS. The goodness-of-fit of the models was assessed using multiple tests such as Chi-square ($\chi2$), comparative fit index (CFI), normed fit index (NFI), standardized root-mean-square residual (SRMR), and root mean square error of approximation (RMSEA). An insignificant $\chi2$ is desirable, but it is highly sensitive to sample size where a significant $\chi2$ is expected when sample size is high (Cohen, 1992). CFI and NFI demonstrate a good fit if their values are greater than .95 (Hu & Bentler 1999). RMSEA should fall within 0 and 1 (MacCallum et al., 1996) and SRMR should range between 0 and .08 (Hu & Bentler, 1999).

Gender and socioeconomic status differences in the scores of BHS were respectively evaluated using independent sample *t*-test and one-way ANOVA. Given the unequal sample sizes, equality of variance was tested prior to this test. According to a common rule of thumb, a participant-to-item ratio of 5:1 with a minimum number of 100 participants can be considered an acceptable sample size (Gorsuch & Hillsdale, 1983), suggesting that the samples used in this study exceeded the recommended minimum ratio. Data were analysed using SPSS (version 24.0) and AMOS (version 24.0).

Results

Item analysis and reliability estimation

We calculated descriptive statistics (i.e., mean, standard deviation), corrected item-total correlation, and reliability estimates for each item in the BHS (see Table 1). Results demonstrated that the scores of all items were above the mean across the samples. The items were approximately normally distributed. The item-total correlation ranged between .73 and .85 and all the correlation coefficients were statistically significant at $p < 0.01$ level. Furthermore, Cronbach's alpha (α) was used to estimate the internal consistency reliability of the Turkish BHS. Cronbach's α was .91 across all samples. These results confirmed a strong internal consistency reliability (Taber, 2018).

Exploratory factor analysis (EFA)

Kaiser-Meyer-Olkin (KMO) and Bartlett's Sphericity tests were first performed to explore whether the data were appropriate for factor analysis. The values of

Table 1. Descriptive statistics, reliability, and factor loadings for the Turkish BHS.

Items	Min	Max	Mean	SD	Skew	Kurt	IC	CD	EFA loadings
Sample 1 (n = 139)									
Item 1	1.00	7.00	5.64	1.64	−1.56	1.57	0.85	0.87	0.94
Item 2	1.00	7.00	5.61	1.72	−1.49	1.18	0.81	0.88	0.89
Item 3	1.00	7.00	5.52	1.73	−1.23	0.50	0.73	0.91	0.74
Item 4	1.00	7.00	5.73	1.61	−1.54	1.69	0.82	0.88	0.83
Sample 2 (n = 160)									
Item 1	1.00	7.00	5.48	1.66	−1.13	0.54	0.81	0.88	0.87
Item 2	1.00	7.00	5.55	1.63	−1.10	0.45	0.80	0.88	0.87
Item 3	1.00	7.00	5.44	1.74	−1.18	0.46	0.82	0.87	0.86
Item 4	1.00	7.00	5.36	1.77	−0.96	0.01	0.74	0.90	0.78
Sample 3 (n = 105)									
Item 1	1.00	7.00	5.69	1.31	−1.25	2.04	0.76	0.89	0.83
Item 2	1.00	7.00	5.76	1.26	−1.04	1.17	0.82	0.87	0.87
Item 3	1.00	7.00	5.37	1.58	−1.08	0.90	0.85	0.85	0.89
Item 4	1.00	7.00	5.50	1.49	−1.04	0.84	0.74	0.90	0.79

Note: IC = Corrected item-total correlation; CD = Cronbach's alpha if item deleted

KMO and Bartlett's Sphericity tests were adequate, (KMO = 0.80; Barlett Sphericity, χ^2 (6) = 411.70; $p < 0.001$ for Sample 1; KMO = 0.83; Barlett Sphericity, χ^2 (6) = 427.96; $p < 0.001$ for Sample 2; and KMO = 0.78; Barlett Sphericity, χ^2 (6) = 295.69; $p < 0.001$ for Sample 3), according to the criteria that KMO value ≥0.70 is interpreted as acceptable and the Bartlett's Sphericity test must be significant at $p < 0.05$ (Hair et al., 2010).

An EFA was carried out using maximum likelihood without an extraction method. The EFA indicated that only one eigenvalue was greater than 1.00. The extracted factor explained 79.52% of the total variance with an eigenvalue of 3.18 for Sample 1, 78.65% of the total variance with an eigenvalue of 3.15 for Sample 2, and 78.38% of the total variance with an eigenvalue of 3.14 for Sample 3. As seen in Table 1, the analysis showed very strong factor loadings ranging between 0.74 and 0.94.

Criterion-related validity

Table 2 shows the relationship between hospitality, satisfaction with life, and domains of personality traits' scores in Sample 1 and 3. Hospitality was significantly positively related to satisfaction with life, extraversion, and conscientiousness in Sample 1 and significantly positively related with satisfaction with life and all domains of personality traits except openness to new experiences in Sample 3. The strength of relationships was small with a minimum value of 0.19. According to Cohen (1992), a correlation of 0.10≤r<0.30 represents a small

Table 2. Descriptive statistics and correlations between the study variables.

Variable	Descriptive statistics				Reliability	Correlations						
	Mean	SD	Skew	Kurt	α	1.	2.	3.	4.	5.	6.	7.
Sample 1 (n = 139)												
1. Hospitality	22.50	5.96	−1.49	1.58	.91	—						
2. Satisfaction with life	18.87	6.88	0.13	−0.52	.77	.22**	—					
3. Extraversion	8.40	3.22	0.02	−0.66	.26	.19*	.23**	—				
4. Agreeableness	10.44	2.72	−0.25	−1.02	.18	.07	.02	.29**	—			
5. Conscientiousness	9.65	3.06	−0.21	−1.03	.31	.19*	.18*	.41**	.19*	—		
6. Emotional stability	9.01	3.09	−0.27	−0.35	.16	−.07	.00	−.04	.12	−.10	—	
6. Openness to experience	8.19	2.83	−0.11	−0.22	.21	.04	−.10	−.38**	−.23**	−.32**	.20*	—
Sample 3 (n = 105)												
1. Hospitality	22.32	5.00	−1.13	1.66	.91	—						
2. Satisfaction with life	19.55	6.51	−0.18	0.14	.88	.40**	—					
3. Extraversion	10.01	2.89	−0.56	−0.15	.80	.33**	.20*	—				
4. Agreeableness	10.16	2.63	−0.50	0.01	.49	.38**	.20*	.39**	—			
5. Conscientiousness	11.01	2.36	−0.89	1.29	.60	.30**	.20*	.48**	.38**	—		
5. Emotional stability	9.16	2.92	−0.67	0.09	.54	.33**	.22*	.40**	.31**	.41**	—	
6. Openness to experience	9.40	2.98	−0.61	0.07	.64	.14	.17	.02	.03	.08	.10	—

**p < 0.01; *p < 0.05. Internal consistency reliability for BHS in Sample 2 was .91.

effect size, .030≤r<0.50 represents a medium effect size, and a correlation r≥0.50 represents a large effect size.

Incremental validity

A hierarchical multiple regression analysis was conducted to provide evidence whether BHS could predict satisfaction with life over and above the personality traits in Sample 1 and Sample 3. In Step 1, personality traits were entered as controlled variables, and in Step 2, BHS was entered as a predictor. Satisfaction with life was entered as the outcome variable. As presented in Table 3, the unique contribution of the BHS in predicting satisfaction with life was 3% in Sample 1 and 8% in Sample 3, suggesting that the BHS contributed a significant amount of variance in predicting satisfaction with life over and above the personality traits.

Construct validity (confirmatory factor analysis)

The authors of the BHS (Biswas-Diener et al., 2019) and current EFA results suggested a single-factor model for the scale. Therefore, to test whether the proposed underlying model for the Turkish BHS was held true, a one-factor model was constructed using CFA. The CFA for Sample 1 showed that the results of the goodness of fit indices were good, [$\chi2$ (2) = 9.62, p = .01, NFI = 0.94, CFI = 0.98, SRMR = .02 and RMSEA = 0.16]. The CFA for Sample 2 also provided good data-model fit statistics, [$\chi2$ (2) = 19.15, p = .01, NFI = 0.96, CFI = 0.96, SRMR = .04 and RMSEA = 0.25]. Furthermore, the CFA for Sample 3 suggested acceptable data-model fit statistics, [$\chi2$ (2) = 24.80, p = .01, NFI = 0.92, CFI = 0.92, SRMR = .05 and RMSEA = 0.33]. Here RMSEA value was above the recommended value of .10. According to Kenny et al. (2015), a model with small degree of freedom and sample size could result in artificially high RMSEA values that usually incorrectly demonstrate a poor model fit. Notwithstanding RMSEA, the results showed that the one-factor model fits well with the observed data. All standardised factors loadings were significant and satisfactory ranging between .74 and .94.

Gender and socioeconomic status differences

Two separate independent sample t-tests were performed to measure the mean score differences between hospitality scores of male and female groups in all samples. There were no statistically significant differences between the two groups across the studies. Three separate one-way ANOVAs were conducted to compare the mean score differences in the hospitality scores of three different socioeconomic statuses (below average, average, and above average) in all samples. The analysis did not produce any significant results between the groups

Table 3. Hospitality predicting life satisfaction over and above the personality traits.

Variable	Sample 1							Sample 3						
	B	β	t	p	R	R^2	ΔR^2	B	β	t	p	R	R^2	ΔR^2
Step 1	$F_{(5,138)} = 1.88$, $p>0.05$				0.26	0.07	0.70	$F_{(5,104)} = 2.24$, $p>0.05$				0.32	0.10	0.10
Extraversion	0.45	0.21	2.14	0.03				0.18	0.08	0.71	0.48			
Agreeableness	−0.16	−0.06	−0.69	0.49				0.27	0.11	1.00	0.32			
Conscientiousness	0.23	0.10	1.11	0.27				0.18	0.07	0.58	0.56			
Emotional stability	0.06	0.03	0.32	0.75				0.25	0.11	1.02	0.31			
Openness to new experience	0.00	0.00	−0.01	0.99				0.33	0.15	1.55	0.12			
Step 2	$F_{(6,138)} = 2.35$, $p<0.05$				0.31	0.10	0.03	$F_{(6,138)} = 3.67$, $p<0.05$				0.43	0.18	0.08
Hospitality	0.21	0.18	2.12	0.04				0.42	0.32	3.13	0.00			

(see Table 4). These results suggest that participants were on an equal level of hospitality despite gender and socioeconomic status differences.

Discussion

To our knowledge, this is the first study to examine the psychometric analysis of the BHS in Turkish samples living in Turkey. In this study, we conducted three studies to adapt and validate the BHS to the Turkish language and culture. The results showed that the Turkish version of the scale indicated good factorial validity and unidimensionality, excellent internal consistency and adequate criterion-related and incremental validity, in addition to invariance across gender and socioeconomic status. These findings confirmed the psychometric properties of the original version (Biswas-Diener et al., 2019).

The Turkish version of the BHS was internally consistent. The Cronbach's α value found in the current three samples (α = .91) proved to be high and similar to those reported in the original study (α ranged between .81 and .94). This suggests that each item has similar importance in forming the scale, with none being superior to others. It also suggests that the 4-item BHS instrument measures the hospitality construct adequately as a reliable and unidimensional measure.

Concerning factorial validity of the BHS, EFA showed a robust one-factor solution that accounted for a significant amount of the total variance (79.89%), with only a salient eigenvalue being above the recommended criterion (Kaiser, 1960). All items were good in terms of factor loadings, no item was recommended for elimination. This suggests that the relationship between the observed variables (items) and the latent variable (hospitality construct) is high. In support of EFA results, CFA demonstrated a good fit to the data, in addition to the satisfactory contribution to the latent variable in each item. The standardised factor loadings were high, and all items' residuals were sufficient. Both EFA and CFA results provided support for a one-dimensional hospitality construct using a four-item scale. This factor solution was also proposed by Biswas-Diener et al. (2019).

Previously tested hypothesis, that hospitality should be related to life satisfaction and personality traits (Biswas-Diener et al., 2019), was partially replicated in the current study. This study confirmed a positive relationship between hospitality and satisfaction with life suggesting that people with higher hospitality levels are more likely to satisfy with their life. This finding collaborates previous studies that have revealed that increasing levels of hospitality is related with greater well-being (Biswas-Diener et al., 2019). Concerning the relationship between hospitality and personality traits, the emerging findings were relatively inconsistent. In Study 1, hospitality was only related to extraversion and conscientiousness with a small effect size. However, in Study 3, except openness to new experiences, hospitality was related with all aspects of personality traits

Table 4 Gender and socioeconomic status differences in hospitality scores.

Sample	Group	N	Mean	SD	F	p	Group	N	Mean	SD	t	p
			Socioeconomic status						Gender			
Sample 1 (n = 139)	Below average	7	17.71	7.41	2.44	0.09	Female	78	21.69	6.47	−1.56	0.12
	Average	94	22.81	6.13			Male	64	23.25	5.40		
	Above average	38	22.61	4.94								
Sample 2 (n = 160)	Below average	12	21.75	6.72	0.54	0.58	Female	85	22.55	5.40	1.62	0.11
	Average	98	21.43	6.37			Male	75	21.01	6.60		
	Above average	49	22.53	5.11								
Sample 3 (n = 105)	Below average	12	20.67	3.42	0.81	0.45	Female	76	22.57	4.99	−0.80	0.42
	Average	61	22.67	5.59			Male	29	21.69	5.04		
	Above average	32	22.28	4.21								

Note. Degrees of freedom were corrected for gender differences in Sample 1 and Sample 2.

with a medium effect. These results suggest that people with greater levels of hospitality tend to report higher levels of extraversion, agreeableness, emotional stability, and conscientiousness. In the original study, hospitality was found to be positively related with all adaptive personality traits and negatively related with neuroticism. The variation between the results of that study and the current study might be associated with the characteristics of the samples used in studies because sample characteristics can lead to different outcomes of the same variable (Yildirim et al., 2018). Although the findings extend literature that has considered hospitality as a potential variable related with personality traits, future research should replicate the current findings. Nevertheless, the emerging relationships between hospitality, satisfaction with life, and personality traits are coherent with the understanding that hospitable people tend to satisfy their life and have more positive personality characteristics by demonstrating more extraverted, agreeable, emotionally stable, and conscientious characteristics.

We further assessed the incremental validity of the BHS by testing the assumption that the BHS would predict life satisfaction over and above the personality traits. The results showed that the scores of the BHS significantly accounted for a significant amount of variance in satisfaction with life over and above the personality traits. This suggests that hospitality is uniquely important to influence life satisfaction despite the effect of personality traits.

Research investigating the correlates, predictors, and outcomes of hospitality has primarily focused on the hospitality industry where hospitality is considered as a financial transaction (Biswas-Diener et al., 2019). However, taking hospitality into account from a psychological perspective can be useful to understand human well-being as it has been found to be closely related with well-being (García-Cabrera et al., 2018). The BHS measure of hospitality can serve as a resource that allows researchers, practitioners, communities, and government agencies to identify the correlates and predictors of hospitality and its relationship with various indicators of well-being and mental health. The measure can also assist to underpin the assessment of interventions aiming to strengthen the prosocial behaviours for hospitality. In addition, the measure can function as a knowledge platform for designing effective strategies and programs that can enhance hospitality among university students in locally relevant and culturally and contextually sensitive ways.

This study has several limitations that should be addressed in future research. First, although the psychometric features of the BHS have been tested on three samples in the same geographic region of Turkey and achieved good reliability and validity, great caution should be given to draw overarching conclusions from these data and apply them to other regions within Turkey because Turkish culture includes a wide range of lifestyles and subcultures based on their specific geographic locations. It needs further replication in different contexts using different sample groups to ensure emerging results. Second, the current results were based on cross-sectional data with missing values in Study 1,

although the problem of missing values was addressed by calculating maximum estimation with missing in less than 5% of the items in individual sub-scales of personality. A complete dataset is thus warranted by future studies. Another limitation of this study is that we obtained low levels of internal consistency reliability for the TIPI which may have negative consequences on the results. Indeed, poor internal consistency reliability for the TIPI has been reported in the original development of the scale and those adapted in other languages (Gosling et al., 2003; Hofmans et al., 2008). According to Gosling et al. (2003), the content validity may be poor in case of having items that were relatively distinct from each other in the same factor, which may result in poor internal consistency and the factor structure.

In conclusion, the one-factor structure of the BHS established by Biswas-Diener et al. (2019) was verified in the Turkish context. We also provided adequate evidence for the reliability, criterion-related validity, incremental validity, and gender and socioeconomic status in hospitality scores. With our adaptation of the BHS, studies conducted on Turkish-speaking samples will be able to include a brief measure of the hospitality in their protocol. When researchers need a reliable and valid estimate of hospitality and when they are in an exploratory phase, they should use the BHS due to be a short robust measure.

Ethical Considerations

All procedures performed in this study were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. This study was approved by the Ethics Committee of Agri Ibrahim Cecen University.

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Author Contributions

MY and AG contributed to the conception and design of the study. MY and AG contributed to the acquisition of data. MY drafted the manuscript. Both authors approved the final version of the manuscript.

Informed Consent

Written informed consent was obtained from all participants included in the study.

Declaration of Conflicting Interests

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