

## How about another joke from the Covid-19 pandemic

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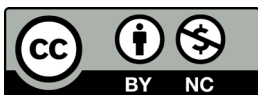
### Abstract

The outbreak of Coronavirus disease, 2019 (COVID-19 virus), started in late 2019 and developed into a pandemic by March 2020 and has become a global problem. Following the global outbreak and coronavirus spreading around the world, the WHO reported a statement on January 11, 2020, announcing the new Coronavirus outbreak as the sixth significant public health emergency in the world. In the stressful situation caused by the coronavirus epidemic, many jokes and Humor about this disease were distributed on social networks. In these circumstances, the question arises: Why do some people continue to make jokes about it, despite the mass perception of the coronavirus epidemic? The present research method was qualitative and Strauss and Corbin's version of the grounded theory was used. Participants were included the Telegram Social Network Comic Channel "https://t.me/s/jokcom" Members, which had more than 2879 members and those on Instagram and Twitter members who liked the corona content to the jokes about the covid-19 pandemic inside Iran. Based on the result, we found the effects and consequences of corona jokes. There was several factors involved in shaping the phenomenon of covid's jokes. Joke and Humor are like a double-edged sword; in some situation, can be both harmful and helpful.

**Keywords:** coronavirus, humor, joke, social networks.

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## Introduction

On December 29, 2019, hospital doctors in Wuhan, China, noticed unusual cases of pneumonia. However, the first case of this new disease was observed on December 12. Following the global outbreak and spread of this virus, the WHO reported a statement on January 11, 2020, announcing the new Coronavirus outbreak as the sixth significant public health emergency globally, which is a threat to all countries only to China (Lai et al., 2020) (Lai, Shih, Ko, Tang, & Hsueh, 2020; Lai et al., 2020). The outbreak of Coronavirus disease, 2019 (COVID-19 virus), started in late 2019 and developed into a pandemic by March 2020 and has become a global problem. Person-to-person transmission of the Coronavirus through respiratory droplets and contaminated objects was confirmed (Lam et al., 2020; Lu et al., 2020).

By the end of January 2020, more than 10,000 people with SARS-CoV- throughout China had been approved by the World Health Organization. By February 19, the number of cases had reached 74280 in China, and 924 confirmed in 24 countries outside China, and the total death toll from this infection was estimated to be 2009 (Dhama et al., 2020). According to the World Health Organization's latest report on March 15, 2020 (Situation Report- 57), the number of confirmed cases has increased to 81048 in China and 72469 in other (143) countries. The number of deaths from the outbreak in China has also expanded to 5735 and 2531 in other countries. The most confirmed cases of the virus after China have been to Italy, Iran, and South Korea, respectively, and the highest deaths have been reported after China and Italy in Iran (Situation Report- 57) . As of 9 May 2021, more than 157.36 million cases have been confirmed, with more than 3.27 million confirmed deaths attributed to COVID-19, making it one of the deadliest pandemics in history.

Due to the lack of effective vaccine and treatment for the new Coronavirus so far, the best way in the present situation is to avoid infection and prevent its spread. In this stressful situation caused by the coronavirus epidemic, many jokes and Humor about Coronavirus were transferred on social networks. Coronavirus's jokes were widely broadcast on social networks, SMS, and some community that it seemed the deterioration of the situation is not noteworthy to them, and the subject is thought of as a tail joke.

Jokes have a historical origin in Iranian society in various shapes and forms and communication or entertainment. Joking about phenomena is not only limited to Iran; it is common in most societies, but jokes about events and problems for nearly a decade have been in Iranian. The important point is that the joke has various functions beyond laughing, which can be regarded in both positive and negative terms. In positive aspects, at stressful conditions such as the coronavirus epidemic can enrich

the people's coexistence. Humor can be an important coping skill against life's problems; Humor can be used as a positive behavioral component of well-being, building healthy relationships, expanding social networks, enhancing the sense of understanding and harmony, and preventing and even treating mental disorders (Reff, 2006).

However, Humor is such a "double-edged sword" that it can be harmful in an unbalanced situation. Nevertheless, in a pandemic situation, the whole community will face a very serious problem if they do not follow prevention rules. There is concern that the seriousness of the problem and compliance with preventive, overshadowed by Humor and Jokes.

It is important to pay attention to the cultural aspects, as the ways in which Humor is applied and how it depends on cultural factors. The main focus of this manuscript is about Corona comics in the virtual community. Online or virtual comedy is produced, distributed, and consumed without direct contact between the community. Among the various genres of Humor, jokes are the most common one. A funny joke or phrase is inserted by someone somewhere and reviewed and judged by people elsewhere. The only rule to judge about the Joke, especially the virtual jokes, is the number of likes. In fact, throughout history, characters have been responsible for joking and laughing at different functions and a range of jokes, but nowadays, virtual life has made it the most indeterminate and commonplace.

However, analyzing these kinds of jokes can discover people's life reactions in all dimensions, moreover can even tell us about cultural, political, psychological, and social trends before they become social realities, or also lead to the shifting of the seemingly socially demanding boundaries and rules that govern it, as in Farsi language this meaning is stated with the term "The joke gets serious with the joke". Therefore, a deep understanding of Humor and Jokes is essential to understanding the context of the situation and its functions. In this aspect, some questions arise to explain the functions of jokes in situations such as the Corona epidemic; For example, laughter is necessary for human life, but how and at what value should society laugh? Why do some people continue to make jokes about Coronavirus despite facing the severity of the epidemic? What are the consequences of these kinds of jokes for society? Finally, what pattern of coronary jokes followed?

## **Research method**

The present research method was qualitative and Strauss and Corbin's version of the grounded theory was used. Grounded theory was used to properly manage and analyze data to provide a coherent theoretical formulation of the obtained information. This strategy converts data from

information sources into a set of codes, common codes into categories, and then categories into theory. The researcher extracts data from the interviewees' statements and then finally obtains a theory about the problem by classifying and coding them. Data management and classification processes were managed and categorized using three basic theory elements: concepts, categories, and theorems. Finally, in the research process, a theoretical model was developed to examine the phenomenon in question based on the participants' lived experiences.

### ***The grounded theory building process***

Key elements of the grounded theory method include theoretical sampling, constant comparison, open, axial and selective coding, recall and theoretical saturation. Conceptualization of data is the first step in analysis. Crushing and conceptualization mean that each of the events, happenings, and ideas contained in the data is named. This name is a label or symbol that replaces an event, event, or idea. Concepts are separate mental labels to events, happenings, and other phenomena. This is done in such a way that the researcher raises questions about each of the events and happenings. For example, what is the meaning of this Joke? What does it represent? Events in the work process are compared and those that are similar are given a name.

The phenomenon in question is the central idea, thought, event, to which the flow of actions and reactions are directed to manage, control, or respond. The central phenomenon is related to the main question, what do the data indicate? The central category is the idea (idea, conception) or phenomenon that is the basis and axis of the process. This category is the title (concept name or label) that is intended for the framework or design created. The category that is selected as the central category must be abstract enough to be able to relate to the other main categories. In the theory of contextual foundations by Strauss and Corbin method, the sub-categories are related to the main and central category under a series of relations and the relations between them and the main category are determined under a model. Making such a connection is based on asking questions and making comparisons. In axial coding, the type of questions asked indicates the type of relationship. For example, to compare one category with another, the question may be asked whether category A is a consequence of strategies for category B. The researcher does this by looking for evidence and facts to confirm or disprove the question. Once the data confirms the question, the relationship between the two categories is identified and can become a proposition. Figure 1 shows the stages followed in the GT building process.

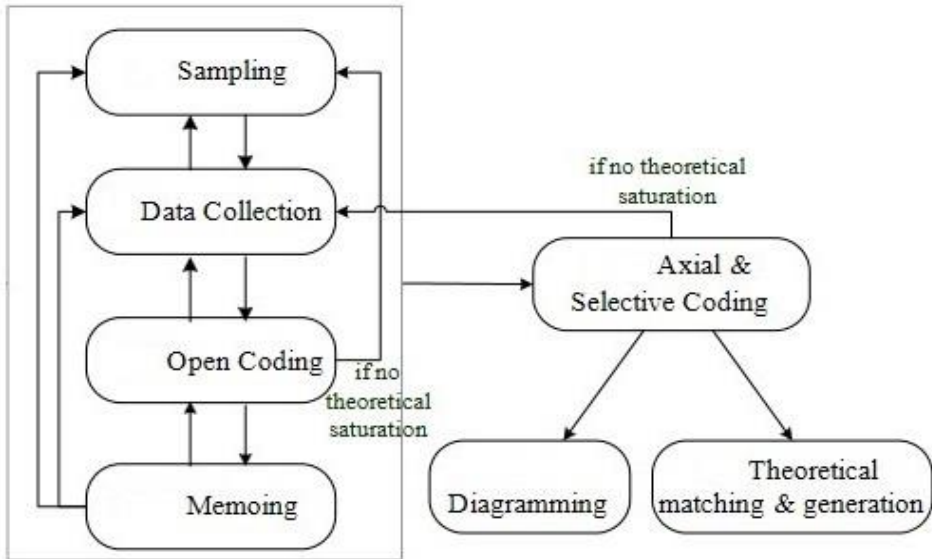


Figure 1. Grounded theory building process

### **Statistical population and sample**

Participants in the study were selected among the most information and insight into the phenomenon under investigation. Accordingly, three snowball sampling methods, Purposive Sampling and theoretical sampling, were used in combination. As one of the most fundamental components of the fundamental method, theoretical sampling provided the ground for comprehensive interpretation and achieved theoretical and analytical saturation of the phenomenon under consideration. Participants included members of the Telegram Social Network Comic Channel “<https://t.me/s/jokcom>” (which had more than 2879 members) and those on Instagram and Twitter who liked the corona content referring to the jokes about the covid-19 pandemic inside Iran.

The search strategy was with #jokes #corona. Accordingly, these groups’ capacity was used to obtain the data in this study, as the views and opinions of some members of this group were highly reflective. Based on initial acquaintance with some of the members of this virtual community, it was determined that the members of this network had different job and social statuses; Thus, by repeated calls through the social networks for detailed surveys, by the snowball method, we have reached 25 suitable samples.

In this study, observation and interview with participation was used to collect information; The researchers always followed the group’s hot discussions, and high likes of the jokes and new insights

into the topic of research were found with the direct observation and reading of the messages. The researchers also sometimes enriched the data in terms of the researchers' questions directly by directing the questions of this study using participatory observation techniques. All data was immediately recorded. The researchers identify some of the group participants and samples that contained information or perspectives that effectively advance the objectives of this study for semi-structured interviews. In this study, different samples of different ages, gender, education, and occupations were used to increase the research results' generalizability. Due to the data analysis process as well as the level of information of the sample individuals in this study, some samples were interviewed twice at different time intervals. The characteristics of these interviews and the statistical sample are presented in Table 1.

To increase validity, the researchers used two techniques. In the first technique, precise parallel information was obtained, and after data analysis, the results were presented to the experts, and their comments were obtained. In the second technique, data analysis and results were presented to some of the respondents, and their reactions were observed during the final reporting phase. To achieve research reliability, researchers by carefully guiding the interview during data collection, creating structured processes for conducting convergent interviews, attention to gathering duplicate data at different time points, and interpreting them, reaching the homogeneous point of the duplicate and preliminary data results in the research process, increased reliability.

## Results

Table 1. Characteristics of the participants

Age Category	Gender	Level of Education	Occupation
19-26	7 M - 5 F	4 Diploma 6 Bachelors 2 masters	5 unemployed 4 Marketplace 2 employees 1 driver
26-36	6 M - 4 F	1 diploma 6 Bachelors 2 masters 1 PhD student	2 unemployed 3 Health staff 4 employees 2 teachers
36-46	2 M - 1 F	1 diploma 1 bachelor degree 1 Ph.D.	1 seller 1 employer 1 Professor

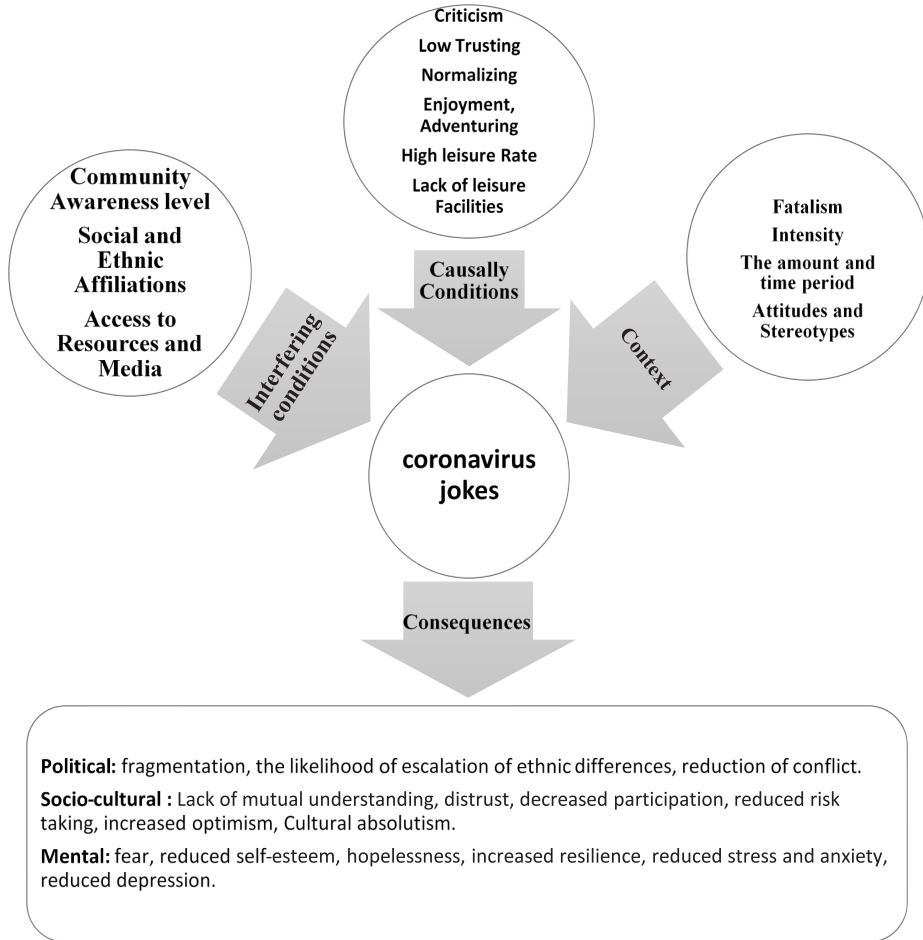


Figure 2. The effects and consequences of corona jokes

### **Causal conditions shaping Corona Jokes**

Most jokes were in Instagram stories and Telegrams. Following the analytical approach of fundamental theory and the Strauss and Corbin paradigm model, the results were obtained in Figure 2.

In stressful and critical situations, there are many factors involved in shaping the phenomenon of jokes, such as the coronavirus epidemic. One of the main causes of jokes in Iranian society is critical jokes about problems and limitations. In this category, jokes each point to some or all of the flaws. In a general classification, Sometimes the criticism is about the individual, sometimes about the family, sometimes about the society and the rulers, sometimes about the situation, political and sometimes about the dynamics of all this together and the changes that come with it,



and sometimes it deals with static defective situations and illuminates the spark for change.

The jokes in this sub-genre have a serious look at pathology. As a social pathologist, a comedian produces or redefines jokes; however, it can sometimes magnify or even create an issue as a defect or social damage. Self-criticism is a subset of this category whose acknowledgment and affirmation are negative. Critical jokes about society comprise the most detailed part of jokes. In the history of Persian literature, such as “Malijaks, clowns, Talkhaks, Haji Firouzs, etc,” Joker plays fundamental roles (Gkorezis et al., 2014). According to the theory of incompatibility, Humor and jokes are derived from an understanding of one’s dissonance. There is an apparent dissonance between people’s expectations and knowledge of what is happening in jokes, Humor, or nonsense. Indeed, there are socio-political, Inflation, inconsistencies, and events that become the subject of criticism (Tavakolirad & Ghaffary, 2017).

Another reasons of Joke making in Iranian society is at individual, interpersonal, and institutional levels. In this aspect trust is key element. Trust is defined as believing in others because we depend on others to achieve our needs (Martin et al., 2003). Trust is a dynamic phenomenon that depends on various factors, each of which effectively builds a trust plan (Tyler, 2003). When the trust in society falls, the context for the spread of jokes such as Coronation jokes is broadened in various individual, cultural, and political forms. Many Jacks’ roots against ethnicities, languages, personalities, and political institutions in society undermine mutual trust (Tavakolirad & Ghaffary, 2017).

For example, consider the following statement: “The number of jokes that are made on a topic is also partly essential, and because of the distrust of many people in the official media, many people become aware of crises and inflammation after reading these jokes online. There is a reason why this style of response to the crises of society is useful.”

It is quite clear that “normalization” is another factor influencing this phenomenon of society. The existence of multiple crises leads to the normalization of problems and crises, is a part of people’s lives, and joking is a mechanism for dealing with them humor. In this situation, it acts as a coping mechanism. Participants’ statements reflected the impact of these experienced crises: “So many of these bad things in society have been accruing that it is normal for everyone.” Or “In recent years, there have been a series of crises in Iran that have led to a lack of attention to major problems and serious threats, which make crises such as the Coronavirus is less important.”

Some examples of Related Jokes: “All-natural disasters invited Corona to a meeting, at the end of the meeting it was decided that Earthquake kills



people, Corona catch them, the flood will take them away, And eventually the locusts eat them” or another joke: “Be prepared after going through the pollution stages, plane crashes, and road accidents, flash floods, sand storm, droughts, Inflation and earthquake we reach flood stages / The compatriots who survive will go to the volcanoes and meteors stage, then if we survive, we will go to war with Corona / If we pass this stage we will go to the final.”

Humor is a mechanism for dealing with life’s problems. A survival skill is to get away from a challenge. Stress coping mechanisms are cognitive and behavioral efforts that individuals use in stressful situations to cope with their issues and problems and play an essential and decisive role in their physical and mental health. Effective coping strategies reduce one’s response to high-stress levels and modulate its detrimental effects (Farzin, 2010).

An example of a statement related to this point: “We need to have the morale to manage and resolve a crisis. Without morale, we are definitely losers. Indeed, you agree that no one’s cannot get morality by crying or sighing and regretting. By the way, the opposite of a smile that gives life to a person.”

The two factors of “fun” and “adventure” are also the most critical factors that cause black jokes in society. Some people, Willingly or unintentionally adventurous to arouse others’ emotions as well as psychologically evacuate. A misunderstanding of pleasure and euphoria, along with the adventure factor, is another factor to makes such jokes. One of the innate tendencies of humans is the tendency for happiness and comfort associated with escaping suffering, but in an anomic society, the joy of bitter jokes is accompanied by the happiness of some and others’ anger and suffering. Some society has a crisis of meanings and meanings of life, in which it sees pleasure as selfish and, by using jokes related to crisis and stressful situations, enables happiness for itself and fatal suffering for those around it. For Freud, the human psyche is naturally inclined to relax and does all he can to prevent psychological strife (Critchley, 2002). Therefore, with Humor and Joke, they are looking for prosperity, but this success may have positive or negative effects on society.

Finally, two other factors that cause jokes in stressful situations and epidemics like Coronavirus among the population are “lack of recreational facilities” and “increased leisure” due to the closure of schools and universities. Most workplaces are compulsory to stay home.

People use different types of jokes for their leisure time. When society’s leisure facilities are not cheap and effective, people are finding ways to fill their leisure time with economically less expensive ones. Web browsing, virtual social networks, jokes, and various forms are one of the leisure tools that are economically costly for its consumers.

### ***Context and interventions affected Coronavirus Jokes strategies***

The occurrence of corona jokes is influenced by various factors such as 'stereotyped attitudes and perceptions such as fatalism', 'community space', 'intensity, extent, and time period'. One of the crucial reasons that lead to the creation of coronary jokes and the use of different strategies against them is stereotyped ideas and attitudes. A stereotype or attitude reflects a simple, unverified, and sometimes incorrect judgment about another group or event (Eckstein, 1996).

One of the most influential attitudes is fatalism. In the most social networks, all-natural disasters, catastrophes, catastrophes of human and animal disasters, enumerated one by one, with calmness and humility, and finally the question asked that what is our next calamity, Lord of the world?

Some of these messages say of a particular share of the calamities that God is constantly providing to the Iranians daily. According to one participant, "in everyday conversations, such perceptions and interpretations of the current catastrophe can also be seen and occasionally quoted openly. We may see and laugh, but seeing these messages with the Laughing emoji below or above them does not necessarily mean that they are funny. At least, it is sad and exhilarating". The implications of these kinds of messages show a gradual and slow change in our Iranian social psychology in the last two years: the transition of society from transformationalism to fatalism, which is undoubtedly an unfortunate event.

The most important feature of fatalism is the feeling that I do not have the power to redirect the events that will occur. In other words, the feeling of powerlessness, helplessness, and inability lies at the heart of fatalism. One recognizes that whatever comes next is predetermined, and in fact, the inevitable is interpreted. As a result, the role and power of choice, action, and human will are lost with the spread of fatalism. Destiny is a pre-written book. However, in the humanities, there are different views on fatalism. Still, overall, it is the sort of fatefulness that passive acceptance and the mere surrender to whatever comes close are undesirable and criticized by passivity, passive acceptance, and the mere surrender to whatever comes close. It should be noted that this description of fatalism is not similar to what has always existed in traditional societies under different names and titles. This article is not about fatalism in traditional society or in religious literature.

The kind of fatalism that creates the idea of "whatever comes next is good" or Realism and Logic avoidance, rely on the power of fancy, avoid change, is the focus of this text. Corona was like a beacon of disaster in Iran. Corona was like a Shoot, the deadly bullet of disaster in Iran to further segments of society toward fatalism. Undoubtedly, the spread of this

fatalism is accompanied by a decline in social responsibility, and therefore it must be taken seriously.

### ***Interfering conditions of Coronas Jokes***

Interfering conditions such as structural factors influence coronary virus jokes strategies and may facilitate or limit its movement, including three levels of community awareness, social and ethnic affiliation, and access to resources and media.

Social life is a field of different experiences. Sometimes in this arena, people are so melted in their social groups and values and their social and ethnic affiliations that they feel that they are dying out of their absence. This makes the person very emotionally attached to that group or culture. The production of jokes in this regard and its associated reactions, especially jokes whose ethnicities, cultures, customs, and social identities are affected. The effectiveness of jokes in community-specific conditions, such as the coronavirus epidemic, depends on the accumulation of production in the field and its dissemination on a wider social scale. Various media, especially cyberspace and various social networks, provide the opportunity to produce and reproduce jokes promptly, facilitating their release at high speed and volume. The above claim was evident in the words of some interviewees; Examples of quotes : “How many groups of jokes and humor have gone up in cyberspace these days. Just one Joke in that space. It’ll be less than a few days of pyramid jokes all over the country.” If it was a joke industry, we would have been the first in the world ... now that anybody makes or hears jokes... the jokes don’t die anymore”.

### ***Consequences of Coronas Jokes***

The phenomenon of coronary jokes in this study has different consequences. At the community level, it can be divided into three categories: “political”, “socio-cultural”, “psychological”.

Some jokes, especially unethical and genderism jokes, always consider culture superior and others less culturally based on a correct cultural understanding or the principle of cultural relativity. All created by such jokes in society cause groups, tastes, and ethnicities to be separated. Such a situation, destroys political solidarity and consequences to political fragmentation in the social sphere. Examples of quotes: “Jokes made for ethnicities ... If we examine their content well ... we find that those who made these jokes are in a position to know their own thinking above others.” That if they ignite, the whole community will burn jokes that put people, clans, and cultures in place, causing political segregation and ethnic strife in society.

Humor's social and cultural consequences draw attention and admiration and stigmatize the expression of criticism, thereby better accepting it and drawing social boundaries and reducing conflict between people with different aspect (Gervais & Wilson, 2005; Martin & Ford, 2018). Christy Davis has put forward a theory about the history of ethnic jokes in the world. His first point is that today's jokes are universal stupidity, dating back thousands of years (Laineste, 2005). Davis's view is that senseless jokes in the past targeted in most local communities because, at that time, people were generally rivals in neighboring villages or settlements. Although neighboring areas were culturally and socially similar, but based on some geographical or social and economic characteristics, usually one of them considered himself superior and valuable to the other. The foolishness of his neighbors made him laugh and Humor. Davis emphasizes that this laughter was not a laugh from hostility and aggression, but rather laughter has been our reflection in the tilting mirrors.

Moreover, Humor in a situation where despair is widespread in society can boost one's optimism. Optimism is one of the positive traits of human beings that has received special attention in psychology and social sciences over the past two decades. Optimism refers to the cases in which positive outcomes are usually expected, and these outcomes are considered as constant, general, and internal factors. Optimism, positive beliefs profoundly affect a person's illness and mental and physical health (Peterson, 2000).

Psychologically, the spread of corona jokes among people causes some people in the community to be in constant fear and anxiety. Applying some of these jokes to different circles, with the profound destruction of affection and solidarity, while also spreading distrust in society, precludes some people from being effectively present in the social scene and the decline in people's participation we will face is a decrease in risk-taking as a result of the crisis, despite the polluted and unstable environment.

Additionally, Humor and Joke in these situations can have good psychological effects. Various studies have confirmed the association between wit and anxiety reduction, depression, ease of sleep, and coping with death and emotional relaxation (Mager & Cabe, 1990; Mawdsley et al, 2007; Troller, 2003).

Humor is a way of coping with life's problems and Survival Skills to Get Away from a Problem (Shaw, 2010). From the perspective of the Relief Theory approach, laughter reduces the amount of energy used to inhibit and suppress psychic activities, which brings us pleasure and relaxation, and the secret to the joy of laughter lies (Shaw, 2010). It can be said that psychological stresses decrease the living being's ability to defend itself and increase its readiness for the disease. It causes changes in the endocrine

glands and these changes, in turn, affect immune functions and increases the vulnerability of living organisms to diseases, resulting in psychosomatic disorders and depressive problems (Lee, 2004). Freud believes that Humor has two main characteristics: first, quality improvement and everyone is allowed to free himself from the facts at once, without any social considerations, the second is a onslaught act of resistance to sanctions and restrictions. The post-restriction Joke is an uprising against pressure (Han, 2016).

## Conclusion

In their sweet and humorous form, jokes can help people identify abusive behaviors like social reformers. Still, when it gets dark and bitter, it disturbs human beings and disrupts productive social interactions in recognizing beauty. The Joke must be based on boundaries and limits so as not to offend human dignity and respect for the diverse insights of different cultures. There are no adverse and sometimes irreversible consequences at different psychological, social, cultural, and political levels. Humor is a tool for dealing with an anomaly, disorder, and heterogeneity. Some people like to laugh when they are worried about something. Psychologists believe that wit can guide mental health and rational thinking in the right direction (Meyer, 2000). Jokes related to stressful and critical situations such as the Corona epidemic in our society have become an antagonistic or defensive mechanism that people use to relieve themselves of society's-imposed chains or the daily pressures that they have on themselves in every way. Still, they are unaware that its outbreak can be devastating and leave many undesirable effects on society. Therefore, it must be acknowledged that Humor is a high-risk nature (Bitterly, 2018), and it is difficult to predict whether the Humor is appropriate because it is highly dependent on context and location (Bitterly, 2018). According to studies, Humor is successful when the audience considers it a mild and gentle violation (McGraw & Warren, 2010; Warren & McGraw, 2015; 2016). Moreover, Humor can make others laugh when it has two conditions: first, it must violate physical or psychological security (such as violating moral, social, or dialectical norms) and secondly, this violation should be low-risk and mild, not to exceed the Joke. researchers often define Humor as a tendency to violate norms violation (McGraw & Warren, 2010; Warren & McGraw, 2015; 2016).

Joke and Humor are like a double-edged sword; in an unbalanced situation, Can be harmful, and it has to have its own criteria. Throughout history, commanders sent comedians to keep the spirits of soldiers who were only a few meters from the front line, to make them laugh and not forget that life still have beauties and we have to fight to capture those

beauties. They laugh and remember their mother's beautiful laughs or their little girl; therefore, they do not give up. They fight to make fun of those laughs again.

### **Ethical considerations**

The authors have completely considered ethical issues, including informed consent, plagiarism, data fabrication, misconduct, and/or falsification, double publication and/or redundancy, submission, etc.

### **Acknowledgments**

Thank you to all participants in this study.

### **Conflicts of interests**

The authors declare that there is no conflict of interests.

### **Data availability**

The dataset generated and analyzed during the current study is available from the corresponding author on reasonable request.

### **References**

- Eckstein, H. (1996). Culture as a Foundation Concept for the Social Sciences. *Journal of Theoretical Politics*, 8(4): 471–497. <https://doi.org/10.1177/0951692896008004003>.
- Bitterly, T. B. (2018). *The Interpersonal Consequences of Humor*.
- Han, H., Kim, W., & Jeong, C. (2016). Workplace fun for better team performance: Focus on frontline hotel employees. *International Journal of Contemporary Hospitality Management*, 28(7): 1391–1416. <https://doi.org/10.1108/IJCHM-11-2014-0555>
- Critchley, S. (2002). *On Humour (1st ed.)*. Routledge. <https://doi.org/10.4324/9780203870129>.
- Dhama, K., Khan, S., Tiwari, R., Sircar, S., Bhat, S., Malik, Y. S., Singh, K. P., Chacumpa, W., Bonilla-Aldana, D. K., & Rodriguez-Morales, A. J. (2020). Coronavirus Disease 2019-COVID-19. *Clinical microbiology reviews*, 33(4):e00028-20. <https://doi.org/10.1128/CMR.00028-20>
- Farzin Rad, B., Asgharnejad Farid, A., Yekkeh Yazdandoust, R., & Habibi Asgarabad, M. (2010). Comparison of copying strategies and personality styles in depressed and non-depressed students. *Journal of Behavioral Sciences*, 4(1): 17-21.
- Gervais, M., & Wilson, D. S. (2005). The evolution and functions of laughter and humor: A synthetic approach. *The Quarterly review of biology*, 80(4): 395-430. <https://doi.org/10.1086/498281>.



- Gkorezis, P., Petridou, E., & Xanthiakos, P. (2014). Leader positive humor and organizational cynicism: LMX as a mediator. *Leadership & Organization Development Journal*. 35: 305-315. DOI:[10.1108/LODJ-07-2012-0086](https://doi.org/10.1108/LODJ-07-2012-0086).
- Lam, TTY.; Shum, MH.H.; Zhu, H.C.; Tong, Y.G.; Ni, X.B.; Liao, Y.S. et al. (2020). Identification of 2019-nCoV related coronaviruses in Malayan pangolins in southern China. *bioRxiv* 583(7815):282-5. doi: [10.1038/s41586-020-2169-0](https://doi.org/10.1038/s41586-020-2169-0)
- Lai, C.C.; Shih, T.P.; Ko, W.C.; Tang, H.J. and Hsueh, P.R. (2020). "Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and corona virus disease-2019 (COVID-19): the epidemic and the challenges". *International Journal of Antimicrobial Agents*. 55(3): 105924. <https://doi.org/10.1016/j.ijantimicag.2020.105924>.
- Laineste, L. (2005). Targets of Estonian ethnic jokes within the theory of ethnic humour (Ch. Davies). *Folklore: Electronic Journal of Folklore* (29): 7-24. DOI: [10.7592/fej2005.29.davies](https://doi.org/10.7592/fej2005.29.davies)
- Lee, J.-S., Koeske, G. F., & Sales, E. (2004). Social support buffering of acculturative stress: A study of mental health symptoms among Korean international students. *International Journal of Intercultural Relations*, 28(5): 399-414. <https://doi.org/10.1177/0022022119861151>
- Lu, R.; Zhao, X.; Li, J.; Niu, P.; Yang, B.; Wu, H. et al. (2020). "Genomic characterisation and epidemiology of 2019 novel Coronavirus: implications for virus origins and receptor binding". *The Lancet*, 395(10224): 565-74. DOI:[https://doi.org/10.1016/S0140-6736\(20\)30251-8](https://doi.org/10.1016/S0140-6736(20)30251-8).
- Mager, M., & Cabe, P. A. (1990). Effect of death anxiety on perception of death-related humor. *Psychological Reports*, 66(3\_suppl): 1311-1314. doi: 10.2466/pr0.1990.66.3c.1311.
- Martin, R. A., & Ford, T. (2018). *The psychology of humor: An integrative approach*: Academic press. pp: 130-139
- 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(1): 48-75. [https://doi.org/10.1016/S0092-6566\(02\)00534-2](https://doi.org/10.1016/S0092-6566(02)00534-2)
- Mawdsley, R. H., Verazin, E. J., Bersch, E. S., Crowley, M. C., DePhillips, S. B., & Perry, J. R. (2007). The relationship between humor and physical therapist students' anxiety. *Journal of Physical Therapy Education*, 21(1): 70-75. DOI:[10.1097/00001416-200701000-00010](https://doi.org/10.1097/00001416-200701000-00010)
- McGraw, A. P., & Warren, C. (2010). Benign violations: making immoral behavior funny. *Psychological science*, 21(8): 1141-1149. <https://doi.org/10.1177/0956797610376073>.



- Meyer, J. C. (2000). Humor as a double-edged sword: Four functions of humor in communication. *Communication theory*, 10(3): 310-331. <https://doi.org/10.1111/j.1468-2885.2000.tb00194.x>
- Peterson, C. (2000). The future of optimism. *American psychologist*, 55(1), 44. <https://doi.org/10.1037/0003-066X.55.1.44>
- Reff, R. C. (2006). Developing the humor styles questionnaire-revised: a review of the current humor literature and a revised measure.
- Romero, E. J., & Cruthirds, K. W. (2006). The use of humor in the workplace. *Academy of management perspectives*, 20(2): 58-69. <https://doi.org/10.5465/amp.2006.20591005>
- Shaw, J. (2010). Philosophy of humor. *Philosophy Compass*, 5(2), 112-126.
- Tavakolirad, M., Ghaffary, G. (2017). Black Jokes, Social Interactions and Its Destructive Consequences. *Quarterly of Social Studies and Research in Iran*, 5(4): 593-615. doi: 10.22059/jisr.2017.60892.
- Troller, P. J. (2003). Taking the “grim” out of Grim Reaper: families, humor and the dying process. <http://digital.library.wisc.edu/1793/41111>.
- Tyler, T. R. (2003). Trust within organisations. *Personnel Review*, 32(5): 556-568. <https://doi.org/10.1108/00483480310488333>
- Warren, C., & McGraw, A. P. (2015). Opinion: What makes things humorous. *Proceedings of the National Academy of Sciences of the United States of America*, 112(23): 7105-7106. <https://doi.org/10.1073/pnas.1503836112>.
- Warren, C., & McGraw, A. P. (2016). Differentiating what is humorous from what is not. *Journal of Personality and Social Psychology*, 110(3): 407-430. <https://doi.org/10.1037/pspi0000041>