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# Humor in Therapy: Assessing Demand for Integration

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## **ABSTRACT**

Humor can deepen therapeutic alliance and cognitive flexibility, yet its clinical value appears to depend on the characteristics of the client. This study examined how sociocultural factors play a role in psychotherapy expectations for humor use. In a preregistered study of adults (n=398, 77.1% female; Mage=34.5, SD=12.1), participants completed personality, coping humor, expectation of humor in therapy, and demographic/cultural measures. Group differences were assessed using t-tests and analysis of variance (t/ANOVA); a path model (adjusted for demographic and contextual covariates) was used to test whether the approach to humor in culture was linked to coping humor and expectations for humor in psychotherapy. Men reported greater use of coping humor than women (p<0.05). Habitual coping with humor was strongly correlated with higher expectations for the rapeutic humor ( $\rho$ =0.60,  $\rho$ <0.05). Regression analyses showed that older age ( $\beta$ =0.16, p<0.05) and a positive cultural approach to humor  $(\beta=3.74, p<0.05)$  were independently associated with stronger expectations of humor in psychotherapy. A favorable cultural stance toward humor was associated with more coping humor ( $\beta$ =0.24, p<0.05), which in turn was related to higher expectations ( $\beta$ =0.38, p<0.05); the indirect effect ( $\beta$ =0.09, 95% CI.05-0.14) accounted for 40% of the total association. Personality traits and other covariates were not significant. Clients who come from humor-affirming cultures and already rely on humor to cope are most likely to expect and presumably benefit from humor in psychotherapy. Therefore, a culturally attuned, client-centered use of humor may enhance engagement without compromising therapeutic seriousness.

**Keywords:** Coping, cultural differences, expectations in therapy, humor, individual differences, psychotherapy.

#### ÖZ

# Terapide Mizah: Entegrasyon Gereksiniminin Değerlendirilmesi

Mizah, terapötik ilişkiyi güçlendirebilir ve bilişsel esnekliği artırabilir, ancak klinik değeri genellikle danışanın kişisel özelliklerine bağlıdır. Bu çalışmada, sosyokültürel faktörlerin psikoterapide mizah kullanımına yönelik beklentilerde nasıl bir rol oynadığı incelendi. Önceden kayıtlı bu çalışmada (katılımcı sayısı=398, %77,1 kadın; ortalama yaş=34,5, SS=12,1) katılımcılardan kişilik, mizahla başa çıkma, terapide mizah beklentisi ve demografik/kültürel ölçümler toplandı. Grup farklılıkları t-testleri ve ANOVA ile ölçüldü; kovaryantlarla ayarlanmış bir yol modeli, başa çıkma mizahının kültürel tutumları terapiye yönelik mizah beklentileriyle nasıl ilişkilendirdiğini test etti. Temel bulgularda, erkekler, kadınlara kıyasla daha fazla başa çıkma mizahı kullandıklarını bildirdi (p<0,05). Mizahla başa çıkma, daha yüksek terapötik mizah beklentisiyle güçlü bir şekilde ilişkilidir (p=0,60, p<0,05). Regresyon analizleri, daha ileri yaşın (β=0,16, p<0,05) ve mizaha karşı olumlu kültürel bir yaklaşımın (β=3,74, p<0,05) bağımsız olarak daha yüksek mizah beklentileriyle bağlantılı olduğunu gösterdi. Mizaha olumlu kültürel bakış açısı, daha fazla başa çıkma mizahını (β=0,24, p<0,05) ve dolayısıyla daha yüksek terapötik mizah beklentisini (β=0,38, p<0,05) öngörmektedir. Bu dolaylı etkinin büyüklüğü (β=0,09, %95 GA=0,05-0,14),



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This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License. toplam ilişkinin %40'ını açıklamaktadır. Kişilik özellikleri ve diğer kovaryantlar anlamlı bulunmadı. Mizahı olumlayan kültürlerden gelen ve zaten mizahla başa çıkmayı tercih eden danışanlar, psikoterapide mizah kullanılmasını en çok bekleyen ve muhtemelen bu yaklaşımdan en çok fayda gören gruplardır. Bu nedenle, kültürel olarak hassas, danışan odaklı mizah kullanımı, terapötik ciddiyeti tehlikeye atmadan terapi sürecindeki katılımı artırabilir.

**Anahtar Kelimeler:** Baş etme, bireysel farklılıklar, kültürel tutumlar, mizah, psikoterapi, terapide beklentiler.

#### INTRODUCTION

Humor is recognized as a clinically versatile technique that can enhance cognitive restructuring, emotional regulation, and therapeutic alliances (Ellis & Whiteley, 1979; Martin, 2007). Humor interventions reduce depressive and anxious symptoms and improve happiness (Wellenzohn et al, 2016; Zhao et al, 2019). However, the small and inconsistent effect sizes, along with reports of boundary blurring or offense, raise doubt on the uniform benefit of humor in psychotherapy (Falkenberg et al, 2011; Hussong & Micucci, 2021; Sarink & García-Montes, 2023). Clarifying who benefits most from humor is a pressing clinical question.

# **Theoretical Background**

The broaden-and-build theory (Fredrickson, 1998) suggests that positive emotions, broaden thought-action repertoires, fostering creativity and cognitive flexibility. This broadened thinking helps build enduring social and psychological resources, reinforcing overall well-being. However, the impact of positive emotions varies according to individual factors, such as resilience, which influences the ability to find positive meaning in adversity (Fredrickson, 2001; 2004). The consistency of the broadening component has also been questioned in recent empirical work, as it does not always function as predicted (Roth et al, 2024). These findings align with the notion that individual and cultural differences may shape the effects of positive emotions, including humor, highlighting the importance of examining for whom and under what conditions humor is beneficial in psychotherapy.

## **Humor in Psychotherapy**

Martin (2007) identified three uses of humor in psychotherapy: as a communication tool (e.g., fostering empathy), as a direct intervention (e.g., humor-enhancing therapy), and as a support for evidence-based techniques (e.g., targeting irrational beliefs). Research on humor as a communication tool in therapy suggests that it facilitates client understanding and relieves stress (Dionigi & Canestrari, 2018; Consoli et al, 2018); however, it also carries risks, such as offending clients and blurring boundaries

(Hussong & Micucci, 2021). The efficacy of humor-based interventions remains equivocal. While some studies report benefits, such as increased life satisfaction in older adults (Tse et al, 2010) and subjective happiness in community samples (Wellenzohn et al, 2016), some found limited effects (Rudnick et al, 2014; Sim, 2015). Mental health outcomes are similarly inconsistent: humor reduced depression and anxiety in non-clinical students and subclinical groups (Narula et al, 2011; Tagalidou, et al, 2018) but showed that not all humor types serve a functional role for depression (Altan-Atalay & Boluvat, 2024). A recent systematic review reported modest improvements across mental health indicators (Sarink & García-Montes, 2023), whereas newer evidence suggests more substantial benefits—showing that laughter-based interventions can significantly enhance life satisfaction and reduce anxiety (Porras-Jimenez et al, 2025).

## **Humor in Cognitive Behavioral Therapy**

A few studies have examined the role of humor in evidencebased therapies. Albert Ellis, a pioneer of cognitive behavioral therapies, argued that excessive seriousness contributes to neurotic disorders and advocated the integration of humor to challenge irrational beliefs (Ellis, 1980). Although traditional Cognitive Behavioral Therapy (CBT) does not explicitly address this, humor can still serve for cognitive restructuring by encouraging alternative perspectives (Amici, 2019). Empirical studies on humor in CBT are limited. One study found no significant differences in the outcomes between traditional and humor-based desensitization for spider phobia (Ventis et al, 2001). However, another study reported more frequent use of humor in CBT than in PA or PDT, with positive associations between humor and the therapeutic relationship (Brooks et al, 2023). Despite these insights, the direct impact of humor on CBT outcomes remains underexplored, highlighting the need for targeted studies.

#### **Humor and Individual Differences**

Individual differences, such as age, gender, education, and social status, may influence humor use in coping and psychotherapy. Research shows consistent patterns across sociodemographic groups; for instance, men show different

neural responses to humor than women (Hofmann et al, 2023). Adolescents report higher use of aggressive humor than young adults (Falanga et al, 2020), and younger adults demonstrate greater humor orientation, which supports coping (Wanzer et al, 2009). Romantic relationships and socioeconomic status have also been associated with humor styles (Tümkaya, 2011), whereas low school motivation was linked to more negative humor use (Saroglou & Scariot, 2002). Personality traits are similarly influential, with extraversion linked to affiliative humor and neuroticism to self-defeating humor (Plessen et al, 2020). Moreover, various studies have highlighted the links between humor use and mental health conditions (Boerner et al, 2017; Schneider et al, 2018).

#### **Humor and Cultural Differences**

Culture is also recognized as a key factor influencing the use of humor (Martin, 2007; Jiang et al, 2019). Individualistic cultures often view humor as a positive trait linked to creativity, whereas collectivistic cultures may perceive it as disruptive to social harmony, reserving it for more formal professional contexts (Chen & Martin, 2007; Yue et al, 2016; Jiang et al, 2019). Humor use also varies with cultural dimensions such as power distance and uncertainty avoidance. Cultures with low power distance generally embrace humor more freely, whereas others avoid humor due to higher social risks (Lu et al, 2019). Conversely, a study on laughter therapy reported stronger effects in Asian samples, which has been suggested to reflect cultural values that attribute greater relational significance to humor (Porras-Jimenez, et al, 2025). From this perspective, examining how culture shapes the impact of humor on psychotherapy is a worthwhile endeavor. A study examining regional differences in Türkiye further illustrates how sociocultural context shapes humor patterns: teachers in the Aegean and Mediterranean regions, characterized by greater access to education, leisure, and tourism, reported higher overall humor use, whereas those in Southeastern and Northeastern Anatolia, regions with higher migration and stress, reported less overall humor use (Uyanık et al, 2015).

## **The Present Study**

This preregistered, cross-sectional study assessed whether (a) sociocultural factors, (b) Big-Five traits, and (c) coping humor (CH) were associated with expectations for humor (EHC) in a community sample. We further tested whether coping humor plays a role in the link between cultural approaches and humor and these expectations. We hypothesized that those from humor-affirming cultures and using humor as a coping mechanism would expect more humor in therapy.

#### **METHODS**

Following quantitative research guidelines (Appelbaum et al, 2018; Simmons et al, 2012), we documented the decisions on data exclusion, sample size, and measures. This study was conducted in accordance with the principles of the Declaration of Helsinki. Ethics committee approval was obtained from the institutional review board of the authors' affiliated university (No: 45776; Date: 10 September 2024). The study was preregistered (https://doi.org/10.17605/OSF.IO/ST9CK).

## **Participants**

An a priori power analysis conducted using G\*Power (version 3.1.9.4; Faul et al, 2007) indicated that a total sample size of 285 was required to detect a small effect size ( $f^2$ =0.10) (Campbell et al, 2008) with 14 independent variables,  $\alpha$ =0.05, and power (1– $\beta$ )=0.95. The target sample size was set at 400 to account for potential missing data. Participants were recruited via social media and provided informed consent to ensure anonymity. They then completed secure online surveys assessing the relevant psychological and demographic factors. All data were stored in compliance with data protection regulations. Two participants were excluded because they submitted the survey without answering any questions. Table 1 presents the demographic details of the participants.

#### Measures

## Ten Item Personality Inventory

The Ten Item Personality Inventory (TIPI; Gosling et al, 2003) assesses the Big-Five Factor Personality traits: extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience. Participants responded to 10 items using a 7-point Likert-type scale. The Turkish adaptation of TIPI has demonstrated reliable psychometric properties (Atak, 2013).

## Coping with Humor Scale

The Coping Humor Scale (CHS; Martin & Lefcourt, 1983) uses a 7-item, 4-point Likert-type scale to measure the use of humor as a coping mechanism in stressful situations. Although the Turkish version has demonstrated reliable psychometric properties (Yerlikaya, 2009), the internal consistency in this study was suboptimal ( $\alpha$ =0.53).

## **Expectations Regarding Humor in the Counseling Scale**

The Expectations about Humor in Counseling Scale (EHC; Blevins, 2010) uses an 8-item, 7-point Likert-type scale to assess expectations of humor in counseling. The Turkish version of the scale was developed for this study and demonstrated strong internal consistency ( $\alpha$ =0.91).

Table '	1 Demogram	hic characte	aristics of the	participants	(n-308)
iabie	i. Demograf	onic characte	eristics of the	participants	(n=398)

Variable	n (%)	Variable	n (%)	
Gender (female)	307 (77.1)	Southeastern Anatolia	16 (4.0)	
Age	34.5 (12.1) [18.0, 65.0]	Central Anatolia	60 (15.1)	
18–24	85 (21.4)	Black Sea	33 (8.3)	
25–29	101 (25.4)	Marmara	173 (43.5)	
30–34	56 (14.1)	Missing	2 (0.4)	
35–39	28 (7.0)	Frequency of humor in the culture		
40–49	64 (16.1)	Sometimes used	174 (43.7)	
50–65	62 (15.6)	Never used	1 (0.3)	
Missing	2 (0.4)	Neutral	24 (6.0)	
Education level		Rarely used	11 (2.8)	
High school graduate	74 (18.6)	Frequently used	187 (47.0)	
Less than in high school	11 (2.8)	Missing	1(0.2)	
College graduate	192 (48.2)	Approach to humor in culture		
Master's/doctoral degree	117 (29.4)	Very positive	69 (17.3)	
Missing	4 (1)	Very negative	1 (0.3)	
Relationship status		Neutral	52 (13.1)	
Single	178 (44.7)	Positive	269 (67.6)	
Divorced	9 (2.3)	9 (2.3) Negative		
Married	210 (52.8)	210 (52.8) Missing		
Missing 1 (0.2)		Psychological support received	177 (44.5)	
Subjective social status	6.30 (1.63) [1.00, 10.0]	Anxiety	103 (25.9)	
Occupation		Depression	49 (12.3)	
Employed	190 (47.7)	Trauma	26 (6.5)	
Retired	22 (5.5)	Anger Issues	28 (7.0)	
Homemaker	61 (15.3)	Relationship Issues	79 (19.8)	
Student	25 (6.3)	Attention Issues	21 (5.3)	
Unemployed	94 (23.6)	Number of sessions		
Missing	6 (1.6)	1–5 Sessions	58 (14.6)	
Geographical background		11–20 Sessions	31 (7.8)	
Mediterranean	21 (5.3)	21+ Sessions	31 (7.8)	
Eastern Anatolia	27 (6.8)	6–10 Sessions	50 (12.6)	
Aegean	66 (16.6)	Missing	7 (1.7)	

Continuous variables are presented as mean and standard deviation (M, SD) along with minimum and maximum values (min, max); categorical variables are presented as counts and percentages (n, %).

## **Demographic Information Form**

The demographic information form, developed for this study, includes 12 items on gender, age, education level, occupation, subjective social status (SSS), relationship status, geographical background (GB), frequency of humor in the culture (FHC), approach toward humor in the culture (AHC), history of psychological support, the specific issue for which

psychological support was previously sought, and the number of sessions attended (if applicable). FHC was measured with the question: 'How frequently is humor used in your culture (family and close social environment)?' and AHC with the question: 'What is your general attitude toward humor in your culture (family and close social environment)?' Both items were rated on a 0–4 scale (FHC: 0=never, 4=frequently; AHC: 0=very negative, 4=very positive).

Table 2. Descriptive statistics of the main variables of the study

Variable	Mean (SD) [min, max]
СН	18.4 (2.75) [10, 26]
EHC	38 (10.4) [8, 56]
Extraversion	4.84 (1.5) [1, 7]
Agreeableness	5.1 (1.17) [1.5, 7]
Conscientiousness	5.48 (1.23) [1, 7]
Neuroticism	3.74 (1.37) [1, 7]
Openness to the experience	4.65 (1.23) [1, 7]

M, SD, min, and max are used to represent mean, standard deviation, minimum, and maximum values, respectively. CH: Coping with humor; EHC: Expectations about humor in therapy.

## **Analysis Plan**

First, demographic and sociocultural factors were analyzed, and descriptive statistics were used to identify the key variables. A correlational analysis was conducted to examine the relationships between demographic and sociocultural characteristics, personality traits, CH, and EHC. Additionally, an independent samples t-test and ANOVA were used to explore the group differences in CH and EHC between the categorical variables. A multiple regression analysis was conducted to examine the combined effects of the independent variables on EHC.

Exploratory path analyses were conducted to clarify the relationships among AHC, CH, and EHC based on the significant regression results. A path analysis model was estimated, and three primary paths were specified: a path from AHC to CH (a), from CH to EHC (b), and a direct path from AHC to EHC (c'). The total association (c) between AHC and EHC is conceptualized as the sum of the direct effect (c') and the indirect effect (a×b). Given the cross-sectional design, these paths reflect overlapping variance and not causality.

Statistical analyses were conducted using the lavaan package (version 0.6.15) in R (version 4.2.3). To accommodate nonnormality, the models were estimated using maximum likelihood (ML) with 1,000 bootstrap resamples and biascorrected accelerated (BCa) 95% CIs. To adjust for potential confounding influences, several covariates were included, such as age, occupation, education level, SSS, GB, relationship status, number of psychological support sessions attended, and personality traits. All main variables were scaled prior to analysis. Model fit was evaluated using established guidelines: a nonsignificant chi-square, Comparative Fit Index (CFI), and Tucker–Lewis Index (TLI) values above 0.95 (Hu & Bentler, 1999), and both the Root Mean Square Error of Approximation (RMSEA) and Standardized Root Mean Square Residual (SRMR) values below 0.08 (Kaplan, 2008; Xia & Yang, 2019).

#### **RESULTS**

## **Preliminary Analysis**

Table 2 presents the descriptive statistics of the key variables. The Shapiro–Wilk test showed that personality traits, including extraversion, agreeableness, conscientiousness, neuroticism, CH, and EHC, were not normally distributed (p<0.05), indicating deviations from normality. However, openness to experience was normally distributed (p>0.05). Table 3 presents the correlations among the variables. The Spearman Correlation Test suggests that our main study variables of CH and EHC did not show significant correlations with other variables, but they were strongly associated with each other (r=0.6, p<0.05). This indicates that participants who reported higher expectations about humor in psychotherapy tended to use humor as a coping strategy.

# **Differences in Sociodemographic Group**

A t-test indicated that gender plays a significant role in the use of CH (p<0.05). Men (M=19, SD=3.10) reported using CH significantly more than women (M=18.3, SD=2.63). When examining EHC, the results approached significance but did not reach the conventional threshold (p=0.06). Men reported a slightly higher average score (M=39.8, SD=9.78) than women (M=37.5, SD=10.5). Table 4 presents these group differences by gender.

#### **Regression Analysis**

To explore the possible combined role of these independent variables on EHC, a multiple regression analysis was conducted including all theoretically and empirically potentially related variables (age, occupation, education level, SSS, FHC, AHC, GB, relationship status, and the number of psychological support sessions attended). The results suggest that age was significantly related to EHC scores, with older participants reporting higher expectations ( $\beta$ =0.14, p<0.05). In addition, the humor approach in the participants' culture was positively associated with EHC, suggesting that a positive humor approach in the individuals' culture was related to higher EHC scores ( $\beta$ =3.72, p<0.05). The overall model was statistically significant (F(16, 342)=2.66, p<.05), explaining approximately 11% of the variance in the EHC scores (R<sup>2</sup>=0.11).

A second multiple regression analysis was conducted to extend the previous multiple regression model by including personality traits. The model revealed that age ( $\beta$ =0.16, p<0.05) and AHC ( $\beta$ =3.74, p<0.05) remained as variables significantly associated with EHC. However, personality traits and other variables were not significantly associated with the outcome variable. The model explained approximately 11% of the variance in the EHC scores ( $R^2$ =0.1115), and the overall model was statistically significant (F(21, 320)=1.91, p<0.05).

Table 3. Spe	Table 3. Spearman's p-correlations											
Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. CH												
2. EHC	0.60*											
3. Age	-0.04	-0.06										
4. Edu	-0.11	-0.16	0.43									
5. SSS	0.02	-0.09	0.55	0.35								
6. FHC	0.15	0.21	-0.30	-0.19	-0.17							
7. AHC	0.36	0.35	-0.15	-0.17	0.00	0.74**						
8. NoS	-0.01	-0.07	-0.27	0.11	-0.17	-0.18	-0.23					
9. Ext	-0.07	-0.15	0.36	0.16	0.49	0.02	0.12	-0.18				
10. Agg	0.21	0.21	0.40	0.34	0.44	0.17	0.31	0.10	0.61*			
11. Con	-0.07	-0.06	0.59*	0.24	0.61*	-0.11	0.02	-0.39	0.65*	0.62*		
12. Neu	-0.21	-0.13	-0.62*	-0.35	-0.58*	-0.11	-0.27	0.30	-0.55	-0.58*	-0.80**	
13. OE	0.03	-0.12	-0.04	-0.05	0.08	0.13	0.21	-0.14	0.53	0.45	0.33	-0.36

\*: P<0.05; \*\*: P<0.01; CH: Coping with humor; EHC: Expectations about Humor in therapy; FHC: Frequency of humor in the culture; AHC: Approach to humor in the culture; Edu: Education; SSS: Subjective social status; NoS: Number of sessions attended for psychological support; Ext: Extraversion; Agg: Agreeableness; Con: Conscientiousness; Neu: Neuroticism; OE: Openness to experience.

0.068

 Table 4. Group differences

 Male (n=91)
 Female (n=307)
 p

 Mean (SD) [min, max]
 Mean (SD) [min, max]
 CH
 19.0 (3.10) [10.0, 26.0]
 18.3 (2.63) [10.0, 26.0]
 0.041

M, SD, min, and max represent the mean, standard deviation, minimum, and maximum values, respectively. CH: Coping with humor; EHC: Expectations about humor in therapy.

37.5 (10.5) [8.00, 56.0]

39.8 (9.78) [14.0, 56.0]

#### **Path Analysis**

**EHC** 

The overall model fit was excellent. The chi-square value of 17.211 (df=12, p=0.142) indicates that the model-implied covariance structure does not significantly differ from the observed data. A CFI of 0.949 (very close to the recommended 0.95 cutoff), TLI of 0.886 (slightly below the recommended cutoff), SRMR of 0.02 (well below the 0.08 threshold), and RMSEA of 0.036 (90% CI [0.000, 0.071]) corroborate the overall adequate model fit. Path a (AHC  $\rightarrow$  CH) was ( $\beta$ =0.246, p<0.05, 95% CI [0.151, 0.352]) significant, suggesting that positive cultural views on humor are linked to more frequent use of CH. Path b (CH  $\rightarrow$  EHC) was significant ( $\beta$ =0.382, p<0.05, 95% confidence interval [CI] [0.264, 0.495]), indicating that the frequent use of CH is associated with higher EHC. Path c' (AHC  $\rightarrow$  EHC) was also significant ( $\beta$ =0.162, p<0.05, 95% CI [0.059, 0.272]). This implies that people who have positive cultural views on humor also have higher EHC, independent of personal use of humor.

The examination of the indirect effect (axb) was also significant  $(\beta=0.094, p<0.05, 95\% CI [0.051, 0.144])$ , suggesting that a notable proportion of the association between AHC and EHC is shared with CH. This indicates that people who have positive cultural views on humor may apply CH, which may in turn be associated with EHC. The total effect (direct + indirect) was also significant (β=0.256, p<0.05, 95% CI [0.148, 0.361]). Additionally, the ratio of the indirect effect to the total effect was estimated to be 0.40 (p<0.05, 95% CI [0.247, 0.712]). This indicates that the association with CH accounts for approximately 40% of the shared variance between AHC and EHC, suggesting that CH explains a significant part of the cultural influence on EHC. Although several covariates were included to control for confounding factors, most did not reach statistical significance. Table 5 presents standardized parameter estimates and p-values. Given the nonnormality in several variables, all 95% CIs are bias-corrected and accelerated bootstrap intervals based on 1,000 resamples. Figure 1 presents the path analysis's main findings.

## **DISCUSSION**

The present study synthesized extant research on humor in psychotherapy and tested whether factors of individual and cultural differences account for the field's mixed results (Saroglou & Scariot, 2002; Tümkaya, 2011; Plessen et al, 2020). Contrary to our expectations, education, occupation, SSS, relationship status, GB, prior psychological treatment, and most personality dimensions were unrelated to either CH or EHC. However, men reported significantly more frequent use

	-		
Iabi	le 5.	Parameter	estimates

Path	β (Beta)	р	95% CI
Covariates			
Age	0.009	0.096	(-0.002, 0.020)
Education	0.034	0.619	(-0.111, 0.158)
Subjective social status	-0.005	0.882	(-0.076, 0.066)
Relationship status	-0.187	0.173	(-0.457, 0.079)
Geographical background	0.009	0.774	(-0.053, 0.067)
Number of psychological support sessions provided	-0.000	0.929	(-0.006, 0.006)
Extraversion	-0.018	0.640	(-0.094, 0.053)
Agreeableness	0.038	0.389	(-0.052, 0.124)
Conscientiousness	0.031	0.544	(-0.067, 0.132)
Neuroticism	0.035	0.398	(-0.046, 0.116)
Openness to the experience	-0.050	0.244	(-0.133, 0.034)
Regression paths			
$AHC \rightarrow CH(a)$	0.246	<0.05	(0.151, 0.352)
$CH \rightarrow EHC$ (b)	0.382	<0.05	(0.264, 0.495)
$AHC \rightarrow EHC (c')$	0.162	<0.05	(0.059, 0.272)
Defined parameters			
$AHC \to CH \to EHC \ (a_1^* \ b_1)$	0.094	<0.05	(0.051, 0.144)
Total (c) = c'+ $(a_1 * b_1)$	0.256	<0.05	(0.148, 0.361)

 $\beta$ =standardized regression (path) coefficient; p=p-value, indicating the significance level; CI: Confidence interval for  $\beta$ ; " $\rightarrow$ " denotes the direction of the path in the model; a, b, c', c represent specific path labels. AHC:Aapproaches to humor in culture; CH: Coping with humor; EHC: Expectations about humor in therapy.

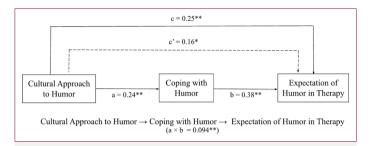
of CH. Given that men are generally less likely than women to seek psychological support (National Institute of Mental Health, 2021), incorporating humor into psychotherapy might create a more approachable environment for male clients. Additionally, older participants had significantly greater EHC, possibly reflecting a more positive appraisal of humor's role based on life experience. Furthermore, CH was robustly associated with EHC.

The most novel contribution of this study is its identification of both direct and indirect significant associations between AHC, CH, and EHC, which partially supports the main hypothesis. Cultural dimensions, such as individualism-collectivism and power distance, are known to influence the use of humor (Lu et al, 2019), and cross-cultural research indicates that the psychological impact of humor interventions may vary depending on cultural values (Porras-Jimenez et al, 2025). Our findings extend this literature by demonstrating that AHC is associated with both CH and EHC. Within the framework of social learning theory, individuals may learn to use humor in response to difficult situations by observing others in their cultural environment (Bandura, 1977). Meanwhile, operant

conditioning theory suggests that if positive outcomes are obtained, humor use may be reinforced (Skinner, 1938). This learned use of humor may, in turn, inform individuals' expectations about its role in therapy.

The other demographic characteristics and personality traits were not significantly associated with CH or EHC. This aligns with the mixed findings in the literature, which highlight the need for more comprehensive research on the role of these factors (Ventis et al, 2001; Narula et al, 2011; Tagalidou et al, 2018; Altan-Atalay & Boluvat, 2024). Although humor styles are known to be linked to personality traits (Mendiburo-Seguel et al, 2015), this study did not examine them separately, representing a limitation worth addressing in future research, as different humor styles may have distinct effects on therapeutic outcomes (Yonatan-Leus et al, 2018).

This study has several limitations. Its cross-sectional design prevents causal inferences, and self-reports introduce the risk of social desirability bias. Additionally, the CHS demonstrated a relatively low internal consistency (Cronbach's  $\alpha$ =0.53), which limits the reliability of findings involving this measure and calls



**Figure 1.** The path model examines the association between cultural approaches and humor, coping with humor, and expectations about humor in therapy. Paths are standardized; covariates are included in the model but omitted from the diagram for clarity.

for cautious interpretation. The "GB" variable, derived from participants' selection among Türkiye's seven geographical regions, provides only a broad regional classification and therefore has limited power to reflect cultural diversity. Although two single-item indicators, FHC and AHC, were used to supplement the cultural assessment, these measures primarily capture the perceptions of participants within their immediate environments rather than the broader and multifaceted nature of culture. Future studies should employ more comprehensive and validated instruments or qualitative approaches to better capture the complexity of cultural influences. Most participants were female (77%), which restricts the generalizability of the findings to broader populations. Finally, a larger and more demographically balanced sample could have provided a more representative distribution.

# CONCLUSION

In conclusion, the study addresses a key gap by examining the link between individual and cultural characteristics and the expectation of humor in therapy, offering practical insights for developing more culturally sensitive interventions. Notably, the finding that a favorable cultural stance toward humor was associated with more coping humor, which in turn was related to higher expectations underscores the necessity of considering the influence of culture for the effective use of humor in therapy. Future research could use larger samples and advanced qualitative methods to capture more nuanced cultural perspectives.

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**Informed Consent:** Written informed consent was obtained from all participants prior to their inclusion in the study.

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