The role of future planning scenarios in reducing the social impacts of coronavirus pandemic in Saudi Arabia

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Abstract: The present research aims to identify the role of future planning scenarios in reducing the social impacts of the Coronavirus (COVID-19) pandemic in Saudi Arabia. It defines the foundations of the success, types, approaches for using, as well as criteria and indicators of designing and building future planning scenarios to reduce the social impacts of COVID-19. It also explores the differences in the participants' responses to the criteria and indicators of designing and building future planning scenarios to reduce the social impacts of the COVID-19 pandemic in Saudi Arabia due to academic degree, position in the Ministry of Human Resources and Social Development, and years of experience. The author adopted the descriptive analytical approach and used a questionnaire to collect data. The results provide a ranking of each item in the five domains according to the participants' responses regarding the benefits of planning scenarios, the foundations of success, types of planning scenarios, methodological steps of using them, and criteria and

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- A Proposal for a National Social Program for Supporting the Elderly in Saudi Arabia
- The Reality of the Consumption Behavior of the Saudi Woman
- Obstacles to Saudi Women's Participation in Volunteering (Co paper)
- The Need to Establish a Social Development Organization to Support Productive Families
- Efforts of the Society Organization Method in Satisfying the Needs of the Poor Families

Currently, I want to publish a paper entitled “The Role of Future Planning Scenarios in Reducing the Social Impacts of Coronavirus Pandemic” (a single-author paper) that addresses contemporary issues and reduces social impacts of COVID-19.

PUBLIC INTEREST STATEMENT
The world has recently experienced panic and confusion as it faces a novel virus (the novel coronavirus) whose outbreak has severe social repercussions. This pandemic poses a direct threat to human life. Consequently, the strict plans will be inappropriate along with the world's rapid progress and development. The importance of future planning scenarios is highly apparent as they bring immediate benefits. They convert uncertainty into manageable and measurable parts, reduce confusion, and give us the confidence to sort out and classify what is unknown and important. Thus, you can act with confidence and act quickly with options for all possible outcomes. Based on this basic rule, the post-Corona world differs from what came before it, leaving the degree and scope of the difference to the development of events.
indicators of designing and building them. Additionally, the results showed no differences in the responses to the criteria and indicators of designing and building the scenarios that reduce the social impacts of the COVID-19 pandemic due to academic degree, and years of experience, whereas there were differences due to position.

**Subjects: Education - Social Sciences; Sociology & Social Policy; Development Policy**

**Keywords: Planning scenarios future; pandemic; social impacts; Coronavirus**

1. **Introduction**

Corona pandemic has created an unprecedented global crisis that resulted in changing the political, economic and social priorities as well as the emergence of new priorities. Moreover, it has grabbed the attention of the scholars interested not only in medical research but also in social and human analyses because of its human, anthropological and social implications that directly affect and threaten human life as well as its continuity. The spread of Coronavirus (Covid-19) since December 2019 has been classified as a state of global panic as it is a global health threat. Thus, World Health Organization has classified its spread as a pandemic, which means that it has gone out of control. The global organizations concerned with human health have linked this to the high increase in cases and deaths worldwide. This rate symbolizes the danger stage in several developed countries, such as China, Italy, and Spain (Wang et al., 2020) and (Al-AL-SKAFI, 2020).

According to WHO statistics, the cases were more than four million around the world, and deaths were approximately two hundred and seventy-five thousand in May 2020 (https://www.care.gov.eg/EgyptCare/Index.aspx). On March 5th, 2020, the cases were (362,664), and the recovered were (207,932), while deaths reached (12,310) in the Arab countries. Cases were (37,136) in Saudi Arabia (Muhammad & Hussein, 2020).

Infectious diseases, including coronavirus, are health phenomena of a social nature because they spread among human groups. The social and cultural structure of a society affects the rate of infection. Social habits, which maximize infection rate, have to be changed to avoid it (Ibrahim, 202, p. 267). Since the beginning of the virus spread, everyone has been following news bulletins to know cases and deaths. Moreover, the painful scenes in many countries, such as America, Italy, and Spain, have become their major speech.

This crisis may cause multiple problems if no solution is presented. What confirms this is that with the start of the compulsory lockdown for the Chinese citizens and with the high rates of cases and deaths, the Chinese Ministry of Health, on January 26th, 2020, launched hotlines for guidance and support services for citizens and asserted that the Chinese people, as a result of this epidemic, would get exposed to numerous pressures and problems because of anxiety, stress, depression and various types of social problems that which require instant support (COVID-19 Resource Centre, 2020).

The social effects of the virus outbreak were worse than expected as this pandemic made all groups of the community exposed to unprecedented change in a short time, and so change their lifestyle. It also destroyed the economy of many countries, affected health care systems globally, prevented movements, and stopped flight (Viswanath & Monga, 2020). In addition, many individuals lost their temporary work, and others became captive to the fear of passing on the infection to family members. They were prevented from meeting their friends and forced to stay at home, especially with the start of the evening curfew (Al-Fiqi & Abu Al-Fotouh, 2020). Furthermore, the Corona pandemic will fundamentally change the social and ecological fabric of human societies in the long run, particularly the organization of the communities. It also affects how social
institutions operate, how people behave daily, and how they interact with each other on the global level. It also disturbed the social service systems (Dominelli, 2020).

However, this does not mean a global rupture between human beings, but rather a new concept will be generated that humans have to be closer to each other and need solidarity and more cooperation to face the relevant threats. A clash may occur between the hegemonic policies of governments and feelings of solidarity between people at this stage. The result will be that the world needs a global system that is more concerned with the substantial needs of people and more responsive to keep the integrity of the globe to continue giving for the benefit of its inhabitants (Al-Ardawi, 2020). Thus, it has become clear to the author that social aspects have a great impact on the rates of infection with coronavirus, as confirmed by the World Health Organization’s warnings of the necessity of social distance to reduce the spread of the virus.

Asmundson (2020) indicated that the virus led to a state of fear and anxiety among the world’s population. Sadati et al. (2020) showed that it caused social anxiety and new concerns among citizens throughout the world. Halford (2020) asserted that with its emergence, its social dimensions have become clear as we cannot understand the shape and dynamics of this pandemic without thinking about the social aspects. Cao et al. (2020) illustrated that the virus created not only the risk of death from infection but social pressures, as well.

Covid-19 has become a pandemic in early 2020, as the World Health Organization’s Emergency Committee declared the outbreak of Covid-19 as a public health emergency. Subsequently, several countries have imposed restrictions on traveling to avoid infection. Since that announcement, the countries have been suffering from the virus and have attempted to develop plans and policies to prevent its spread and reduce its social repercussions and effects (El Zowalaty & El-Zowalaty, 2020). Consequently, countries have reconsidered the status quo and developed future plans as well as scientific methods to combat this pandemic rapidly and effectively (Saqr, 2020).

On the other hand, thinking about the future has become a part of the strategic planning at the individual, institutional, political, economic, social, and cultural levels as envisioning the future and drawing its features is an effective mechanism for investing the present data in building promising future. A new science called (future foresight) has appeared among thinkers and leaders and has become one of the most important strategic sciences for large institutions and countries that develop their plans.

Crisis threatens everyone, so it has to be addressed effectively. It may threaten the institution or the entire system and requires dealing with surprise, alternatives and options, diverse scenarios, elements of decision-making, means of successful implementation of the decision, preparation for the consequence of the decision, the ability to deal with the crisis, and its repercussions on the sectors of the local community and other societies. This issue is primarily scientific based on knowledge, information, skills, correct trends, planning, organization, control, good implementation, evaluation, and feedback, as well as disregarding randomness, urgency, arrogance of authority, and improvisation (Khatib, 2020).

Faraj (2006) claims that the concept of crisis management refers to the management’s ability to anticipate potential crises, prepare to prevent them, address them efficiently, and prepare various alternatives to face them and control sudden situations or limit their exacerbation. The author contends that this concept comprises various processes, such as planning, organization, and evaluation. It requires developing future scenarios.

On the other hand, crises may occur suddenly and create relevant problems, so it may be difficult to address them well. Time pressure, as well as social and psychological pressures, cause the inability to control matters, especially if the sources of information are unavailable or insufficient to take specific positive decisions. Crises maximize in case they are not addressed
Future planning scenarios play a salient role in reducing the effects of these crises, including the novel Corona pandemic (Covid-19).

The novel Coronavirus spreads rapidly worldwide. To protect people from its repercussions, especially the social ones, to control the situation in light of these rapid changes, and to be able to deal with these repercussions, we must build and prepare models that can absorb or reduce this high percentage of risks. The optimal method is to develop future scenarios. We have to consider what occurs because of the multiple possibilities for the future, the emergence of new trends in life, and the sudden changes that the world may witness, such as the emergence of more pressures and challenges for planners and decision-makers. Thus, people have to comprehend and confront the ambiguity of the future and the present using scenarios. Lack of a future vision in the past has created an ambiguous present (Rashid, 2008; Shenouda, 2010).

Scenarios are not the reality of the future but a way to represent it to enlighten the present action in light of desired or possible future situations. Thus, they provide the opportunities that help control history, the present, and the future. Moreover, they are a description of a possible future situation, with an explanation of the features of the approach that creates it. All future studies have to conclude with scenarios (Baaten, 2006; Ghaudee et al., 2008).

Nettelmann (2013) stated that the scenario is not a prediction of the future, but it sheds light on the factors causing change. Moreover, future scenarios are a representative description of possible future dimensions, starting from the current situation and reaching a specific point in the future. They are adopted by the bosses who attempt to understand the potential aspects of the future to make proper decisions at the utmost (Shenouda, 2010).

The aims of the scenarios can be summarized in presenting the possibilities, abilities, and alternative options involved in future development and revealed by the different scenarios, presenting the consequences of the different options or alternatives, and focusing people’s attention on issues that should be given priority in their interests. The aim of that is to enable people to think about all these matters and provoke discussion about them, elicit reactions, activate their imagination, and then help them make better decisions about the future (Al-Sun, 2011).

Based on what is stated, the author views that scenarios as future scientific studies in which they depend on reason and logic in dealing with the present and future development. The scenarios are seen as a tool to change the world, not just to understand it. They are dealt with as the basis for adopting a desired future vision observing people, and adjusting their decisions and actions to implement this desired future vision into reality. Hence, it is necessary that the analysis of scenarios ends up with recommendations regarding the choices and decisions that should be taken now to reach the desired future setting.

The role of scenarios is highlighted in presenting different forms of the future and the consequences of actions, attitudes, and actions. Thus, the characteristics of the required future vision are defined. The success of this vision is based on the planning process. Also, scenarios are strategic planning methods that may help decision-makers (Thomas et al., 2006).

Abdel-Hadi (2017) identified the importance of future scenarios and aimed to identify the effect of using the scenarios method (the theoretical method) on the success of the strategic plan. The results showed a statistically significant impact of applying the scenarios method at the level of (0.05) on the success of the company's strategic plan, the accuracy of expectations on the movement of factors in the external and internal environments of the company, and the company's effectiveness in implementing its goals, etc.

In the 1970s, scenario planning became popular as a tool that helps organizations in this process by filtering countless possibilities for future situations. It is a limited set of coherent,
logical, and interconnected visions that can influence the process of strategic decision-making (Fink et al., 2005). Scenario planning is a method of creating, strengthening, and developing. It also depends on information and facts that the planners adopt for building a scenario that simulates reality and can be adopted for the future. In addition, quantitative methods are employed to analyze data and identify the relationships between scenario planning and the surrounding phenomena (Thomas et al., 2006).

Cann (2010) defines scenario planning as a creative and flexible strategic tool for creating and developing alternatives and strategic methods for competitive success, survival and prosperity for organizations operating in an uncertain environment. Scenario planning is a mental and practical tool that maximizes the expertise of the organizations’ personnel and provides them with skills required for building future scenarios, considering environmental conditions, assessing the current situation, and making appropriate decisions (Al Douri & Saleh, 2011).

According to Torrielli and Nijkamp (2002), scenario planning is a process of positing several informed, plausible, and imagined alternative future environments in which decisions about the future may be played out for the purpose of changing current thinking, improving decision making, motivating persons, and improving performance. Scenario planning represents a road map for the decision-makers who need to evaluate and choose the best strategic alternatives for the future. Ideas, predictive signals, deep insight, and changing possibilities can form the intellectual base that defines the strategic options to cope with the change in the future (Heijden, 2005). Accordingly, the author concludes that planning a future scenario has some future indicators represented in a future vision, some assumptions for future situations, dealing with long-term variables, and making strategic decisions to face the future situation.

The process of building future scenarios, in general, aims to define future actions and direct the future differently. It helps decision-makers discover the driving forces of the future. Hence, it tremendously benefits planning; for example, it provides the appropriate information relevant to plans, identifies the effective factors of the external factors that can affect the future growth of institutions, improves adaptation with the expected changes, allows creative thinking, and identifies development strategies as well as the opportunities and risks resulting from their implementation (Al-Omari, 2010). Scenario planning is conducted in a specific or different method. It also describes alternative possibilities for the future and presents an overview of the options available to human action, explaining their expected results. It may provide us with implicit or explicit recommendations concerning what should be done (Baaten, 2006).

Borjeson et al. (2006) reported that logic strongly affects the success of building future scenarios because there will be no integrated work that simulates reality and helps predict the future without it. In addition, a clear plan should be available as the beginnings and ends of the scenario are among the most important factors affecting its success. In other words, scenarios should have a planning plot, which combines a remarkable beginning and logic and an end that leads the community members to fulfill future predictions.

Owolabi (2011) adds that future attitudes are among the most important dimensions of a successful scenario, as predicting the future has to be considered when formulating a scenario. This aspect indicates that the change of any party entails a parallel change for the other. Scenario planning plays an essential role in simulating the level of environmental uncertainty or disturbance by analyzing, diagnosing, and defining the environmental characteristics of the forces and the aspects of the interaction between the organization and its environment. Nature and level of a strategic response to situations of environmental uncertainty represent the stages of the organization’s life cycle as life and death situations. Thus, the role of scenario planning in dealing with the environmental movement can be understood; it determines the pattern and nature of the strategic response to uncertainty situations (Al-Hadrawy & Muhammad, 2013).
Scenario does not only reduce the uncertainty gap, but it also defines the fundamental assumptions; forms the mental models for strategic decision-makers as it defines what must be done to survive and prosper; acts as the basis of strategic evaluation and control to identify the opportunities, threats, strategic alternatives, and directed forces that constitute the desired results; reshapes the mental models of organizations. It is of a constructive and cultural value based on brainstorming and activating the collective mind of the organization to face the unknown competitive challenges through brainstorming ideas to solve difficult problems (Heijden, 2005).

Scenarios are deployed to analyze the contents of current actions, such as thinking about possible actions and reactions. They also allow us to perceive possible future environments that could develop and understand the implications of strategic decisions taken in the present. When considering some possible future situations, decisions will be better, and strategy will be based on deep insights, causing higher success (Al-Saeedi, 2010). Scenario planning also plays a role in activating strategic flexibility, adaptation, and response speed as it is an effective tool that reinforces the foundations’ ability to successfully compete in an inconstant and turbulent world.

The substantial factors of success in a competitive and complex business environment are speed and adaptation. Speed is an aspect of adaptation and the decisive factor in a turbulent, complex, and fast-changing environment. Adaptation is the ability to deal with levels of complexity. The optimal solution to address complexity is variation (flexibility and adaptation). Both of them require the development of various alternatives and strategic options that tools of scenario planning can provide efficiently through creating a balance between alternatives (Global Business Net Work, 2008).

Wright (2000) clarified how scenario planning represents an approach of constant improvement of the strategy considering that it is an advanced method that differs from traditional methods. The results showed that scenario planning is a modern method that empowers the foundation to maintain its quality and accomplish its goals to ensure sustainability and progress. Verity (2003) investigated the importance of applying scenario planning in business, especially in the field of uncertainty environments, as a strategic method to think about the future. In addition, foundations that adopt strategic planning for a long time have to follow the strategic planning of the scenario.

The study also highlighted that the process of developing and building the scenario requires much information to define which scenarios are appropriate for the environment where they are applied. The results demonstrated that the major challenge for administrative leaders was how to choose the appropriate scenario. Furthermore, leaders had to carefully explore the reality and develop future possibilities, expectations, and tasks, considering the available indicators, experiences, and information to build the appropriate scenario.

Thomas et al. (2006) demonstrated the relationship between scenario planning and the educational organization’s perspective. The study clarified the importance of adopting these scenarios despite the availability of quantitative data that can be adopted in forecasting the future, i.e., real rather than estimated or speculative data. The study used the questionnaire to collect data. Moreover, the questionnaire was applied based on developing scenarios and assessing their level of learning. The scenario was applied to measure the impact of scenario planning on the organization.

Borjeson et al. (2006) identified the types and methods of scenario and its role in exploring future features through an overview of the events and identifying the future needs based on the information that enables the scenario planning to adopt them in developing the necessary plans and possibilities. They considered the available information, as well as the consistency and integration of events using advanced technologies to obtain the required information. The study showed the importance of developing future scenarios as a guide for developing the foundations to be able to face unexpected possibilities. Moreover, they can be adopted as a guide for continuity, growth, and progress, so the organization will not be exposed to loss and collapse.
Chermack et al. (2010) evaluated scenario planning and organizational ambidexterity as two key tools for leveraging teams toward organizational effectiveness. The results revealed that using scenarios in planning and adopting organizational competence maximize the common strategic approaches. The study recommended that organizations should modify their organizational structures to have the potential to build teamwork that can increase organizational effectiveness and adopt such approach in accomplishing tasks.

Owolabi (2011) investigated the importance of scenario planning in managing performance in the manufacturing sector in Nigeria. The study was based on the assumption that the world faced a state of uncertainty due to rapid progress, events, and rapid changes. Accordingly, managers had to have the expertise and sophisticated skills to prepare for the future by developing multiple scenarios to meet all expected possibilities. The results showed that factories that adopted scenario planning achieved greater success and performance than other factories.

Montibeller and Morton (2011) illustrated how diverse scenarios that cope well with qualitative and quantitatively defined variables could be developed quickly and investigated regret resulting from not adopting multi-criteria decision analysis that facilitate decision analysis within and across scenario comparisons. The results indicated that the alignment between scenario planning and multi-criteria decision analysis extensively benefited the strategic options’ evaluation process.

Al-Hadrawy and Muhammod (2013) identified the effect of the interactive relationship between success factors of strategic scenario planning and its performance in effective crisis management in the local administration in An-Najaf al-Ashraf. The results illustrated a correlation between the success factors of strategic scenario planning and its performance indicators in the effective management of crises in the local administration of the province.

Shermack et al. (2015) identified the effect of scenario planning on the participants’ perceptions of the creative organizational climate in the United States of America. The results showed a positive correlation between scenario planning and improving perceptions of the creative organizational environment.

Accordingly, it is important to develop future scenarios because they solve problems, raise performance, easily identify the major problem and its effects and provide urgent solutions, present specific scientific solutions, and suggest an organized approach of thinking. However, to the author’s knowledge, no previous study addressed developing future scenarios to reduce the social impacts of the novel coronavirus (Covid-19). These scenarios are beneficial, especially for crisis management.

Al-Skafi (2020) presented the strategies that help adapt to home quarantine by presenting clear and practical steps for all family members during quarantine. They involve positive, cognitive, emotional, and behavioral strategies by focusing on changing negative thoughts, controlling negative emotions and feelings, and conducting behavioral actions that kill spare time and help forget the problem of quarantine and social distancing. Adaptation shows the person’s voluntary responses to the current situation, so one will be aware of everything regardless of unrealistic impulses that may push one’s psychological pressures and disorders, such as anxiety, tension, and depression.

Abd Rabbo (2020) investigated media policies and their role in reducing the risks of the outbreak of Coronavirus. The results showed the virus role in changing human life and reliance on social media technology, the need for safe coexistence with the spread of the virus, and the need to reinforce societal and interactive media. They showed technical means in holding social meetings and workshops and controlling any controversial issues that affect the normal style of life and spreading rumors about the number of cases or deaths.
Ashour (2020) explored the media role in predicting and raising awareness to confront the novel Coronavirus. The results showed that the influence of media was achieved in light of presenting adequate information on the virus and some cases as well as their families. Al-Dahshan (2020) aimed to develop advisory scenarios on the future of education after the Corona pandemic. The results illustrated that distance learning would be fundamental in the upcoming period, especially in developing countries, as well as rural, poor and deprived areas.

Philipp et al. (2020) aimed to understand the economic shock of Coronavirus. The study presented three scenarios to combat the Coronavirus pandemic, focusing on social distance until 2020. It was applied to South Korea and Singapore.

The results of the previous studies highlighted the importance of developing policies to combat the Corona pandemic and its various implications. However, Al-Anzi and Al-Saedi (2014) showed that the scenarios have not been completed yet. For the present research, it is not among the aims of the future planning scenarios to draw the future, nor to develop a specific strategy or plan for those policies to deal with the social repercussions for reducing the Corona crisis. Further, these scenarios aim to provide strategies that help decision-makers choose the best future to reduce the repercussions of this crisis. Hence, the present research aims to identify the nature and determinants of scenario planning that reduces the social risks of the novel Coronavirus (Covid-19) in the Saudi community.

2. Statement of the problem

2.1. The problem of the present research stems from the following aspects

Scientists have asserted that it is impossible to eliminate or combat the Corona pandemic. For the first time in human history, people adopt quarantine at homes voluntarily and comply with the instructions of the governments that their homes are the safest places to protect them from this virus. Hence, the plan to coexist with this pandemic has become necessary, necessitating identifying life features during the outbreak of Coronavirus and years later. Consequently, we can develop policies and scenarios that address and reduce the social impacts of the Corona pandemic.

Recommendations of some conferences assert the importance of future foresight, such as the International Conference on Strategic Thinking and Future Foresight held in Algeria on 13–14/10/2019 to spread public awareness on the importance of creating the future and highlight the global, regional and national future trends of the issues that interest the Algerian and Arab community. They also provide the opportunity for Arab authors and thinkers concerned with foresight and future issues. They instill the concept of foresight in the development process, especially in the field of developing the perceptions of planners, decision-makers, strategy makers, and policy makers (The International Conference on Strategic Thinking and Future Foresight, 2019, https://www.diae.actions/actions).

Seminars and conferences addressed the novel Corona pandemic from various aspects, such as the seminar entitled “technological infrastructure and digital transformation and its future roles in education during Corona pandemic and its aftermath” organized by the National Planning Institute in Egypt as a national expertise house and as a thorough center for all state departments and institutions, in general, and the Ministry of Economic Development and Planning, in particular (Al-Dahshan, 2020); and the international virtual conference entitled “The Novel Coronavirus Pandemic … Multidisciplinary Challenges and Practices”, held by Helwan University on June 4th and with the participation of professors from international and Egyptian universities, to create a platform for scientists and authors. In these seminars and conferences, authors can exchange knowledge and visions on the Corona pandemic and present their current studies conducted and the most important future research directions. Moreover, the online conferences entitled “Corona Pandemic between Challenges and Repercussions” and “Corona (Covid-19) Pandemic between the Inevitability of Reality and Aspirations” were held in Jordan via Zoom application.
Novel Corona Pandemic Conference: Multidisciplinary Challenges and Practices, 2020, [http://www.helwan.edu.eg](http://www.helwan.edu.eg), (Recommendations of the Coronavirus Pandemic Conference between Challenges and Repercussions, 2020, [https://www.for9a.com](https://www.for9a.com)), (Corona (Covid-19) Pandemic between the Inevitability of Reality and Aspirations, 2020, [https://www.minia.edu.eg](https://www.minia.edu.eg)) and the international conference entitled “The World in light of Corona Crisis: Problems and Solutions” on 30–31 May 2020were held via Zoom. These conferences recommended holding future conferences covering the various impacts of the Corona pandemic (Ramadan, 2020).

Scarcity of the studies that attempted to identify the effects of this crisis, especially on the social life, such as Hashem (2020), Mahmoud (2020), and Telji (2020), handled some of its social effects, seriousness, and necessity to reduce them. This aspect was confirmed by the findings of a study conducted in the School of Public Health at Harvard University on the economic scenarios to combat the novel coronavirus by identifying the social and economic impacts and the need to continue applying the rules of social distancing until 2022 unless the country's capacity to care for critical cases maximizes (Philipp et al., 2020).

2.1.1. The present research seeks to address the crisis by raising the following questions
(1) What are the benefits of future scenario planning in reducing the social impacts of the Coronavirus pandemic?

(2) What are the foundations that ensure the success of future scenario planning in reducing the social impacts of the Coronavirus pandemic?

(3) What are the types of future scenario planning that reduce the social impacts of the Coronavirus pandemic?

(4) What are the approaches for using future scenario planning to reduce the social impacts of the Coronavirus pandemic?

(5) What are the criteria and indicators that can contribute to designing and building future scenario planning to reduce the social impacts of the Coronavirus pandemic?

(6) Are there differences in the participants' responses to the criteria and indicators that can contribute to designing and building future scenario planning to reduce the social impacts of the Coronavirus pandemic due to academic degree, position in the Ministry of Human Resources and Social Development, and years of experience?

3. Objectives
The present research paper aims to identify the benefits of future scenario planning in reducing the social impacts of the Coronavirus pandemic, the foundations that ensure the success of future scenario planning in reducing the social impacts of the Coronavirus pandemic, the types of future scenario planning that reduce the social impacts of the Coronavirus pandemic, the approaches for using future scenario planning to reduce the social impacts of the Coronavirus pandemic, the criteria and indicators that can contribute to designing and building future scenario planning to reduce the social impacts of the Coronavirus pandemic, and the differences in the participants' responses to the criteria and indicators that can contribute to designing and building future scenario planning to reduce the social impacts of the Coronavirus pandemic due to academic degree, position in the Ministry of Human Resources and Social Development, and years of experience.

4. Significance
4.1. A. Theoretical significance
The significance of the present research stems from the novelty of the topic it addresses, so it presents an academic reference for the author. To the author's knowledge, no previous study tackled the nature and determinants of scenario planning that reduces the social risks of the novel Coronavirus (Covid-19) pandemic. Few studies addressed future scenario planning. Moreover, the
results of the research reinforce future studies and their role in crisis management. In addition, the research highlights the cities where the cases maximized.

4.2. B. Applied significance
The present research helps decision-makers make appropriate and effective decisions that reduce the social impacts of the novel Coronavirus by designing future scenarios and submitting appropriate proposals to improve and develop their use. Moreover, this research is a scientific addition to the Arab Library. It encourages the authors to conduct further research and studies in the field of social planning to investigate the nature and determinants of scenario planning, which reduces the various risks of the novel coronavirus (Covid-19).

5. Limits
Spatial Limits: Cities where the seriousness of the virus maximizes, such as Riyadh, Mecca, Medina, Al Ahsa, Taif, and Al-Qatif.

Human Limits: Some employees of the Ministry of Human Resources and Social Development in the cities where the seriousness of the virus maximizes, such as Riyadh, Mecca, Medina, Al Ahsa, Taif, and Al-Qatif.

Temporal Limits: (4) months from 2 November 2020 to 20 February 2021.

Objective Limits: Future scenario planning to reduce the social impacts of the novel corona pandemic.

6. Definition of terms
Future scenario planning: A scenario is a tool for predicting and creating the future and reinforcing strategic planning as well as future decision-making based on possible environmental circumstances (Azazi, 2012). According to Al-Hadrawi and Mohammed (013), it is a strategic planning tool that organizations employ to develop and formulate long-term strategies and plans that empower them to handle future uncertain variables flexibly. The author procedurally defines the term as an approach that helps decision-makers make effective decisions based on theoretical foundations and realistic planning experiences by providing a planning framework commensurate with the nature of the novel Corona pandemic, reducing the level of uncertainty and raising the level of knowledge regarding the results of the measures taken or that will be taken at present to reduce the social impacts of the pandemic.

Social impacts: How dealing with others affects the social influence is an important aspect of one’s behavior as it affects others and the person, in general. Social behavior is one of the rules that define standards (Al-Daly, 2017). The author procedurally defines the term as a variety of behaviors related to the changes or social impacts of the Corona pandemic on the individual and family, which impede life and cause confusion, ambiguity, and the urgent need for explanation and clarification.

The novel Corona pandemic: Pandemic is the outbreak of a new disease worldwide. When it emerged in Wuhan in China at the end of 2019, it was classified as an outbreak of the epidemic until it has spread in various areas of the world and affected them economically, politically, and socially (Abu Al-Rub, 2020). Al-Skaifi (2020) defines it as a disease that affects humans and causes acute respiratory distress syndrome (ARDS) and inflammation of the respiratory system, which leads to acute respiratory closure that results in death. The author procedurally defines the term as the sudden, unexpected, and social problems the virus causes in the Saudi community.

7. Theoretical framework

7.1. Philosophical foundation
Theory of Change, which is the foundation of the present research, is a method of thinking that handles social change complexities and the way of perceiving the world. It promotes the competence of raising
critical questions, not taking issues as guaranteed, addressing cases of uncertainty, and having several opinions. It is a strategic tool that primarily aims at social organizations seeking a defined social change. It links the organization’s interventions and the desired impact, measures all these aspects using specific indicators, and builds on logical hypotheses based on evidence. It explains the correlation of several results in the short and medium-term to achieve the long term. It aims to set a clear work plan that links programs, activities, and long-term impact and facilitates evaluation and follow-up. Compared to other strategic methods and tools, it deals with reality and shows the obstacles and requirements that will face change. It is also distinguished by the commencement with the desired effect or the final goal and moves from it to the conditions or requirements of this effect, the rational reasons, the programs, activities, the resources and inputs (Van Es et al., 2015).

According to Anderson (2018) as well as Anas and Abdu (2020), the theory of changes comprises six aspects, as follows:

• Outcome or long-term goal: The desired effect of an initiative, project, or organization. It is also the long-term goal that the organization endeavors to accomplish
• Preconditions or requirements for achieving impact or medium-term outputs: The conditions and the logical matters that have to be fulfilled before the impact occurrence.
• Interventions, activities, programs, and strategies: What has to be done to make the conditions a reality?
• Indicators: The measurement tools that illustrate the accomplishment of the impact.
• Assumptions: Clarification of your beliefs on why the impact will be achieved after the accomplishment of conditions and interventions.
• Pathway of change: The map that illustrates the relationship between the other elements of the theory of change.

7.1.1. In the present research, the theory is employed, as follows

• Defining the needs of the Saudi community, especially the areas badly affected by the Coronavirus pandemic, by developing strategies for influencing the community.
• Preparing initiatives and programs that can reduce the social impacts of the Corona pandemic in the aforementioned regions, including developing community initiatives that encompass the pyramid of societal influence, designing work models in light of the Corona pandemic, developing programs and initiatives for changing behavior, and providing products and services.
• Designing a measuring tool (a questionnaire) based on the approaches of social research design to measure the impact of programs and initiatives that reduce the Corona pandemic, designing learning systems, as well as evaluating the human, material, and organizational capabilities of the Ministry of Human Resources and Social Development.

7.2. Goals of scenario planning

According to Mohammed et al. (2009), scenario planning aims to:

• Enhance understanding and facilitate communication with stakeholders because the model used for scenario planning has to be realistic to achieve a credible outcome. It should be at an appropriate level of complexity so that stakeholders can understand it. It also reinforces transparency and completeness substantial for communication with stakeholders.
• Control the major factors of decision.
• Define the logic of the scenario through a visualization that includes defining the principles and assumptions related to the system relations and feedback. Each scenario should be coherent, reasonable, and rational.
8. Methodology and procedures

8.1. Type of research
The author adopts the descriptive analytical approach which presents information and facts about the reality of the current phenomenon, clarifies the relationship between different phenomena, and helps predict the future of the phenomenon itself. The author also uses the quantitative approach (questionnaire) in collecting and describing data numerically, presenting the results, as well as drawing conclusions, generalizations, and new relationships (Al-Tarif, 2019; Fares & Sarayra, 2011; Pandey, 2014).

According to this approach, the current research may exceed the present to the future, in an attempt to derive different predictions through an in-depth study of the reality of the phenomenon. It allows to monitor the benefits of future planning scenarios to reduce the social effects resulting from the Coronavirus pandemic and the main foundations to ensure their success through a questionnaire prepared for this purpose. The author utilized the questionnaire to identify the participants’ responses to the criteria and indicators that can contribute to designing and building future scenario planning to reduce the social impacts of the Coronavirus pandemic. Then, the author performed statistical processing and analyzed and discussed the results. Additionally, the forward-looking approach was utilized to put forward possible future planning scenarios, depending on describing the future in an organized series of events linked from a starting point in the past to a future point.

8.2. Method
The present research adopted the method of social surveying using Snowball sampling used when the sample is not framed, as the author identifies every participant with the set standards and after conducting the study, the author asks the participant to access other participants with the same features. This method is often used in exploring sensitive topics (Alnoury, 2011). It matches the nature of the scenarios’ method, which is probabilistic analytical in defining the nature of the Coronavirus pandemic in the badly affected cities, such as Riyadh, Mecca, Medina, Al-Ahsa, Taif, and Al-Qatif to properly design the scenarios that reduce the social impacts of the virus, as well as criteria and indicators that help design and build scenarios using the determinants of directional or linear scenario, reforming scenario, and transformational or radical scenario.

8.3. Population
The population consisted of (9271) employees of the Ministry of Human Resources and Social Development: (8249) employees in sector of labor and social development and (1022) employees in civil service sector in 2020/2021 in the badly affected cities, such as Riyadh, Mecca, Medina, Al-Ahsa, Taif, and Al-Qatif.

8.4. Sampling
The sample comprised (136) Saudi employees with the following items:

- Work in the Ministry of Human Resources and Social Development for three years or more.
- Intend to participate in collecting data due to the importance of the research topic because it is consistent with the current and future circumstances of the Ministry's tasks and responsibilities.
- Have the willingness to design scenario planning to reduce the social impacts of the Coronavirus pandemic based on the goals of the National Transformation Program for the Saudi Vision 2030. as shown in Table (1)

Table 1 shows the difference of the participants in terms of the variables of gender, residential area, previous workplace, degree, position, and years of experience.
8.5. Tool

The author adopted the questionnaire to identify the benefits of scenario planning in reducing the social impacts of the Coronavirus pandemic and the foundations that ensure the success and types of scenario planning. The author asked the employees about the methodological steps to use scenario planning that reduce the social impacts of the Coronavirus pandemic, as well as the criteria and indicators that help design the scenarios.

The author reviewed the relevant literature literature and surveyed a sample of the specialists to define the domains and items of the questionnaire. Furthermore, the author reviewed the most important future planning scenarios in different fields (Abdul-Hadi, 2017; Chermack, 2015; Al-Anzi, 2014; El-Hadrawi, 2013; Nettelmann, 2013; Owolabi, 2011; Saleh, 2011; Kuye & Ogbojafor, 2011; Montibeller & Morton, 2011).

The preliminary form comprised (4) items in the first domain, (4) items in the second domain, (4) items in the third domain, (4) items in the fourth domain, (5) items in the fifth domain and (8) items in the sixth domain. The items were short, concise, and clear.

The final form comprised two sections: While section one involved the personal data (gender, residential area, previous workplace, degree, position, and years of experience), the second section included the six domains and the sub-items. The author adopted the three-point Likert scale.

To verify its validity, the questionnaire was reviewed by (10) faculty members from the College of Medicine in Princess Nourah Bint Abdulrahman University (PNU) and King Saud University (KSU), and the College of Social Work in Helwan University, Princess Nourah Bin-t Abdulrahman University (PNU), and King Faisal University (KFU) to evaluate the appropriateness, relevance, clarity, and wordiness of the items. According to their views, some items were omitted and modified to have the final form of the questionnaire. Moreover, options were made for the reviewer about wordiness and content (correlated and uncorrelated).as shown in table (2).

Table 2 shows that the arithmetic mean of the correlation of the terms of the questionnaire in terms of wordiness was (2.3 out of 3), while the arithmetic mean of the correlation of the terms in terms of content was (2.641 out of 3), suggesting that the measurement of the item was (0.88). The structural validity was estimated between the score of each domain and the total score.

Table 3 reveals that correlation between the items of the first, third, fourth, and fifth domains is high, while that between the items of the second domain is low positive. The correlation between the items of the sixth domain is low negative. In social sciences, correlation is moderate if it is above (0.25) and high if it is above (0.5; Green et al., 2000). These coefficients are significant at the level of (0.05) and (0.01). Thus, the questionnaire is valid and reliable.

The questionnaire’s reliability was estimated using Cronbach’s alpha applied to (30) experts and specialists of the Ministry of Human Resources and Social Development. as shown in table (4).

9. Results and discussion

To answer the 1st question, arithmetic means, standard deviation, and (T) value of the responses to the benefits of scenario planning in reducing the social effects of the novel coronavirus were estimated. as shown in table (5).

Table 5 shows differences in the frequency of the participants’ agreement to the domain of the benefits of scenario planning in reducing the social effects of the novel coronavirus.

Item No. (2) was ranked the first, indicating that thinking using scenarios is a preparation for the minds to consider more than a single form of the future as it begins with describing several future environments that differ from each other and it is possible that one of them will be confronted in
| Variable               | Frequency | Percentage % |
|------------------------|-----------|--------------|
| Gender                 |           |              |
| Male                   | 12        | 8.8          |
| Female                 | 124       | 2.91         |
| Total                  | 136       | 100%         |
| Residential area       |           |              |
| Central area           | 120       | 88.24        |
| Eastern area           | 7         | 15.5         |
| Western area           | 9         | 61.6         |
| Total                  | 136       | 100%         |
| Previous workplace     |           |              |
| Ministry of Human Resources and Social Development | 126 | 92.6 |
| Another workplace      | 10        | 7.4          |
| Total                  | 136       | 100%         |
| Degree                 |           |              |
| Pre-university         | 15        | 11.00        |
| Bachelor               | 96        | 70.6         |
| Postgraduate diploma   | 4         | 2.9          |
| Master                 | 14        | 10.3         |
| Doctorate              | 7         | 5.1          |
| Total                  | 136       | 100%         |

(Continued)
| Variable | Frequency | Percentage % |
|----------|-----------|--------------|
| Position |           |              |
| Manager of Public and Organizational Departments | 5 | 3.7 |
| Deputy Minister | 3 | 2.2 |
| Chairman | 4 | 2.9 |
| Director General | 7 | 5.1 |
| Managing Director | 6 | 4.4 |
| Director of Public Relations | 11 | 8.1 |
| Director of Social Affairs | 9 | 6.6 |
| Director of Research and Development | 8 | 5.9 |
| Director of Research and Studies | 5 | 3.7 |
| Statistics Director | 3 | 2.2 |
| Planning Director | 4 | 2.9 |
| Project Manager | 3 | 2.2 |
| Investment Manager | 6 | 4.4 |
| Director of Training Center | 3 | 2.2 |
| Director of Social Welfare Home | 5 | 3.7 |
| Director of Strategic Planning | 3 | 2.2 |
| Director of Strategic Planning and Investment | 3 | 2.2 |
| Operation Planning Manager | 3 | 2.2 |
| Operation and Technology Planning Manager | 3 | 2.2 |
| Strategy and Planning Expert | 3 | 2.2 |
| Project Manager | 3 | 2.2 |
| Information and Knowledge Management Specialist | 3 | 2.2 |
Table 1. (Continued)

| Variable                                      | Frequency | Percentage % |
|-----------------------------------------------|-----------|--------------|
| Information Security Specialist               | 5         | 3.7          |
| Information Security Administrator            | 5         | 3.7          |
| Management Consultant                         | 3         | 2.2          |
| Senior Administrator of Human Resources       | 3         | 2.2          |
| Social Care Technician                         | 2         | 1.5          |
| Other                                         | 15        | 11.0         |
| **Total**                                     | **136**   | **100%**     |

| Years of Experience                          | Frequency | Percentage % |
|-----------------------------------------------|-----------|--------------|
| Less than 5 years                             | 35        | 7.25         |
| 10-5                                          | 45        | 1.33         |
| 10-15                                         | 14        | 3.10         |
| 20+                                           | 23        | 9.16         |
| **Total**                                     | **136**   | **100%**     |
Table 2. Result of the reviewers' validity

| Reviewers' validity | Wardiness Correlation | Content Correlation | Arithmetic Mean | Standard Deviation | Arithmetic Mean | Standard Deviation |
|---------------------|------------------------|---------------------|-----------------|--------------------|-----------------|--------------------|
| Correlated          | 2.3000                 | 82,327.             | Uncorrelated    | 2.641              | .88             |

Table 3. Correlation coefficients between the score of the domain and the total score

| Structural validity | 1st domain | 2nd domain | 3rd domain | 4th domain | 5th domain | 6th domain |
|---------------------|------------|------------|------------|------------|------------|------------|
| Correlation coefficient | .651*    | .121       | .885**     | .696*      | .676*      | .119-      |

*Significant at the level of (0.05) **Significant at the level of (0.01).

Table 4. Reliability coefficients of the questionnaire and domains

| Domain   | No. of Item | Reliability |
|----------|-------------|-------------|
| First    | 4           | .671        |
| Second   | 4           | .529        |
| Third    | 4           | .839        |
| Fourth   | 4           | .434        |
| Fifth    | 5           | .802        |
| Sixth    | 8           | .817        |
| Overall reliability | 29         | .737        |

Table 4 indicates that Cronbach's alpha coefficients of the questionnaire's reliability ranged from (0.434) to (0.839). The reliability coefficient of the questionnaire was (0.737). Hence, the questionnaire is highly reliable.

The future. The author states that one of the most important features and benefits of planning scenarios is that it considers thinking as the most important human wealth because it develops the strategic thinking of decision-makers and clarifies what must be changed, modified, added, or deleted. When decision-makers have this type of thinking, they will be able to analyze the changes resulting from the novel corona pandemic, discuss and analyze the current situation, and identify several alternatives and policies. Hence, the social impacts of the virus reduce.

The fourth item was ranked the fourth. The author views that this result is illogical, as the planning scenarios are a systematic process subject to scientific methods. These scenarios present several images of the future according to a scientific base, data, and statistics, aim to identify the considerable factors in shaping the future, direct these factors to achieve the desired goals set, and prepare for the future with its risks. This result is consistent with Abdulhadi (2017), Chermack et al. (2015), Al-Hadrawi and Muhammad (2013), Kuye and Oghojafo (2011), Owolabi (2011), Chermack, Bodwell, and Ghck (2010), Thomas et al. (2006), Verity (2003), and Wright (2000).

To answer the 2nd question, arithmetic means, standard deviations, and (T) value of the responses to the foundations that ensure the success of future scenario planning in reducing the social impacts of the Coronavirus pandemic were estimated as shown in table (6).
Table 5. Responses to the benefits of future scenario planning in reducing the social effects of the novel coronavirus

| Items                                                                 | arithmetic mean | Standard deviation | (T) value | Ranking |
|-----------------------------------------------------------------------|-----------------|--------------------|-----------|---------|
| 1. Develop future plans by the competent ones to identify the possible future working conditions in light of the Coronavirus pandemic. | 2.2721          | .79318             | 33.405    | 2       |
| 2. Encourage and develop flexible thinking to reduce the social impacts of the Coronavirus pandemic. | 2.4044          | .68181             | 41.126    | 1       |
| 3. Address old beliefs and develop new perceptions and beliefs about the exceptional circumstances of the pandemic. | 2.3088          | .79363             | 33.927    | 3       |
| 4. Establish clear and explicit assumptions for each scenario on the short-term domain. | 2.2279          | .81620             | 31.833    | 4       |

Table 6. Responses to the foundations that ensure the success of future scenario planning in reducing the social impacts of the Coronavirus pandemic

| Items                                                                 | arithmetic mean | Standard deviation | (T) value | Ranking |
|-----------------------------------------------------------------------|-----------------|--------------------|-----------|---------|
| 1. Identify the future variables of the social impacts of the pandemic on families and community members. | 2.7574          | .49436             | 65.046    | 1       |
| 2. Have the environment that adopts and implements these scenarios accurately. | 2.5956          | .65973             | 45.882    | 4       |
| 3. Train in implementing these scenarios effectively to reduce the social impacts of the Coronavirus pandemic. | 2.5074          | .65542             | 44.613    | 3       |
Table 6 shows difference in the frequency of the participants’ agreement to the domain of the foundations that ensure the success of scenario planning in reducing the social impacts of the Coronavirus pandemic. Item No. (1) was ranked the first, illustrating that the process of discussing the research results, debates, and agreement to the objectives, indicators, and identification of the practical actions are important to form and create a common understanding and share knowledge to maximize interactions. Hence, the scenarios achieve their goal. The author claims that when various options exist, some future possibilities will be more likely than others and form the desired future that differs from the potential future. Accordingly, decision-makers will have a special vision on how to develop good scenarios to reduce the social impacts of the virus.

Item No. (2) was ranked the fourth and the last. It means that the research participants are not convinced of the importance of the availability of the environment that adopts and implements these scenarios accurately, despite its significance to ensure the success of future planning scenarios to reduce the social impacts resulting from the Coronavirus pandemic.

This result is consistent with Philipp et al. (2020), Al Shiroza (2011), Montibeller and Morton (2011), and Owolabi (2011), and Borjeson et al. (2006).

To answer the 3rd question, arithmetic means, standard deviations, and (T) value of the responses to types of future scenario planning that reduce the social impacts of Coronavirus pandemic were estimated. As shown in Table (7)

Table 7 indicates difference in the frequency of the participants’ agreement to the types of scenario planning that reduces the social impacts of the Coronavirus pandemic. Item No. (1) was ranked the first, indicating that the participants preferred this type of scenario because they saw that the best scenario to reduce the social impacts of the virus is to express the probable situation

| Items | Arithmetic mean | Standard deviation | (T) value | Ranking |
|-------|----------------|--------------------|-----------|---------|
| 1. A reference scenario or the continuation of the status quo | 2.2941 | .57242 | 46.738 | 1 |
| 2. Collapse scenario, i.e., the contradictions of the system reach an end that detonates it from the inside. | 2.0221 | .99232 | 23.764 | 4 |
| 3. The golden age scenario, which is based on a return to an earlier period of time supposed to represent safe and peaceful life | 2.0809 | .68912 | 35.214 | 2 |
| 4. The fundamental transformation scenario, which represents a qualitative leap in the community life. | 2.1397 | .72186 | 34.568 | 3 |
for the development of the phenomenon, whether it represents a possible situation or not. The author states that based on the novelty of this pandemic, the best type of scenario planning is the linear extension of existing trends as it relates to the continuation of the current situation in terms of optimism and pessimism with the inability to change. However, the author claims that reference scenario is the scenario of the current general trends with the continuation of the status quo. This result is completely inconsistent with the novel Corona pandemic that we have to adapt to and decision-makers have to exert more efforts to reduce its social impacts. In addition, it will not occur by adopting this type of scenario. Furthermore, reference scenario may represent the least viable situation as history does not repeat itself. Although this scenario presents a reference benefit, it is inconsistent with the research objective.

Item No. (2) was ranked the fourth and last. The author attributes this result to the inappropriateness of this type of scenarios when dealing with crises and potential risks, such as the coronavirus pandemic and its social repercussions. The result is consistent with Borjeson et al. (2006).

To answer the 4th question, arithmetic means, standard deviations, and (T) value of the responses to the approaches for using future scenario planning to reduce the social impacts of the Coronavirus pandemic were estimated. as shown in Table 8.

Table 8 shows difference in the frequency of the participants’ agreement on the domain of the approaches for using scenario planning to reduce the social impacts of the Coronavirus pandemic. Item No. (1) was ranked the first, indicating the participants’ satisfaction with the step of reviewing the main elements in the current situation, stating the strengths and weaknesses, and identifying general and prevailing trends, and emerging general trends or signs of change that predict important changes in the future. These variables can be divided into internal ones that belong to the nature of the novel corona pandemic, and external ones that reflect the environment affected by the pandemic. Item (2) was ranked the fifth and last, suggesting that the research participants should be aware that this step is one of the most important steps in building scenarios, in contrast to what was obtained from their responses. The aim of this step is to reveal the dynamics of the system and its driving forces and analyze the relationships and intertwining, which helps understand the dynamics of the system. It can be achieved by determining the aspects and boundaries of the system, the relationships between its parts, and the driving forces.

| Items | Arithmetic mean | Standard deviation | (T) value | Ranking |
|-------|----------------|--------------------|-----------|---------|
| 1. Describe the current situation and general trends. | 2.6029 | 50.596 | 10.745 | 1 |
| 2. Understand the dynamics of the system and its driving forces. | 2.4926 | 2.70527 | 37.165 | 5 |
| 3. Define the alternative scenarios. | 2.3235 | .72910 | 40.751 | 4 |
| 4. Write scenarios. | 2.2868 | .65442 | 37.722 | 2 |
| 5. Analyze scenario results (target scenario). | 2.2353 | .69106 | 59.996 | 3 |
Table 9. Responses to the criteria and indicators that can contribute to designing and building future scenario planning to reduce the social impacts of the Coronavirus pandemic

| No. | Suggestions                                                                 | Responses                  | Total weights | Mean | Percentage | Ranking |
|-----|------------------------------------------------------------------------------|----------------------------|---------------|------|------------|---------|
|     |                                                                              | Agree | Undecided | Disagree |               |         |         |
| 1   | Use appropriate technology that helps design the scenario that reduces the social impacts of the Coronavirus pandemic. | 115   | 19        | 2        | 385           | 2.83    | 94.33%  | 1     |
| 2   | Ensure the privacy of all electronic communications and records related to the individuals, groups, and local communities. | 108   | 28        | ...      | 380           | 2.79    | 93%     | 2     |
| 3   | Maintain privacy and confidentiality for the patients and their families.   | 84    | 41        | 11       | 345           | 2.54    | 84.67%  | 8     |
| 4   | Provide rapid professional assessment by social workers.                    | 93    | 42        | 1        | 364           | 2.68    | 89.33%  | 5     |

(Continued)
| No. | Suggestions                                                                 | Agree | Undecided | Disagree | Percentage | Total Weights | Mean | 2.72 % | 30 | 9 | 5 | 92 |
|-----|-----------------------------------------------------------------------------|-------|-----------|----------|------------|---------------|------|---------|----|---|---|----|
| 5   | Each scenario should have general objective, time in months, responsible for implementation, expected outcomes and measurement tools. | 5     | 92        | 4        | 90.33%     | 364            | 2.61 |
| 6   | Develop short, medium, and long-term scenario planning.                     | 4     | 97        | 3        | 90%        | 366            | 2.72 |
| 7   | Provide some therapeutic methods that social workers can practice with the cases to reduce the social impacts of the Coronavirus pandemic. | 3     | 35        | 9        | 94.07%     | 370            | 2.72 |
| 8   | Provide some therapeutic methods that social workers can practice with the cases to reduce the social impacts of the Coronavirus pandemic. | 7     | 97        | 9        | 96.33%     | 384            | 2.64 |

Table 9 (continued)
### Table 10 Differences in the responses to the criteria and indicators that can contribute to designing and building future scenario planning to reduce the social impacts of the Coronavirus pandemic

|                          | Sum of Squares | Df | Mean Square | F    | Sig. |
|--------------------------|----------------|----|-------------|------|------|
| **Academic degree**      |                |    |             |      |      |
| Between Groups           | 8.696          | 9  | .966        | 1.026| .423 |
| Within Groups            | 118.686        | 126| .942        |      |      |
| Total                    | 127.382        | 135|             |      |      |
| **Position in the Ministry of Human Resources and Social Development.** |                |    |             |      |      |
| Between Groups           | 1245.230       | 9  | 138.359     | 1.948| .051 |
| Within Groups            | 8951.116       | 126| 71.041      |      |      |
| Total                    | 10,196.346     | 135|             |      |      |
| **Years of experience**  |                |    |             |      |      |
| Between Groups           | 16.901         | 9  | 1.878       | .963 | .474 |
| Within Groups            | 245.658        | 126| 1.950       |      |      |
| Total                    | 262.559        | 135|             |      |      |

(\textit{F}) Value at (135, 0.05) = 32, while at (31, 0.01) = 1.26457.
Benefits of theory of change are defined, as follows:

- Defining the needs of the Saudi community, especially the badly affected areas by the Coronavirus pandemic by developing strategies for influencing the community.
- Preparing initiatives and programs that can reduce the social impacts of the Corona pandemic in the aforementioned regions, including developing community initiatives that encompass the pyramid of societal influence, designing work models in light of the Corona pandemic, developing programs and initiatives for changing behavior, and providing products and services.
- Designing a tool (a questionnaire) based on the approaches of social research design to measure the impact of programs and initiatives that reduce the Corona pandemic, designing learning systems, and evaluating the human, material, and organizational capabilities of the Ministry of Human Resources and Social Development.

To answer the 5th question, frequencies, means, weights, and percentages of the participants’ responses to the criteria and indicators that can contribute to designing and building future scenario planning to reduce the social impacts of the Coronavirus pandemic were estimated as shown in Table (9).

Table 9 shows difference in the frequency of the participants’ agreement to the domain of the criteria and indicators that can contribute to designing and building scenario planning to reduce the social impacts of the Coronavirus pandemic. Item (1) was ranked the first. The author claims that this result asserts the importance of using technology in building and developing scenarios and developing the necessary action plan to reduce the social impacts of the novel corona pandemic. Item (3) was ranked the eighth and last, revealing that the participants are not convinced that maintaining privacy and confidentiality for patients and their families can hinder designing and building future planning scenarios that reduce the social effects resulting from the Coronavirus pandemic. However, the author argues that maintaining the confidentiality of patients infected with Coronavirus is considered as one of the most important planning criteria and indicators of building these scenarios. This result is consistent with Montibeller and Morton (2011), Borjeson et al. (2006), and Wright (2000).

To answer the 6th question, ANOVA was estimated. As shown in Table (10).

Table 10 shows no differences in the participants’ responses to the criteria and indicators that can contribute to designing and building future scenario planning to reduce the social impacts of the Coronavirus pandemic due to academic degree and years of experience. It also shows differences in the participants’ responses due to the position in the Ministry of Human Resources and Social Development at (F) value (0.05, 135) and (0.01, 135). The author attributes this result to the fact that the decision-makers’ ability to set planning standards and indicators that help design scenario planning is not affected by their degree or years of experience, but it is affected by their position.

10. Recommendations

The research recommends the introduction of the future scenario planning in the strategic plans of the diverse organizations because it is fundamental in light of the global circumstances and crises. Training workshops should be held for decision-makers on how to build and implement scenario planning. Seminars should be held to introduce people to scenario planning and its importance, especially in times of crisis to manage it efficiently. Moreover, the state’s decision-makers, experts and specialists should adopt designing scenario planning so serve as alternative plans that reduce the social impacts of the novel corona pandemic (Covid-19). Leaders should form a team of specialists in future studies and scenario planning, especially in light of the crises in the country. Holding seminars that present models for scenario planning and inviting the concerned organizations to open new horizons for designing different scenarios is recommended.

Different organizations should prepare a written statement explaining their mission and vision related to planning. In addition, future planning programs should be related to other training programs offered to
personnel in different organizations. Organizations have to provide incentives and rewards for the competent leaders who design future scenarios within their planning programs. Deepening awareness of the role of the scenario planning and its effect on the success of the strategic plan to reduce the effects of the novel corona pandemic is highly recommended. Foundations should activate scenario planning to support the strategic decision-making process through the scenarios’ ability to manage various crises. Modern technologies, such as electronic simulation technology, should be used to train in addressing crises as they represent an aspect of preparedness and prevention of crises.

Furthermore, making the outcomes of scenario planning represented in overcoming the challenges of environmental ambiguity, reinforcing the process of decisions-making, and raising the levels of response to changing and sudden circumstance an effective tool in reducing the effects of the novel corona pandemic. There should be integration between work on the novel Coronavirus into the social and developmental work program and poverty reduction strategies. Besides, defining budget priorities and devoting the largest portion for combating the Coronavirus pandemic without affecting the other affairs are recommended. Developing and implementing multiple national policies and plans concerned with the prevention of the Coronavirus pandemic by the Ministry of Health, the Ministry of Education, the Ministry of Interior … etc., and involving several stakeholders are highly recommended.

Moreover, priority should be increased to preventing the Coronavirus pandemic and limiting the social impacts resulting from it, in line with the goals of the of Saudi Vision 2030. Creative initiatives should be launched by strengthening voluntary work as scenario planning that reduces the social impacts of the Coronavirus pandemic because it has social, political, and economic connotations, such as early prediction and rapid discovery of potential opportunities for developmental success, by building the spirit of team work of based on Code of Ethics that matches the culture of Saudi Arabia. Preventing Coronavirus pandemic and reducing its social impacts according to the goals of the Saudi Vision 2030 should be prioritized.

11. Conclusion
The process of building scenarios aims to determine future events and direct the future in different paths. It can benefit decision-makers in discovering the driving forces of the future. The entire world faces challenges due to the novel Corona pandemic and its social impacts that threaten the entity of the individual, the family, and the society as a whole. In this regard, scenarios can be beneficial to reduce the social impacts resulting from the Corona virus pandemic. Moreover, scenarios can provide an appropriate amount of information related to future plans and solutions, identify the influencing factors of the external environment that may increase the future social impacts, improve opportunities for reaction and adapting to expected changes, reinforce creative thinking, and identify development strategies as well as the opportunities and risks of their implementation, which is the motivation for conducting the current research.

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