

Humor and hope: Can humor increase hope?

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Abstract

It has been empirically demonstrated that humor can positively affect psychological and physical well-being, and that sense of humor is a major component of high-hope individuals. In the current study, the authors examined the relationship between humor and hopefulness, stress and hopefulness, as well as the moderating effect of humor on the stress-hopefulness relationship. Prior to and after viewing either a humorous or a neutral video, participants completed the Snyder State Hope Scale. Results indicated that there was a statistically significant increase in state hopefulness after exposure to a humorous video relative to a control group viewing a neutral video. In addition, a negative relationship was found between the severity of recently experienced stressors and state hopefulness, but little or no relationship existed between state hope and the number of recent stressors. The findings support the positive influence of humor on state hopefulness.

Keywords: Hope; stress; emotion.

Negative life events, such as loss of employment, death of loved ones, or conflicts in the family, often lead to stress, which can then precipitate the onset of depression, anxiety, and many other psychological and physical ailments (Overholser and Adams 1997). Thus, utilizing strategies to relieve stress in order to maintain a general sense of well-being is of utmost importance. Several studies empirically identified humor as an effective stress reliever (Martin and Lefcourt 1983; Cann, Holt, and Calhoun 1999). In the classical study by Martin and Lefcourt (1983), they found that individuals with high scores on both the Situational Humor Response

Questionnaire (SHRQ) and the Coping Humor Scale (CHS) displayed lower mood disturbances despite increases in negative life events. Martin and Lefcourt (1983) further concluded that individuals who displayed high humor production also had lower mood disturbances. According to Martin (1996), humor could alleviate stress by serving as a means of cognitively reframing situations, such as viewing a situation as more of a challenge rather than a threat. At the physiological level, mirthful laughter was shown to decrease hormones associated with stress (Berk et al. 1989). Moreover, those with a greater sense of humor showed increases in pain tolerance (Svebak et al. 2000). Although there are several disconfirming studies on the role of humor on stress (Safranek and Schill 1982; Porterfield 1987), the overall consensus does support the positive role of humor on psychological and physical well-being.

Humor also plays an important role as a potential source of hope. Indeed Herth (1993: 150), found that 94 percent of the high-hope study participants deemed “lightheartedness” as a necessary component in dealing with difficulties associated with stressful life events. In addition, “higher-hope people use humor to cope with the nuisances and blemishes of life” (Snyder 1994: 61) and as a “strategy for coping or for hoping” (Vaid 1999: 129). In other words, as a coping mechanism, humor may competitively inhibit negative thoughts with positive ones, thereby fostering hope in individuals. Hence, humor and hope are potentially significant factors to one’s overall sense of psychological and physical well-being.

Early theories of hope tended to conceptualize hope unidimensionally. For example, Stotland (1969) defined hope as a perceived probability of goal attainment that is greater than zero. More recently, research has identified hope as a multidimensional construct. According to the theory of Snyder et al. (1991), hope is composed of two interrelated cognitive dimensions: agency and pathways. Agency is a cognitive set consisting of having important goals and believing that one can both initiate and sustain action towards goal attainment. Pathways consist of an individual’s perceived ability to find effective ways to reach his or her goals, as well as the perceived ability to formulate alternative plans when obstacles block the way to goal attainment.

How is it that humor might influence a person’s sense of hope? Fredrickson’s (1998) “broaden and build” model of positive emotions proposes that in contrast to negative emotions, which elicit a narrowing of a person’s thought-action repertoire (leading to specific survival-related action tendencies), positive emotions lead to a momentary broadening of the thought-action repertoire. As such, positive emotions are not always

linked to specific behavioral action tendencies, but rather initially stimulate cognitive activity. Thus, positive emotions can have the effect of prompting individuals to “discard time-tested or automatic (everyday) behavioral scripts and to pursue novel, creative, and often unscripted paths of thought and action” (Fredrickson 1998: 304).

If the experience of positive emotions, such as humor, can lead to a momentary expansion of the thought-action repertoire, then it follows that such an expansion could lead to a greater sense of self-efficacy for dealing with specific problems or stressful events. Therefore, positive emotions may lead to an increase in a person’s ability to initiate and sustain action towards a particular problem (agency) and/or increase the individual’s perceived ability to work around obstacles to problem resolution (pathways). Hence, Fredrickson’s (1998) “broaden and build” model of positive emotions provides a theoretical link between positive emotions and the possibility of increased state hopefulness, as defined by the hope theory outlined by Snyder et al. (1991).

Although several studies exist that link humor to the mitigation of stress, there has been only one outcome study to date that attempts to raise levels of hopefulness through the use of humorous stimuli. Westburg (1999: 1017) had participants read the *Far Side* comics, by Gary Larson, and sort them into two piles, one “funny” and the other “not funny” in an attempt to raise scores of the Snyder Hope Scale. Contrary to expectations, this method did not significantly raise the hope scores of the participants. Perhaps using a different type of humor, such as slapstick, sarcasm, sexual humor, nonsense humor, and anecdotal humor, instead of the “perspective-taking” humor found in the *Far Side* comics would be more effective in raising hope scores. For example, Wilson and Molleston (1981) found that males gave more positive ratings on sexual and exploitative humor than females, while females preferred anecdotal humor — the telling of funny stories that happened to themselves or others (Crawford and Gressley 1991). Therefore, the selection of the type of humor based on individual and group preferences may have dramatic effects on the outcome of the study.

The present study examined whether a humorous stimulus, specifically a comedy video, can raise a person’s level of hopefulness, as measured by Snyder State Hope Scale, (Snyder et al. 1996) following a stress-inducing exercise of recalling stressful events. In this study, sense of humor was not only represented as the propensity to display laughter, smiles, and other behavioral responses (Martin 1996), but was operationalized as four distinct factors as measured by the Multidimensional Sense of Humor Scale: humor production, humor as a coping strategy, attitudes toward

humorous people, and attitudes about humor (Thorson, Powell, Sarmany-Schuller, and Hampes 1997). A second objective was to discern if any relationship exists between the number and degrees of stressors and one's overall sense of hopefulness. The hypothesis states that as a person's number and intensity of recent stressors increases, their levels of hopefulness decrease. By using a comedy video to relieve stress, it was expected that a person's level of hopefulness would increase. In addition, those individuals who rated themselves as high in sense of humor, especially those who use humor as a coping mechanism, would benefit more from viewing a comedy video to relieve stress, compared to those individuals who had a lower rated sense of humor. Here, the authors sought to corroborate findings that humor may act as a moderator against the effects of stress (Martin and Lefcourt 1983; Cann et al. 1999).

Method

Participants

One hundred eighty undergraduates (111 women and 69 men) took part in this study in partial fulfillment of course requirements for an introductory psychology course. Participants ranged in age from 18 to 42 ($M = 19$, $SD = 2.19$).

Measures

The Multidimensional Sense of Humor Scale (MSHS). A twenty-four item self-report measure was used to measure four factors associated with a sense of humor (Thorson, et al. 1997). The first factor, humor production, contained twelve items. The second factor, coping humor, had four items. Six items pertaining to humorous people were associated with the third factor. Finally, the fourth factor contained two items dealing with attitudes about humor. Each item was rated on a 5-point scale (1 = strongly disagree, 5 = strongly agree), and scores were summed for each factor. All the factor scores were also summed for an overall sense of humor score. Previous research has found the scores from this measure to have excellent internal consistency, evidenced by a Cronbach's alpha of .92 (Thorson and Powell

1996). Likewise, the overall internal consistency of scores in the present study was excellent, with a Cronbach's alpha of .92.

College Chronic Life Stress Survey (CCLSS). Stress and negative life events of college students were measured with the CCLSS (Towbes and Cohen 1996). The self-report survey contains fifty-four items that pertained to stressful events that college students may experience, such as roommate conflict, money problems, and schoolwork. Each item was rated on a 3-point scale (1 = bothered me just a little, 2 = bothered me a moderate amount, 3 = bothered me very much). Scores from the CCLSS have been found to exhibit good test-retest reliability (Towbes and Cohen 1996). The survey was modified to evaluate stressful events that occurred within the past month, and the participants were instructed to leave blank the items that did not pertain to them within that one-month period.

The Snyder State Hope Scale (SSHS). The current state of hopefulness was measured by the SSHS (Snyder et al. 1996). The scale contained six items — three measuring the agency component, and three measuring the pathways component. Each item was rated on a 4-point scale (1 = definitely false of me, 4 = definitely true of me), and the ratings were summed to give a total state hope score. For the purpose of the present study, participants were told to rate the items on this measure in reference to the ongoing problem or stressful event that they wrote about in their essay. Because the SSHS purports to measure current state of hopefulness, test-retest correlations have appropriately varied substantially, ranging from .48 to .93, depending on the retest time frame (Snyder et al. 1996). In the sample for the current study, scores from this measure had good internal consistency, with a Cronbach's alpha of .79 for both the pre- and post-test administrations.

Self-Assessment Manikin (SAM). The SAM (Bradley and Lang 1994) was used to evaluate the emotions the videos may have induced. The SAM consists of two sets of five cartoon pictographs depicting different levels of affective valence and arousal. For each dimension, participants are instructed to place an "X" on or between the figures that best described their emotional response to the video. Consequently, valence scores can range from 1 (most happy) to 9 (most unhappy). Likewise, arousal scores can range from 1 (extremely excited) to 9 (very calm).

The Post-Video Questionnaire. Further evaluation of the effects of the videos was determined by the completion of the following four items, all rated on a five-point Likert scale: 1.) "How funny did you find the video" (1 = not funny at all, 5 = extremely funny); 2.) "How much did you laugh

during the video” (1 = not at all, 5 = quite a bit); 3.) “How much did you find the video relaxing” (1 = not at all, 5 = quite a bit); 4.) “How much did you find the video informative” (1 = not at all, 5 = extremely informative). Both the SAM ratings and this Post-Video Questionnaire served as manipulation checks to determine if the videos produced the intended emotional responses.

Procedure

In groups of about thirty, participants first completed the MSHS. Next, participants took the CCLSS that contained items relevant to most college students, which measured the number and degrees of stressful events experienced by each subject. Then, participants wrote about a stressful event or problem that occurred within the past month without describing the resolution of the event or problem. This writing exercise allowed participants to describe an event or problem that may not be on the CCLSS, or to delve into detail a particular item on the CCLSS. Next, participants took the SSHS, which specifically examined their levels of hopefulness at that present moment, after completing both the CCLSS and the essay. Depending upon the random assignment of each study session to view either a comedy, or a neutral video, participants watched one of the videos together for 15 minutes. After viewing the assigned video, participants completed the SAM and the Post-Video Questionnaire to rate the videos. In addition, each group completed the SSHS for the second time after watching the video, again responding only to that particular moment.

The comedy video used consisted of various segments selected from *Just Kidding* (REC, Inc. 1999) that covered different categories of humor, such as slapstick humor, but excluded the sexual humor depicting nudity. A 15-minute clip from *Magic Eye: The Video* (Blake 1994) acted as the neutral control video, which was viewed without the accompanying music or sound.

Results

Manipulation checks

Table 1 presents the average valence and arousal scores from the SAM, as well as the average Post-Video Questionnaire responses for the humorous

Table 1. *Mean Self-Assessment Manikin Responses and Post-Video Questionnaire Responses for the Humorous and Neutral Videos*

Measure	Humorous		Neutral		t
	M	SD	M	SD	
Valence	1.88	1.18	4.71	1.68	-13.03**
Arousal	4.46	1.97	8.36	1.41	-15.22**
Funny	4.10	0.73	1.22	0.71	26.83**
Laughed	3.95	1.02	1.33	0.84	18.69**
Relaxing	3.24	1.22	2.76	1.48	2.42*
Informative	1.27	0.59	1.08	0.38	2.53*

Key: * $p < .05$; ** $p < .001$.

and neutral video groups. As seen in Table 1, the mean group differences between the humorous and neutral videos were statistically significant for all of the manipulation checks. In addition, the mean group scores were also in the expected direction. For example, the mean SAM valence rating for the humorous video was 1.88, indicating an extremely positive affective valence, whereas the mean rating for the neutral video was 4.71, almost right at the midpoint between extremely positive and extremely negative valence (i.e. neutral). Likewise, the mean SAM arousal rating for the humorous video was 4.46, almost right at the midpoint between extremely calm and extremely excited, indicating moderate arousal. On the other hand, the mean arousal rating for the neutral video was 8.38, indicating very calm, or little or no arousal. In addition, all of the mean responses to the Post-Video Questionnaire were in the correct direction, with the humorous video being rated as more funny, eliciting more laughter, and more relaxing, compared to the neutral video. Although the humor video was rated higher in informative value than the neutral video, the means for both groups were very similar and very low, indicating that both videos were rated as quite uninformative. Taken together, the results of the manipulation checks indicate that the videos produced the expected emotional responses in term of both absolute scores, as well as relative to each other.

Gender differences in sense of humor

To examine the humor differences between males and females, the scores from the MSHS were summed and computed for each participant. The mean

total score for the MSHS for females was 94.88 (SD = 12.18) and 96.13 (SD = 14.33) for males. In the first factor, humor creativity, the mean score for females was 43.55 (SD = 8.0) and 46.01 (SD = 9.2) for males. In the second factor, coping humor, the mean score for females was 11.27 (SD = 2.26) and the mean score for males was 11.31 (SD = 2.38). In the third factor, attitudes toward humorous people, females gave an average rating of 26.43 (SD = 3.4), while males gave an average score of 25.26 (SD = 4.05). Finally, the fourth factor, attitudes toward humor itself, the mean score for females was 13.55 (SD = 1.62) and a 13.54 (SD = 1.75) for males. T-tests indicated that there were no statistically significant differences between males and females for sense of humor as measured by the MSHS.

Effects of humor on hope

To examine the possible increase of state hope scores following the viewing of a humorous versus neutral video, a hope change score was computed for all participants. The change score was computed by subtracting the pre-video hope score from the post-video hope score. Thus, a positive change score indicated an increase in state hope following the video. The mean change in hope for the group viewing the humorous video was 1.25 (SD = .24), whereas the mean hope change for those watching the neutral video was 0.62 (SD = .23), resulting in a statistically significant difference of 0.63 ($t(174) = 1.90, p < .05, 1\text{-tailed}$). It was also hypothesized that individuals with a greater sense of humor, especially those with high ratings for using humor as a coping mechanism, receive greater benefit from viewing the humorous video. To test this hypothesis, the correlations between change in hope scores and scores from the MSHS were computed only for the group viewing the humorous video. This hypothesis was not supported, with very small and non-statistically significant correlations between change in state hope scores and MSHS total and factor scores for the experimental group.

Sense of humor and state hope

It was hypothesized that those with a greater sense of humor would exhibit a higher rated sense of state hope prior to the experimental manipulation. This hypothesis was supported, evidenced by a statistically significant

relationship between total scores on the MSHS and pre-experimental manipulation state hope scores ($r = .16, p < .05$).

Stress and hope scores

Degree of recent stress was operationalized from the CCLSS as two different variables: the total number of stressors endorsed and the total of the severity ratings of the endorsed stressors. The relationship between these two stress variables and the pre-experimental manipulation state hope scores was examined. Although the relationship state hope scores and the number of stressors experienced over the last month was not statistically significant ($r = -.10, n.s.$), there was a small but statistically significant negative relationship between state hope scores and total severity of past-month stressors ($r = -.19, p < .05$). There was no statistically significant relationship between the change in state hope scores and the number or severity of stressors, indicating that neither the number nor the severity of past-month stressors had any bearing on the experimental effect of watching the humorous video.

Discussion

Viewing a 15-minute comedy video resulted in a statistically significant increase in state hope scores relative to a control group viewing an affectively neutral video. Thus, the present study provides some support for the hypothesis that the experience of humor can positively influence state hopefulness. Furthermore, this finding is consistent with expectations derived from Fredrickson's (1998) "broaden and build" theory of positive emotions, and thus lends some support to that theory. In addition, there was a small but noteworthy and statistically significant negative relationship between the total rated severity of past-month stress and state hope, although there was little or no relationship between state hope and the number of stressors experienced over the past month. Hence, the accumulated severity of recent stressors seem to have more of an impact on hope than the actual number of stressors. Further studies using samples from the general population, and using a stress-rating scale applicable to that population, should be conducted in order to examine the effects of humor on different types of

stressors other than those typically experienced by college students. Moreover, running subjects individually, rather than in large groups, and allowing individuals to select the humorous video should be considered for future studies. In addition, future research should examine whether the increase in state hope, induced by positive emotions, actually leads to a greater degree of successful positive resolution of stressful situations.

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Note

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