

Humor Styles, Subjective Well-Being, Trait Anger and Anxiety among University Students in Turkey

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Abstract: This study compared college students' subjective well-being, trait anger and trait anxiety according to their styles of humor. Humor Styles Questionnaire, Subjective Well-being Scale, Trait Anger Scale and Trait Anxiety Scale were administered to 759 volunteering students, 477 of whom were girls and 282 boys. The means of subjective well-being, trait anger and anxiety scores of the higher and lower groups of 27% categorized according to the scores received from the affiliative, self-enhancing, aggressive and self-defeating humor styles were compared by means of t test. Results demonstrated that the subjective well-being of students who were using affiliative and self-enhancing humor styles were higher whereas their trait anger and anxiety scores were lower. Trait anger scores of students using aggressive humor style were higher while their subjective well-being scores were lower; trait anxiety of students with self-defeating humor style were also higher.

Key words: Humor styles • subjective well-being • trait anger • trait anxiety • Turkey • university students

INTRODUCTION

According to Martin *et al.* [1] humor is a multi-dimensional entity varying from one individual to another and these individual differences can be at intra and interpersonal levels. Likewise, positive and negative uses of humor differ from person to person.

Martin and Lefcourt [2] reported that pioneers of mental health such as Freud, Allport and May saw a link between humor and psychological health. Martin *et al.* [1] inferred that Maslow (1954) and Vaillant (1977) also viewed affiliative and self-enhancing humor styles as indicative of mental health. Psychological health encompasses subjective well-being, wellness and a sense of humor alike [3].

Enduring negativity in affect, hindered potential for self-actualization can impede with one's subjective well-being and lead to anxiety. At times humor is used as way of managing anxiety. Some persons indeed use humor to alleviate or avoid anxiety. Studies comparing positive and negative components of humor reveal that persons with negative styles of humor report higher levels of anxiety [1, 4].

According to Martin *et al.* [1], who developed the Humor Style Questionnaire (HSQ;1), individuals use

denigrating, disparaging and aggressive humor as frequently as they use self-enhancing and affiliative humor styles. With the aggressive humor style, one expresses feelings of anger through humor which hurts the other. Such style does not contribute to the person's growth and might damage his or her social relations.

Differences in styles of humor are more visible during the university education where a great many personal and social changes take place. Along with their availability as research participant, this could be part of the reason researchers have worked with college samples. In their review of literature Durmuş and Tezer [5] concluded that such studies could be gathered in three categories: relationship between humor and various personality traits; the role of humor in interpersonal relationships and relationship between humor and psychological health.

Studies often link a sense of humor with adjustment, psychological well-being and positive self-concept [6-11]. Similarly, there have been work looking into humor; and stress [2, 12, 13], depression [9, 14-16] and anxiety [1, 4, 9]. Martin *et al.* [1] differentiated positive humor from the negative one and thus noted that as humor can be adaptive, it also can have harmful effects on psychological health. Only few studies using Turkish samples were found in the national literature. One of those

studies examined humor response [17]; one death with sense of humor [18] while only three specifically addressed humor styles [19-21].

Given that humor can be positive and negative, this study intended to investigate whether the degree to which individuals use these styles has any relevance to their psychological health. Drawing from the study by Saltuk [21], the current work investigated the relationship between college students' style of humor (low/high degree use of negative/positive humor) and their levels of subjective well-being, trait anger and trait anxiety. With its use of HSQ, methodologies different than those in which HSQ has been used, combining subjective well-being, trait-anger/anxiety and working with a Turkish sample, this study intends to make unique contribution to research on humor and well-being of university students.

MATERIALS AND METHODS

Participants: Participants were 759 students studying in various faculties of Hacettepe University during the fall semester of 2004-2005 (477 females; 282 males). The age ranger was 17-30. Students' scores on negative and positive humor were ranked. The highest and lowest 27% were selected (affiliative humor: 198-194; self-enhancing humor: 203-191; aggressive humor: 187-195; self-defeating humor: 209-208). Data analyses were done with these selected scores.

Measures: Humor Styles Questionnaire (HSQ) [1]. The HSQ was adapted to Turkish by Yerlikaya [19] who also did its reliability and validity testing. The questionnaire is a 7-point Likert scale with 32 items. It has four subscales;

self-enhancing and affiliative dimensions (positive) and self-defeating and aggressive dimensions (negative). Each subscale is comprised of 8 items. Martin *et al.* [1] reported Cronbach's alpha coefficients for internal consistency as 0.77-0.81; test re-test reliability coefficients as 0.81-0.85.

Factor analysis was run twice for the HSQ. Similar with its original form, the Turkish version revealed four dimensions. The sampling adequacy was 0.82 for the second sample. The items clustered in four dimensions which accounted for 36.88% of the variance: 5.22% (self-enhancing), 2.97% (affiliative), 1.90% (aggressive) and 1.70% (self-defeating). Percentages of variance explained by the dimensions were 16.34, 9.28, 5.97 and 5.30 respectively. Correlations between the factors were calculated. Coefficients for affiliative humor and; self-enhancing, aggressive and self-defeating humor style were 0.42, 0.13 and 0.28 respectively. No significant correlation was found between self-enhancing and aggressive humor. Finally, correlation between aggressive and self-defeating humor was 0.29. Item-total correlation coefficient ranged between .20 and .62 for subscales. Cronbach alpha coefficients for internal consistency of each subscale were; self-enhancing 0.78; affiliative 0.74; aggressive 0.69 and self-defeating 0.67. Test re-test reliability coefficients for the subscales were; self-enhancing 0.82; affiliative 0.88; aggressive 0.85 and self-defeating 0.85. Criterion validity testing was done with measures of depression, functional attitudes, self-esteem and positive-negative feelings. Only aggressive humor did not have a significant correlation with the above measures. Correlation coefficients between scores on the Situational Humor Response Scale and subscales of the HSQ were; self-enhancing 0.60; affiliative 0.54; aggressive 0.54 and self-defeating 0.37.

Table 1: Means and standart deviations for the four Humor Styles Questionnaire scales for all participants and for females and males separately (477 females, 282 males, total 759 students)

Humor styles	Total sample $\bar{X}(Sd)$	t test		t values and signif.
		Females $\bar{X}(Sd)$	Males $\bar{X}(Sd)$	
Affiliative humor	42.47 (8.18)	43.06 (8.13)	41.46 (8.19)	2.62 $p<0.01$
Self-enhancing humor	34.23 (9.24)	34.48 (9.23)	33.80 (9.27)	0.98
Aggressive humor	22.09 (7.18)	21.06 (6.82)	23.84 (7.44)	5.25 $p<0.001$
Self-defeating humor	25.92 (8.04)	26.01 (8.11)	25.77 (7.92)	0.39

Descriptive statistics on data from Saltuk's [21] master thesis study were calculated. As shown in the below table, the original study compared scores according to gender. The current study compared these findings with those of the original form of the HSQ.

Table 1 presents means and standard deviations on the four subscales, for the entire sample as well as for males and females separately (N = 759). Females obtained significantly higher scores than males on affiliative humor. Males scored higher on aggressive humor than females. Although females obtained higher scores on self-enhancing and self-defeating humor styles, the differences were not significant. Results with the original form of the HSQ showed that on all the subscales, including the aggressive humor, males had significantly favorable scores. Also, the scores of the original sample were higher than those of the Turkish students with the exception of scores on self-defeating humor.

Subjective Well-being Scale (SWS) [22]. The SWS by Dost [22] was used because it is the only available measure of subjective well-being in Turkish. The scale measures subjective well-being level of the university students. It is a 5-point Likert scale made of 42 items. Dost (22) reported reliability coefficient as 0.93 and test re-test reliability coefficient as 0.86. The researcher tested criterion validity with the Beck Depression Inventory and found a significant negative correlation of .70 ($p < .01$).

Trait Anger Scale (TAS) [23]. The adaptation, reliability and validation studies of the Trait Anger and Anger Expression Scale were carried out by Özer [24]. Trait Anger Scale is a 4-point Likert type scale and has 10 items. Work with college samples showed internal consistency coefficients of the original scale ranged from 0.82 to 0.90 [25]. The internal consistency coefficients of the Turkish version administered to a college sample ranged between 0.67 and 0.82. Bilge [26] found a test re-test reliability coefficient of 0.83. In testing for criterion validity Özer [24] found significant correlations between anger, trait anxiety, depressive adjectives and trait anger. Bilge [26] compared scores of psychotic, neurotic and

normal groups on trait anger. The psychotic scored higher than the normal and neurotic groups.

Trait Anxiety Inventory (TAI) [27]. TAI is a 4-point Likert type scale. Its adaptation to Turkish and the reliability and validity studies were done by Öner and Le Compte [28]. TAI is composed of 20 items, higher scores indicating higher level of anxiety. Kuder-Richardson reliability coefficients of the original form ranged between 0.86 and 0.92; test re-test reliability coefficient ranged between 0.73 and 0.86 [29]. Criterion validity was tested with emotion adjective list and significant correlations were found. Internal consistency coefficients of the Turkish version ranged between 0.71 and 0.86 and Kuder-Richardson reliabilities between 0.83 and 0.87. Criterion validity was tested by comparing trait anxiety scores of patients with psychiatric diagnoses and a normal group. The former group scored higher.

Data analysis: Using t-tests, means on subjective well-being, trait anger and anxiety were compared according to placement in the higher and lower 27% groups of scores on affiliative, self-enhancing, aggressive and self-defeating styles of humor. Analyses were done with SPSS 13.0 for Windows. Significance level was set at 0.05.

RESULTS

The number of the students in the higher and lower groups of each of the humor styles and the means and standard deviations on subjective well-being, trait anger and trait anxiety scores are illustrated in Table 2.

As shown in Table 3, there were significant differences in subjective well-being, trait anger and trait anxiety were found between higher and lower groups of affiliative humor style ($t: 10.49, p < 0.001$; $t: -2.44, p < 0.05$; $t: -6.93, p < 0.001$). Subjective well-being scores of higher group of affiliative humor style were higher whereas trait anger and anxiety scores were lower. Similar results were found between higher and lower groups of self-enhancing

Table 2: Means and standart deviations of subjective well-being, trait anger and trait anxiety scores regarding humor styles

Humor Styles	Subjective well-being						Trait anger						Trait anxiety					
	Higher			Lower			Higher			Lower			Higher			Lower		
	n	\bar{X}	Sd	n	\bar{X}	Sd	n	\bar{X}	Sd	n	\bar{X}	Sd	n	\bar{X}	Sd	n	\bar{X}	Sd
Affil.	198	183.96	21.78	194	157.62	27.60	198	21.11	4.89	194	22.40	5.52	198	39.75	8.35	194	45.95	9.36
Self-en.	203	187.05	22.04	191	159.72	27.55	203	20.75	5.07	191	22.75	5.47	203	38.46	8.37	191	46.94	8.78
Aggr.	187	170.69	27.16	195	175.98	25.39	187	22.56	5.25	195	19.92	4.65	187	42.68	8.55	195	42.06	9.28
Self-def.	209	170.56	25.98	208	175.27	27.78	209	21.28	4.74	208	22.00	5.48	209	43.89	8.99	208	41.97	8.75

Table 3: t values and significance levels of subjective well-being, trait anger and trait anxiety scores regarding humor styles

Humor Sty.	Subjective well-being			Trait anger			Trait anxiety		
	t values	df	Sig.	t values	df	Sig.	t values	df	Sig.
Affil.	10.49**	390	0.000	-2.44*	390	0.015	-6.93**	390	0.000
Self-en.	10.90**	392	0.000	-3.76**	392	0.000	-9.81**	392	0.000
Aggr.	-1.97*	380	0.050	5.22**	380	0.000	0.68	380	0.496
Self-def.	-1.79	415	0.074	-1.42	415	0.156	2.21*	415	0.027

* $p < 0.05$, ** $p < 0.001$

humor style ($t: 10.90$, $p < 0.001$; $t: -3.76$, $p < 0.001$; $t: -9.81$, $p < 0.001$). Likewise, significant differences in subjective well-being, trait anger and trait anxiety were found between higher and lower groups of aggressive humor style ($t: -1.97$, $p: 0.05$; $t: 5.22$, $p < 0.001$). Subjective well-being scores of higher group of affiliative humor style were lower while trait anger scores were higher. A significant difference was found between higher and lower groups of self-defeating humor style only on trait anxiety ($t: 2.21$, $p < 0.05$). The higher self-defeating humor group had higher scores on the trait anxiety. In sum, positive/adaptive humor had significant relationships with all the variables.

DISCUSSION

Findings show that college students using affiliative and self-enhancing (positive/adaptive) styles of humor report higher scores on subjective well-being and lower scores on trait anger and trait anxiety. On the contrary, those with aggressive humor scored higher on trait anger and anxiety as did those with self-defeating humor style. In conclusion positive/adaptive use of humor seems to coincide with higher level of subjective well-being and lower level of trait anger and anxiety which are often indicative of greater degree of psychological health.

These results are consistent with findings of previous research linking use of humor to; psychological well-being [6, 8]. Correspondingly, constructive use of humor has been linked to lower levels of depression, anxiety, stress and hostility [2, 7, 9, 12-14, 30]. Moreover, studies report negative relationships between; aggressive style and agreeableness, openness and conscientiousness; and between self-defeating style and emotional stability and conscientiousness and positive relationships between; affiliative and self-enhancing humor styles and agreeableness and conscientiousness [31]. Martin *et al.* [1] found positive correlations between; trait anxiety and self-defeating humor; hostility

accompanied by anger and aggressive and self-defeating humor; psychological well-being and affiliative and self-enhancing humor and negative correlations between trait anxiety and affiliative and self-enhancing humor; self-defeating humor and psychological well-being. Kuiper *et al.* [4] asserted that persons with positive/adaptive humor style have higher level of control over their anxiety while those with self-defeating humor style have lower degree of control over anxiety. Kazarian and Martin [10] report a positive relationship between well-being and affiliative and self-enhancing humor; and self-defeating humor style and anxious attachment style. Yerlikaya [19] found positive relationships between depression levels of the university students and their use of self-defeating humor style; and negative significant relationship between their levels of depression and use of self-enhancing and affiliative styles of humor. Likewise, Sarı and Aslan [20] found that college students using helpless coping styles are more likely to have self-defeating humor style while those with self-confident coping styles are more likely to have affiliative and self-enhancing styles of humor. Saltuk [21] found affiliative, self-enhancing and self-defeating humor accounted for 31% of variance in subjective well-being. Self-enhancing, aggressive humor and trait anxiety accounted for 16% of variance in trait anger. Affiliative, self-enhancing, self-defeating humor, trait anger and age accounted for 28% of variance in trait anxiety. In short, findings of the current study are consistent with those by previous researchers.

In conclusion, the findings of this study confirm that individuals' levels of subjective well-being, trait anger and trait anxiety vary according to their use of adaptive/maladaptive styles of humor. Findings also confirm some degree of universality of these results, since they are parallel to other work utilizing HSQ with samples of various cultures. The fact that participants of this study were all students at Hacettepe University in Ankara, might pose a threat to generalizability of the results to other populations of college students.

Instead of merely relying on self-report measure, future studies could also utilize additional sources of obtaining information on individuals' styles of humor such as observations of teachers and peers. Studies exploring relationships between styles of humor and cognitive distortions, adjustment, aggression, self-concept and attachment styles could enrich research on humor as would studies comparing various age groups, professions and family structures.

REFERENCES

1. Martin, R.A. *et al.*, 2003. Individual differences in uses of humor and their relation to psychological well-being: development of the humor styles questionnaire. *J. Res. Personality*, 37: 48-75.
2. Martin, R.A. and M.H. Lefcourt, 1983. Sense of humor as a moderator of the relation between stressors and moods. *J. Personality and Soc. Psychol.*, 45: 1313-1324.
3. Diener, E., 1984. Subjective well-being. *Psychological Bulletin*, 95: 542-575.
4. Kuiper, N.A. *et al.*, 2004. Humor is not always the best medicine: Specific components of sense of humor and psychological well-being. *Intl. J. Humor Res.*, 17: 135-168.
5. Durmuş, Y. and E. Tezer, 2001. Mizah duygusu ve stresle başa çıkma tarzları arasındaki ilişki. (Relationship between sense of humor and coping strategies.). *Turk. J. Psychol.*, 16: 25-32.
6. Kuiper, N.A., A.R. Martin and A.K. Dance, 1992. Sense of humor and enhanced quality of life, *Personality and Individual Differences*, 13: 1273-1283.
7. Kuiper, N.A. and A.R. Martin, 1993. Humor and self-concept. *Intl. J. Humor Res.*, 6: 251-270.
8. Martin, R.A. *et al.*, 1993. Humor, coping with stress, self-concept and psychological well-being. *Intl. J. Humor Res.*, 6: 89-104.
9. Kuiper, N.A. and A.R. Martin, 1998. Is sense of humor a positive personality characteristic? In W.Ruch (Ed.), *The sense of humor: Explorations of a personality characteristic*, (New York: Mouton de Gruyter).
10. Kazarian, S.S. and A.R. Martin, 2004. Humour styles, personality and well-being among Lebanese university students. *Euro. J. Personality*, 18: 209-219.
11. Kuiper, N.A. and M. Borowicz-Sibenik, 2005. A good sense of humor doesn't always help: Agency and communion as moderators of psychological well being, *Personality and Individual Differences*, 38: 365-377.
12. Porterfield, A.L., 1987. Does sense of humor moderate the impact of life stress on psychological and physical well-being? *J. Res. Personality*, 21: 306-317.
13. Nezu, A.M., M.C. Nezu, and E.S. Blissett, 1988. Sense of humor as a moderator of the relation between stressful events and psychological distress: A prospective analysis. *J. Personality and Soc. Psychol.*, 54: 520-525.
14. Overholser, J.C., 1992. Sense of humor when coping with life stress, *Personality and Individual Differences*, 13: 799-804.
15. Deaner, S.T. and T.J. McConatha, 1993. The relation of humor to depression and personality. *Psychological Reports*, 72: 755-763.
16. Thorson, J.A. *et al.*, 1997. Psychological health and sense of humor. *J. Clin. Psychol.*, 53: 605-619.
17. Aydın, G., 1994. İç - dış kontrol odağı inancı ile durumluk mizah tepkisi arasındaki ilişki. (Relationship between situational humor response and external-internal locus of control). II. National Psychological Counseling and Guidance Congress Scientific Studies. Ankara: Psychological Counseling and Guidance Association Publication.
18. Durmuş, Y., 2000. Mizah duygusu ile başa çıkma stratejileri arasındaki ilişki. (Relationship between sense of humor and coping strategies.) Unpublished MA thesis, Ankara: Middle East Technical University.
19. Yerlikaya, E., 2003. Mizah Tarzları Ölçeği'nin uyarlama çalışması. (Adaptation study of Humor Styles Questionnaire.), Unpublished MA Thesis, Adana: Çukurova University.
20. Sarı, T. and H. Aslan, 2005. Mizah tarzları ile başa çıkma stratejileri arasındaki ilişki. (Relationship between humor styles and coping strategies), VIII. National Psychological Counseling and Guidance Congress, İstanbul, 21-23 September.
21. Saltuk, S., 2006. Üniversite öğrencilerinin mizah tarzları. (Humor styles of university students), Unpublished MA thesis, Ankara: Hacettepe University.
22. Dost, M., 2004. Üniversite öğrencilerinin öznel iyi oluş düzeyleri. (Subjective Well-being of University Students.) Unpublished Phd thesis, Ankara: Hacettepe University.
23. Spielberger, C.D., S. Jacobs, S. Russell and R.S. Crane, 1983. Assessment of anger: The State-Trait Anger Scale, In J.N. Butcher and C.D. Spielberger (Eds.). *Advances in Personality Assessment*, (Hillsdale), pp: 159-187.

24. Özer, K., 1994. Sürekli öfke ve öfke ifade tarzı ölçekleri ön çalışması. (Preliminary study on trait anger and anger expression styles). *Turk. Psychological J.*, 9: 26-35.
25. Spielberger, C.D., 1991. State-Trait Anger Expression Inventory professional manual. Psychological Assessment Resources, Inc., Tampa, Florida.
26. Bilge, F., 1997. Danışandan hız alan ve bilişsel davranışçı yaklaşımlarla yapılan grupla psikolojik danışmanın üniversite öğrencilerinin kızgınlık düzeyleri üzerindeki etkileri. (Effectiveness of client-centered group counseling and cognitive-behavioral counseling on the level of anger of the university students). *Psychological Counseling and Guidance J.*, 2: 9-16.
27. Spielberger, C.D., R.L. Gorsuch and R.E. Lushene, 1970. The State-Trait Anxiety Inventory (STAI) test manual for Form X. Palo Alto, CA: Consulting Psychologists Press.
28. Öner, N. and A. Le Compte, 1985. Durumluk-Sürekli Kaygı Envanteri el kitabı. İstanbul: Boğaziçi Üniversitesi Yayınları.
29. Öner, N., 1997. Türkiye’de kullanılan psikolojik testler. (Psychological tests used in Turkey.) (İstanbul: Boğaziçi University).
30. Abel, M., 2002. Humor, stress and coping strategies. *Humor: Intl. J. Humor Res.*, 15: 365-381.
31. Saroglou, V. and C. Scariot, 2002. Humor styles questionnaire: personality and educational correlates in Belgian high school and college students. *Euro. J. Personality*, 16: 43-54.