

Where Laughter Comes From: Deconstructing the Cognitive Code and Social Logic of Humor

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Abstract: Humor is a worldwide phenomenon operating at the meeting point of cognition, emotion, and social interaction. The present article is an integrative review of the psychological study of humor from theoretical, personality, developmental, and cultural aspects. The major theories of humor are also discussed: Incongruity Resolution Theory, Cognitive and Affective Mastery Theory, and Social and Emotional Interaction Theory. In addition, the four humor styles are introduced as a framework for understanding humor's interpersonal and social functions. Personality research showed how optimism helps people find amusement in mildly stressful situations, and how tolerance is beneficial for relaxed, non-defensive humor. From a developmental perspective, humor appreciation, production, and comprehension are shown to be present in early ages. Evidence also showed gender differences was most evident during adolescence, when males show more aggressive or competitive humor and females show more affiliative and relational humor. The review also shows potential risks of humor, such as misunderstandings resulting from differences in knowledge or cultural background. Together, these perspectives position humor as a multifaceted phenomenon warranting continued interdisciplinary investigation.

1 Introduction

Humor is a universal phenomenon that is both remarkable and complex. Humor is a crucial part of communication, emotional expression, and social connection. Stand-up comedy has been a popular global phenomenon in recent years, reflecting the adaptability of humor in the face of changing cultural and social conditions. Digital humor has spread even faster than the latter. Memes and videos are examples of the dynamic nature of humor in a new technological context. Even though they are constantly developing, it is still unknown if humor's underlying psychological processes are changing. An important issue arises here: what makes humor transcend time and space, yet preserve its psychological effects?

This article intends to synthesize the major trends in current psychological humor research. It will address cognitive, emotional, and behavioral theories of humor. Additionally, it will address the four humor styles and their psychological significance. Subsequently, the focus of the article will be the development trajectory of the concept of humor across the life cycle, with particular attention to the changes observed in the progression from childhood

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into adulthood. Finally, the social dimension of humor, together with its risks and cultural influences, will be addressed in the article.

2 Humor: a multifaceted psychology and social phenomenon

Humor is treated as a complex psychological system, including cognitive, emotional and behavioral processes. A number of theories have been proposed to explain its concept and mechanisms. According to the Incongruity-resolution Theory, humor comes from a cognitive shift from confusion to clarity due to something that goes against expectations [1]. The Cognitive and Affective Mastery Theory views humor as a way of handling inner tension, emotional discomfort or materials that feels threatening. It involves reinterpreting a distressing or anxious situations and introducing a positive emotional shift so that it feels less emotionally overwhelming [2].

Humor has various functions, especially in the social world. The Social and Emotional Interaction Theory states that humor is an action that facilitates the reduction of tension and the formation of relationships [3]. Martin et al.'s Humor Styles Questionnaire extends this perspective by distinguishing between four types of humor. Affiliative humor is the use of friendly jokes to share with others to bring people closer together. Self-enhancing humor assists people in being balanced by finding something funny even in bad situations. Aggressive humor is the use of sarcasm or ridicule to influence others or to dominate people. Self-defeating humor is making fun of oneself to gain acceptance or avoid rejection [4]. These types of humor illustrate its role inside individual and between people.

Humor also links closely to personality traits. Research shows that stable dispositions like optimism and tolerance support humorous expression. Optimistic people tend to view events through a hopeful lens, which gives them the emotional energy to use humor, even in hard times. Tolerant people accept imperfections in themselves and others, so they are less easily offended and more willing to see mistakes with a relaxed attitude. This openness creates space for humor to emerge [5, 6]. In short, humor is not just a situational response but is tied to deeper patterns in personality.

3 Developmental perspective of humor

Individuals' sense of humor develops throughout lifetime. There are three levels of development, appreciating, comprehending, and producing humor, which develop gradually as individuals cognitively and emotionally mature. Humor appreciation, the ability to identify something as funny, first appears in infancy as babies laugh at playful surprises. As children grow, appreciation becomes more selective and their preferences become more refined from around 6–12 years, reflecting patterns [7, 8]. Humor comprehension, the ability to understand why something is funny develops between 3–4 years, children start to recognize simple incongruities, and by 6–8 years they understand wordplay and more complex and abstract jokes [9–11]. Humor often requires switching between two interpretations, the literal meaning and the humorous reinterpretation. Recognising the speaker's intention helps people shift from literal statements to humorous interpretation, and cognitive flexibility helps people make this shift more efficiently. Humor production, the ability to create humor, emerges with simple jokes appearing around 3–4 years and more sophisticated, socially aware humor developing from 8 years onward. Afterwards, individuals practice timing, delivery, and playful thinking in ways that make them more confident and spontaneous, such as rewriting dull statements into humorous ones, practicing gentle teasing, or generating humorous interpretations to everyday events.

Gender differences in the use of humor become more obvious in adolescents. Developmental changes and gender stereotypes influence the use of humor in boys and girls, as research has shown. Boys may use aggressive or competitive humor during this period. They use sarcasm, teasing, or slapstick to show confidence, test boundaries, or position themselves within their peer group [12, 13]. Girls rely more on affiliative and relational humor. They use shared stories, playful comments, and gentle teasing to build closeness and maintain group harmony [13, 14]. Developmental research also finds that boys' humor is often more absurd or physical, while girls' humor is more narrative and socially aware [15].

These gendered patterns continue into adulthood but evolve in function. Large-scale studies using the Humor Styles Questionnaire also show that men score higher on aggressive humor, while women score higher on affiliative humor, even in adulthood [4]. Adult men are more likely to use humor for status, competition, and impression management, including more self-enhancing and sometimes aggressive humor [16]. Adult women, meanwhile, tend to use humor for affiliation, emotional connection, and social support, but also increase in the use of self-enhancing humor and aggressive humor [4, 17]. It reflects the consistent, but smaller differences in the use of humor between males and females as they mature, suggesting that both men and women gain more flexibility in how they use humor, and humor becomes more tied to more personality rather than gender.

4 Social dimensions of humor: functions and cultural

Humor serves as a social signal for transmission, and also as a tool for maintaining group norms. Consequently humor can play a role in harmonizing interpersonal relationships, but also risks offending someone. According to the benign violation theory, humor works only when something is a violation (slightly wrong), but also benign (safe, acceptable). If violation is too strong, the joke becomes offensive. If it's too weak, the joke becomes too boring. As a form of interpersonal communication behavior embedded in the social context, the generation and reception of humor are both subject to specific social and cultural conditions.

From an individual perspective, humor functions as a covert mechanism for releasing social signals. Research points out that humor can affect the speaker by revealing things about himself to their listeners [18, 19]. This is because when an individual makes a joke, it reveals what he finds funny, what he thinks is acceptable and how close he thinks the relationship between him and others is. However, the speaker might misjudge what is safe and funny which can lead to unintended opposite outcomes.

From a group perspective, humor simultaneously performs the implicit function of maintaining social boundaries and cultural norms. The understanding and appreciation of humor are not naturally universal; rather, they are predicated on a shared cognitive schema. Several factors such as background knowledge, cultural expectations and relational closeness might cause the misjudgment in the use of humor. Humor works only when people share enough background knowledge. This is because jokes usually contain references, assumptions, and implied meanings, if the listener does not share this knowledge, the joke simply falls flat [18, 19].

Cross cultural studies have also demonstrated that there are differences in the sense of humor. Participants from different countries have different results in terms of appreciation of humor, production of humor, and recognition of humor. American participants have higher results in making jokes during conversations and use it as a way of being friendly. The Croatian participants have a preference for intellectual humor and do not joke as frequently in conversations. The British participants use irony or self-mocking humor, which demands understanding from others [20]. The cultural context of a society determines what is

appropriate or not appropriate. A harmless form of humor in a culture might not be appropriate in another culture.

5 Conclusion

In conclusion, the above article has tried to bring together theoretical, personality-based, developmental, and cultural perspectives to explain the mechanisms of humor. Humor involves cognitive, emotional, and behavioural processes. Humor is expressed through various humor styles that help people cope with relationships and roles. Optimism and tolerance form an important foundation. These help people view the world more lightheartedly and use humor without becoming defensive. Developmental research has shown that humor is present early on, becomes more complex with age, and has gender differences in adolescence. These differences disappear as people enter adulthood. Humor can also lead to confusion if people don't share the same knowledge or cultural background. This highlights the extent to which humor is linked to its social and cultural context.

Overall, humor can be viewed as a psychological resource and as a socially constructed form of communication. And as social norms change, so too does the landscape of humor. Future research should go beyond and explore the new forms of digital humor, such as memes, videos, and so on.

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