



Humour

The Science of Resilience

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Definition

One thing most scholars can agree upon is that humour is hard to define, which has resulted in many different definitions of humour, each attempting to describe one or more aspects of this complex construction (Kidd et al., 2009). Cameron et al. (2010) draw upon the work of previous scholars who highlight the ‘incongruity’ of humour, or how unexpected things can result in pleasure, amusement, or laughter. For these authors, the best way to describe humour is a “feeling of nonseriousness” (Cameron et al., 2010, p. 718). In that vein, humour could also be defined as “making fun of or for yourself or others” (Cheung & Yue, 2018, p. 353).

Frequently, how humour is defined depends on the functions it is presumed to serve. Humour has been described as a cognitive ability or mental process, an aesthetic response, a habitual behaviour pattern, an emotion-related temperament or personality trait, an attitude, a coping strategy, and may be interpersonal or intrapsychic (Kidd et al., 2009; Martin et al., 2003). Humour can be understood as a character strength that allows the individual to “see the lighter side of life” (Edwards & Martin, 2014, p. 505). For Cherry et al. (2018), humour is described as a secular coping resource in contrast with spiritual or religious mechanisms for coping with stress.

However, the most popular definition of humour comes from Martin et al. (2003). In an attempt to better understand the different ways that humour manifests and is used by individuals to serve different functions in their lives, the authors break down the construct of humour into four different humour styles: the two adaptive humour styles (affiliative and self-enhancing humour) and maladaptive humour styles (aggressive and self-defeating). Affiliative humour builds relationships between people. People use affiliative humour to make others laugh, increase communication, and minimize conflict. Self-enhancing humour involves putting a humorous perspective on one’s own life and seeing things in a funny way. Self-enhancing humour is described as intrapsychic, arising from the self and own thoughts. Aggressive humour is used to tease others in an offensive way, potentially damaging to the relationship between people. The authors are careful to distinguish between the lighthearted teasing that is sometimes seen in affiliative humour and the kind of aggressive humour that is meant to put another person down. Self-defeating humour involves teasing and putting down oneself, often for the approval of others. Martin et al. (2003) note that the distinctions between these types of humour are more by degree than by dichotomy, and that there can be crossover between types in practice. This conceptualization of humour was used by many of the scholars cited in this brief (Cheung & Yue, 2018; Kuiper et al., 2016; Maiolino & Kuiper, 2016; Schneider et al., 2018; Stieger et al., 2011; Yip & Martin, 2006; Yue et al., 2014).

Relationship to Resilience

Neurobiological Effects of Humour and Laughter

The use of humour and laughter has been noted to have numerous positive benefits on the body. “Humor can have both direct and indirect effects on health. The direct effects are traceable to laughter, which triggers the release of beta-endorphins, increases immune-system functioning, reduces stress-related hormone levels, and reduces muscle tension” (Lockwood & Yoshimura, 2014, p. 411). More specifically, laughter has also been found to decrease hormones that become elevated through stress response (such as cortisol and epinephrine) (Cherry et al., 2018). Bennett et al. (2014) propose that the primary mechanism for this positive outcome is the way laughter stimulates cerebral regions of the brain and recalibrates the hypothalamic pituitary adrenocortical system. In this sense, it appears that humour and laughter can be helpful to “hack” the body’s biological systems, bringing down elevated hormones in times of stress, which presumably would make it easier for people to cope with stressful circumstances. Consequently, laughter and humour therapy have been used in clinical settings, most frequently in responding to depression (Bennett et al., 2014). Further, some studies have noted the positive impact of humour/laughter on chronic pain and immune response (Kidd et al., 2009).

Self-Esteem

One of the ways that humour bolsters resilience is through self-esteem. Several studies have examined the impacts of humour on self esteem. Kuiper et al. (2016) found that higher levels of affiliative and self-enhancing humour were associated with lower levels of depression and higher global self-esteem, whereas self-defeating humour had the reverse effect and aggressive humour had no effect (Kuiper et al., 2016). Schneider et al. (2018) also examined the influence of the different humour styles on self-esteem. They found that affiliative humour was most closely associated with self-esteem, though the effects overall for affiliative humour were not as significant as the effects seen for self-enhancing humour. Additionally, the associations between self-enhancing humour and optimism were weaker for Asian populations than Western ones. The authors attribute these differences to differences in cultural values. Differences between men and women were noted, though were admittedly complex (Schneider et al., 2018). In a study specifically examining these effects in Asian populations, Yue et al. (2014) found that affiliative and self-enhancing humour were positively correlated with self-esteem and subjective happiness.

Not surprisingly, self-defeating humour had a strong negative impact on self-esteem. Overall, aggressive humour was not associated with any mental health outcomes. However, this was not true for studies conducted in Asian samples, where aggressive humour styles were negatively associated with self-esteem and positively correlated with depression (Schneider et al., 2018). Participants who frequently used self-defeating humour styles were more likely to have a damaged self-esteem (high implicit, low explicit). The possible mechanisms cannot be

confirmed in this correlational study. Implicit self-esteem was positively correlated with affiliative humour (Stieger et al., 2011).

Coping with Difficult Emotions

The use of humour is associated with lower levels of depressive symptoms and rumination (Cherry et al., 2018). The authors hypothesize that one way humour helps to cope with negative emotions is by releasing pent up frustration or tension (Cherry et al., 2018; Hernann, 2016). However, not all styles of humour effect emotional coping equally. Affiliative and self-enhancing humour styles are associated with increased levels of self-esteem, life satisfaction, and optimism, and are negatively associated with depression. Schneider et al. (2018) found the reverse association for aggressive and self-defeating forms of humour. The strongest association was between self-enhancing humour styles and optimism. “These results suggest that the habitual use of self-enhancing humor as an emotion regulation strategy, and as a coping resource overall, might be particularly beneficial to mental health” (Schneider et al., 2018, p. 295). In this sense, the authors connect adaptive humour styles with overall positive attitude and coping, rather than a specific aspect of emotional management. Yip & Martin (2006) found that although affiliative and self-enhancing humour are somewhat correlated with each other, affiliative humour was not correlated with emotional management. In contrast, aggressive and self-defeating humour styles were negatively associated with emotional perception (Yip & Martin, 2006).

Some authors offer suggestions about the mechanisms behind humour and positive coping. According to Edwards & Martin (2014), humour helps people to “effectively adapt in the face of stress by means of shifting perspective, distancing oneself from a problem, eliciting social support, increasing positive emotion and/or relieving tension through laughter” (p. 507). Two of these factors, positively reframing issues (shifting perspectives) and distancing oneself from the problem, were also noted by Lockwood & Yoshimura (2014) in their study of cardiovascular disease patients. Strategies like these help to minimize the impact of stressful circumstances, which may make them seem more manageable.

Other studies have demonstrated how humour is used as an emotional coping tool when facing specific stressors. For example, humour has been used in work with people with severe mental illness (mainly schizophrenia) to help increase optimism in the face of experiencing delusions; watching humorous movies on inpatient units was associated with reduced symptomatology, improved overall function, and better perceived relationships with staff (Kidd et al., 2009). In a study on the effects of humour as a coping tool for firefighters exposed to chronic traumatic stress, Sliter et al. (2014) hypothesized that humour acts as a buffer against the effects of traumatic distress largely via cognitive appraisal (using humour to think about stresses in a more positive way, being less likely to ruminate about hardships, etc.) (Sliter et al., 2014).

Building Interpersonal Relationships

One of the primary ways that humour is associated with resilience is through its ability to help bolster social relationships. Strong relationships serve many functions in our lives that help us in times of stress or hardship. Affiliative humour, which is a prosocial kind of humour, is associated with higher levels of life satisfaction and lower levels of depressed mood. A study by Cheung and Yue (2012) found that affiliative humour is the only humour style associated with better adjustment overall for sojourn university students. The authors hypothesize it is because of the relationship building quality of affiliative humour, which garners increased connectedness and social support. Humour is frequently used to show solidarity and build relationships with others (Cameron et al., 2010). Conversely, Cheung and Yue (2012) found that self-defeating humour was associated with lower life satisfaction. A study by Kuiper et al. (2016) supports this notion. They found that greater intimacy development was associated with more affiliative humour and less self-deprecating humour (Kuiper et al., 2016). This means it is also possible that while affiliative humour can bolster relationship quality, having stronger relationships to begin with can help people to develop their use of affiliative humour.

Interestingly, several authors note the ability of humour to serve as effective communication tool, which may be one of the mechanisms through which humour is able to enhance interpersonal relationships. Several authors have found that the judicious use of humour (positive over negative kinds) can increase social competence by helping with self-disclosure, social probing, and diffusing conflict or tension and that people occasionally used irony/sarcastic humour to deflect away from uncomfortable or tense situations and parody to poke fun at behaviours they find challenging (Cameron et al., 2010; Hernann, 2016; Yip & Martin, 2006). While Yip and Martin (2006) found that those scoring higher in affiliative and self-enhancing humour styles were more competent at initiating social relationships, they did not find empirical support to connect affiliative and self-enhancing humour styles to other aspects of social competence (conflict resolution, providing emotional support, asserting personal rights, etc.). However, they note that those who used aggressive or self-defeating humour styles tended to be lacking in these social competence areas (Yip & Martin, 2006).

In a study about the use of humour in supportive relationships by cardiovascular disease patients, Lockwood and Yoshimura (2014) noted that humour is a nonthreatening way to seek or offer information (across the power continuum) and helps to build unity between the sender and receiver. Humour was found to have important influence on the compassionate relationship (between cardiovascular patient and the person who provided the most support to them). They found people used humour in three key ways: as antidote, conversation regulator, and for distancing. They found that patients frequently used these strategies in conversation management as a way to communicate difficult information – particularly as a way of expressing information that feels threatening in an approachable way. Patients also used humour to distance themselves from their companions (a possible symptom of withdrawal associated with depression), which may challenge the supportive relationship. Use of distancing

humour was negatively associated with relationship satisfaction. Use of antidote humour was positively correlated with psychological and social health, but not physical health. Conversation regulation and distancing humour styles were negatively correlated with wellbeing (Lockwood & Yoshimura, 2014).

The role of humour in workplaces has also been explored. Wijewardena et al. (2010) propose that workplace humour has been found to bolster workplace relationships and to increase creativity and motivation. However, they also note that some styles of humour can be harmful (such as sexual or ethnic jokes, or physical horseplay). Sliter et al. (2014) hypothesize that one of the ways humour may serve as a buffer against traumatic stress in the workplace (ex: for firefighters) is by helping to develop strong relational bonds with colleagues, which can help to mitigate burnout and absenteeism. Their study found that use of coping humour did act as a buffer for posttraumatic stress symptoms and burnout, but not for absenteeism.

Challenging Experiences of Oppression/Marginalization

Because of the way that jokes can turn things ‘upside down,’ they can help to elevate minority perspectives but subverting dominant narratives, which can make humour an important political tool (Hernann, 2016; Kidd et al., 2009). Hernann (2016) proposes that humour and joke-telling can also be an important component of oral transmission – in particular, a way of communicating counter-narratives. Further, joking can act as a mechanism for truth-telling, as it can permit people to point out uncomfortable truths while also remaining fairly immune to criticism because ‘it was just a joke!’ (Hernann, 2016).

Kidd et al. (2019), in their study on use of humour by adults with severe mental illness, found that humour was used to challenge the powerlessness that inpatients experienced at the hands of medical personnel. Even though it sometimes backfired and had negative consequences, most people interviewed said that humour was an important way they coped with their experiences.

A discursive study of women’s Tumblr blogs by Kanai (2019) found that by gently and humorously subverting norms and expectations, women used humour to call attention to the pressures they experience. However, by doing it in a funny way that is ‘confessional,’ they uphold the expectations as something to aspire to, even when they miss the mark. In this sense, humour seems to play a role in expectation management (Kanai, 2019).

Interventions

It should be noted that interventions rarely seem to address the differences between adaptive (affiliative and self-enhancing) and maladaptive (aggressive and self-defeating) humour styles, which means there may be need for further development in interventions.

Clown Interventions

Clown interventions are particularly common in health care settings, such as hospitals or long-term care homes. However, the interventions of clowns can be hard to describe, since clowns tailor their activities to responses of patients they work with. In the Sydney Multisite Intervention of LaughterBosses and ElderClowns (SMILE) study, clown intervention took place in long-term care homes with seniors. LaughterBoss sessions were delivered with members of staff, who worked to include elements of humour in their work with seniors between ElderClown sessions. 9-12 humour sessions between ElderClowns and senior residents were conducted, often with the help of the newly trained LaughterBoss. While the study did not find that levels of depression decreased, they did find that levels of agitation dropped significantly over time for those residents receiving the humour intervention (Low et al., 2013).

The 7 Humor Habits Interventions Program

The 7 Humor Habits intervention program (and modifications) by McGee (1994; cited in Cai et al., 2014; Ruch & McGhee, 2014):

- One of the most common approaches to developing humour in hospital settings (Cai et al., 2014).
- The original 7 Humor Habits are: 1) Surround yourself with humour; 2) cultivate a playful attitude; 3) Laugh more often and more heartily; 4) Create your own verbal humour; 5) Look for humour in everyday life; 6) Take yourself lightly: laugh at yourself; and 7) Find humour in the midst of stress (Ruch & McGhee, 2014 – more detail available in this chapter).
- Each lesson involves a theoretical lesson about the skill and participants are given a “home play” list of activities (usually 10-12 per habit) to work on that week to help boost the skill. This may be accompanied by a ‘humor log,’ which involves prompts to get participants to think about how they use humour (Cai et al., 2014; Ruch & McGhee, 2014).
- The study by Cai et al. (2014) randomly assigned schizophrenia inpatients in China to either a control group or the test group that used this intervention. The program ran over the course of two weeks. The authors found that there was a significant decrease in negative symptoms and depressive/anxious mood. Moreover, patients appreciated the humour approach and expressed that they were better able to use humour as a coping mechanism, following the training.

Activities

While humour is fairly personal attribute, there are plenty of things that people can do to boost the amount of humour in their lives.

Affiliative

- Try to spend more time with people you find funny (Robinson et al., 2019).
- Seek out opportunities to laugh: watch a funny movie or YouTube video, watch a live comedy show with friends or coworkers, check out the humour section of your local book store, host a game night with friends, play with a pet, go to a “laughter yoga” class, do something silly on purpose... (Robinson et al., 2019).

Self-Enhancing

- Start with finding small joys in your life, such as making a list of things you are grateful for. It is easier to laugh and find the humour in small things if you’re in a happy state than a sad one (Robinson et al., 2019).
- Practice finding the funniness in a moment that embarrassed you – learning not to take yourself so seriously can help to cultivate your sense of humour (Robinson et al., 2019).
- Practice the art of reframing – when something stressful or uncomfortable is happening in your life, take a moment to see if you can think about the situation in another way. Finding the part of the situation that is ridiculous, silly, or laughable can help you to manage the stress of it better. The more you practice, the easier it will get (Robinson et al., 2019).
- If you’re really struggling, simulated laughter is an activity that can help to stimulate the real thing – laugh at jokes even if you don’t quite find them funny, pretend to laugh alone or with others. The silliness of it might have you genuinely laughing before too long (Robinson et al., 2019).

Assessment

32-item Humor Styles Questionnaire (Martin et al., 2003)

- Assesses the four dimensions relating to individual differences in the use of humour: self-enhancing, affiliative, aggressive, and self-defeating
- A 32-item self-report measure with four 8-item scales
- Cronbach alphas for the four scales range from .77 to .81; test-retest correlations of .80 to .85
- An online version of the measure is available here: <http://www.humorstyles.com>

The Coping Humor Scale (CHS; Martin & Lefcourt, 1983)

- A 7-item self-report measure
- Assesses the degree to which respondents make use of humour in coping with stress in their lives
- Internal consistencies of .60 to .70
- Must contact author for use of scale

Use of Humor Index (Graham et al., 1992)

- An 11-item measure that assess the functions of humour; has a three-factor structure: positive affect, expressiveness, and negative affect. (See Appendix A for factor loadings).

Humor Orientation Scale (Booth-Butterfield & Booth-Butterfield, 1991)

- A 17-item measure that assesses respondents' ability to produce humour and make other people laugh, not their own sense of humour
- The scale is available online for non-commercial use:
<http://healthyinfluence.com/wordpress/2009/07/17/the-humor-orientation-scale-original-17-item-version/>

Other Notes

The Association for Applied and Therapeutic Humour is a good resource for further learning: <https://www.aath.org/>

References

- Bennett, P.N., Parsons, T., Ben-Moshe, R., Weinberg, M., Neal, M., Gilbert, K., Rawson, H., Ockerby, C., Finlay, P., & Hutchinson, A. (2014). Laughter and humor therapy in dialysis. *Seminars in Dialysis*, 27(5), 488-493. doi:10.1111/sdi.12194
- Booth-Butterfield, S. & Booth-Butterfield, M. (1991). The communication of humor in everyday life: Individual differences in the use of humorous messages. *Southern Communication Journal*, 56, 205-218.
- Cai, C. Yu, L., Rong, L., & Zhong, H. (2014). Effectiveness of humor intervention for patients with schizophrenia: A randomized controlled trial. *Journal of Psychiatric Research*, 59, 174-178. doi:10.1016/j.jpsychires.2014.09.010
- Cameron, E.L., Fox, J.D., Anderson, M.S., Cameron, C.A. (2010). Resilient youths use humor to enhance socioemotional functioning during a 'day in the life.' *Journal of Adolescent Research*, 25(5), 716-742. doi:10.1177/0743558410366595
- Cherry, K.E., Sampson, L., Galea, S., Marks, L.D., Stanko, K.E., Nezat, P.F., & Baudoin, K.H. (2018). Spirituality, humor, and resilience after natural and technological disasters. *Journal of Nursing Scholarship*, 50(5), 492-501. doi:10.1111/jnu.12400
- Cheung, C-H., & Yue, X.D. (2012). Sojourn students' humor styles as buffers to achieve resilience. *International Journal of Intercultural Relations*, 36, 353-364. doi:10.1016/j.ijintrel.2011.10.001
- Edwards, K.R., & Martin, R. A. (2014). The conceptualization, measurement, and role of humor as a character strength in positive psychology. *Europe's Journal of Psychology*, 10(3), 505-519. Doi:10.5964/ejop.v10i3.759
- Hernann, A. (2016). Joking through hardship: Humor and truth-telling among displaced Timbuktuans. *African Studies Review*, 59(1), 57-76. doi:10.1017/asr.2016.4
- Kanai, A. (2019). On not taking the self seriously: Resilience, relatability and humour in young women's Tumblr blogs. *European Journal of Cultural Studies*, 22(1), 60-77.
- Kidd, S.A., Miller, R., Boyd, G.M., & Cardeña, I. (2009). Relationships between humor, subversion, and genuine connection among persons with severe mental illness. *Qualitative Health Research*, 19(10), 1421-1430. doi:10.1177/1049732309348381
- Kuiper, N., Kirsh, G., & Maiolino, N. (2016). Identity and intimacy development, humor styles, and psychological well-being. *Identity: An International Journal of Theory and Research*, 16(2), 115-125. doi:10.1080/15283488.2016.1159964
- Lockwood, N.L., & Yoshimura, S.M. (2014). The heart of the matter: The effects of humor on well-being during recovery from cardiovascular disease. *Health Communication*, 29, 410-420. doi:10.1080/10410236.2012.762748
- Low, L-F., Brodaty, H., Goodenough, B., Spitzer, P., Bell, J-P., Fleming, R., Casey, A-N., Liu, X., & Chenoweth, L. (2013). The Sydney Multisite Intervention of LaughterBosses and ElderClown (SMILE) study: Cluster randomised trial of humour therapy in nursing homes. *BMJ Open*, 3(e002072). doi:10.1136/bmjopen-2012-002072
- Maiolino, N. & Kuiper, N. (2016). Examining the impact of a brief humor exercise on psychological well-being. *Translational Issues in Psychological Sciences*, 2(1), 4-13. doi:10.1037/tps0000065

- Martin, Rod A., and Lefcourt, Herbert M. (1983). Sense of Humor as a Moderator of the Relation Between Stressors and Moods. *Journal of Personality and Social Psychology*, 45,(6), 1313-1324.
- Martin, R.A., Puhlik-Doris, P., Larsen, G., Gray, J., & Weir, K. (2003). Individual differences in uses of humor and their relation to psychological well-being: Development of the Humor Styles Questionnaire. *Journal of Research in Personality*, 37, 48-73.
- Nezlek, J.B. & Derks, P. (2001). Use of humor as a coping mechanism, psychological adjustment, and social interaction. *Humor*, 14(4), 395-413.
- Robinson, L., Smith, M., & Segal, J. (2019). Laughter is the best medicine. Retrieved June 5, 2020 from *Help Guide* (website): <https://www.helpguide.org/articles/mental-health/laughter-is-the-best-medicine.htm>
- Ruch, W., & McGhee, P.E. (2014). Humor intervention programs. In A.C. Parks & S. Schueller, *The Wiley Blackwell Handbook of Positive Psychological Interventions* (pp. 179-193).
- Schneider, M., Voracek, M., & Tran, U.S. (2018). "A joke a day keeps the doctor away?" Meta-analytical evidence of differential associations of habitual humor styles with mental health. *Scandinavian Journal of Psychology*, 59, 289-300. doi:10.1111/sjop.12432
- Sim, I. O. (2015). Humor intervention program for children with chronic diseases. *Applied Nursing Research*, 28, 404-412. doi:10.1016/j.apnr.2015.09.001
- Sliter, M., Kale, A., & Yuan, Z. (2014). Is humor the best medicine? The buffering effect of coping humor on traumatic stressors in firefighters. *Journal of Organizational Behavior*, 35, 257-272. doi:10.1002/job.1868
- Stieger, S., Formann, A.K., & Burger, C. (2011). Humor styles and their relationship to explicit and implicit self-esteem. *Personality and Individual Differences*, 50, 747-750. doi:10.1016/j.paid.2010.11.025
- Wijewardena, N., Härtel, C.E.J., & Samaratunge, R. (2010). A laugh a day is sure to keep the blues away: Managers' use of humor and the construction and destruction of employees' resilience. *Research on Emotion in Organizations*, 6, 259-278. doi:10.1108/S1746-9791(2010)0000006014
- Yip, J.A., & Martin, R.A. (2006). Sense of humor, emotional intelligence, and social competence. *Journal of Research in Personality*, 40, 1202-1208. doi:10.1016/j.jrp.2005.08.005
- Yue, X.D., Liu, K. W-Y., Jiang, F., & Hiranandani, N.A. (2014). Humor styles, self-esteem, and subjective happiness. *Psychological Reports: Mental & Physical Health*, 115(2), 517-525. doi:10.2466/07.02.PR0.115c18z6

Appendix A: Use of Humor Index Factor Loadings

Graham et al. (1992, p. 170)

TABLE 1
Uses of Humor: Factor Loadings

Uses of Humor I Use Humor To . . .	Uses of Humor		
	1	2	3
Factor 1: Positive Affect			
make light of a situation	.74	.11	.08
help develop friendships	.59	.28	.02
be playful	.51	.01	.02
Factor 2: Expressiveness			
disclose difficult information	.15	.69	.01
allow others to know me	.03	.67	.11
let others know likes/dislikes	.05	.64	.24
avoid telling others about me	.07	.55	.35
express my feelings	.17	.52	.01
Factor 3: Negative Affect			
demean and belittle others	.06	.07	.77
say negative things to others	.10	.02	.76
put others in their place	.11	.05	.71



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