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Haven't We Learned Anything From HIV, EBOLA, and other Pandemics? The Effect of COVID-19 Stigma on Interpersonal Behavior and Health Practices

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Erasmus Mundus Joint Masters Degree in The Psychology of Global Mobility, Inclusion, and Diversity in Society - GLobal MINDS

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E HUMANAS

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**“Haven’t we learned anything from HIV, Ebola, and other
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Resumo

Este estudo aborda o estigma social em torno das doenças infecciosas e sua relação com COVID-19 na população libanesa. Aplicando a conceituação do estigma por Jones e colegas (1984), os participantes avaliaram a identidade de alguém que se recuperou do COVID-19 ao longo de 6 dimensões (ocultação, curso, disruptividade, estética desagradável, origem e perigo). Os escores foram comparados aos agrupamentos (clusters) de estigma propostos por Pachankis et al. (2018). Em seguida, os participantes relataram seu nível de Saúde Fraca, Estigma Percebido, Estigma Sentido, Medo do Estigma, Medo de Infecção e resultados, incluindo Distância Interpessoal-Social (ISD), Conformidade com recomendações de distanciamento social, Testes, Divulgação de Testes e Divulgação de Infecções. A análise de mediação testou o papel do medo na mediação da relação entre o estigma percebido e os resultados comportamentais. Ao comparar as classificações COVID-19 médias da população libanesa com as do estudo de Pachankis et al. (2018), as características de estigma do COVID-19 foram as mais próximas do Grupo 2 - Grupo Ameaçador - que inclui todas as outras doenças infecciosas em seu estudo, como Herpes Genital e HIV. Estigma percebido foi positivamente correlacionado com medo do estigma e distância interpessoal-social. O medo do estigma medeia parcialmente a relação entre o estigma percebido e o ISD. Finalmente, os resultados confirmaram que aqueles que relataram maior estigma sentiram após a recuperação do COVID-19 avaliaram sua saúde significativamente mais baixa do que os participantes que não relataram altos níveis de Sentiu estigma.

Palavras-chave: Estigma percebido, Distância Interpessoal-Social, Dimensões, Clusters

Abstract

This study addresses the social stigma surrounding infectious diseases and its relation to COVID-19 in the Lebanese population. Applying the stigma conceptualization by Jones and colleagues (1984), participants rated the identity of someone who recovered from COVID-19 along 6 dimensions (Concealability, Course, Disruptiveness, Unappealing Aesthetics, Origin, and Peril). The scores were compared to stigma Clusters proposed by Pachankis et al. (2018). Next, participants reported their level of Poor Health, Perceived Stigma, Felt Stigma, Fear of Stigma, Fear of Infection, and outcomes including Interpersonal-Social Distance (ISD), Compliance with social distancing recommendations, Testing, Testing Disclosure, and Infection Disclosure. Mediation analysis tested the role of Fear in mediating the relationship between Perceived Stigma and behavioral outcomes. When comparing the mean COVID-19 ratings from the Lebanese population with those in Pachankis et al.'s (2018) study, COVID-19 stigma characteristics were closest to Cluster 2 – Threatening Cluster– which includes all the other infectious diseases in their study, such as Genital Herpes and HIV. Perceived Stigma was positively correlated with Fear of Stigma and Interpersonal-Social Distance. Fear of Stigma was found to partially mediate the relationship between Perceived Stigma and ISD. Finally, the results confirmed that those who reported higher felt stigma after recovering from COVID-19 rated their health significantly lower than participants who did not report high levels of Felt stigma.

Keywords: Perceived Stigma, Interpersonal-Social Distance, Dimensions, Clusters

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Stigma

Social justice advocates aim to study and design interventions to tackle the underlying factors that contribute to social inequality, such as stereotypes, prejudice, and discrimination (Stuber et al., 2008). These interconnected factors make up the complicated concept seen as a major contributor to social injustice: Stigma. Research that studied stigma explored its underlying factors, predictors, consequences, and the variations in types of stigmas and their dimensions.

Several definitions of stigma were provided by researchers starting with the work of Erving Goffman, who is considered a pioneer in stigma studies. Goffman (1963, p. 3) defined stigma as an “attribute that is deeply discrediting” and holds negative effects on its beholder. As stigma studies evolved, other definitions were provided by researchers, such as Crocker and colleagues (1998, p. 505), who proposed that “stigmatized individuals possess (or are believed to possess) some attribute, or characteristic, that conveys a social identity that is devalued in a particular social context.”. Stafford and Scott (1986, p. 80) defined stigma as “a characteristic of persons that is contrary to a norm of a social unit.”. Despite a wide range of disciplines that study stigma, the common defining characteristic of stigma refers to an interaction between two groups (ingroups and outgroups) based on specific social attributions to one group within a specific context. In other words, “stigma is relationship and context-specific; it does not reside in the person but in a social context” (Major & O’Brien, 2005, p. 395).

Link and Phelan (2001) argue that the reason many definitions of stigma exist is that it applies to many circumstances, each being unique, leading to different conceptualizations of stigma. Also, it is multidisciplinary, and its study extends to other disciplines such as anthropology, sociology, and political science.

The terms Anticipated Stigma, Perceived Stigma, Perceived Discrimination, Enacted Stigma, and Felt Stigma are interrelated in their use by researchers and how they are measured, and what factors influence them. Anticipated stigma refers to the extent to which individuals belonging to a stigmatized group perceive and expect to experience prejudice and discrimination in the future, and Enacted stigma refers to their experienced and felt discrimination by their communities because of stigma attributed to their group (e.g., HIV positive; Earnshaw & Chaudoir, 2009).

The influencing factors are also interconnected and include concepts such as Internalized Stigma (i.e., the degree to which the stigmatized individuals endorse the negative attributes of their stigma; Earnshaw & Chaudoir, 2009), *Stigma Centrality* (i.e., the extent to which the stigma is part of one’s identity or self-image) and Stigma Salience (i.e., the extent to which stigmatized individuals think about their stigma; Quinn & Chaudoir, 2009). However, even if all the above features of a stigma are known, they cannot reliably provide a generalizable framework for stigmas and their consequences. For example, when anticipating behavioral outcomes to a given stigma, some people who might be a target

of stigma may avoid disclosing their concealable stigmatizing identity, not because they agree with the negative stereotypes associated with the stigma or have “internalized” them, but to protect themselves from possible discrimination, especially if they have faced it in the past when disclosing their concealable identity to others (Chaudoir & Quinn, 2010). *Associative Stigma* is another type of stigma that would be relevant with stigma related to infectious diseases (e.g., COVID-19 stigma) as those associated with the infected (e.g., healthcare workers and family members) also go through adverse effects of the stigma (Mostafa et al., 2020). Thus, the factors that contribute to the impact/experience of a given stigma vary, and a multilayered framework is needed for a deeper analysis. This study examines available stigma frameworks to understand how they apply to infectious diseases, particularly COVID-19 stigma.

Dimensional Conceptualization of Stigma

Stigma researchers have long attempted to classify stigmas into types and categories and produced stigma frameworks. In addition to Goffman’s (1963) three stigma categories (moral character, body abominations, and tribal blemishes), other frameworks categorized stigma based on evolutionary functions such as avoiding parasitic infections (Kurzban & Leary, 2001) and social functions such as keeping the stigmatized dominated or excluded (Phelan et al., 2008). Other frameworks of stigma categorization include the Stereotype Content Model developed by Cuddy and colleagues (2007). The model classifies stigma based on the emotional responses that predict behaviors towards the stigmatized. Two dimensions are proposed in the model: Warmth and Competence. For example, persons with a disability elicit high warmth and low competence, which predicts a pitiful and helping behavior.

In addition to external functions, stigmas have unique characteristics such as appearance, how they are acquired, and whether they are contagious. The benefits of a detailed classification of stigma allow researchers to predict stigma outcomes, including the formation of stereotypes and prejudice, coping mechanisms, social distance, mental health, and psychosocial wellbeing. However, these frameworks do not provide foundations to explain similarities and differences between stigmatized groups and health consequences. In their pioneering work, Jones and colleagues (1984) proposed a dimensional conceptualization of social stigmas that included six dimensions that explain the similarities, differences, and effects of stigma. Jones and colleagues built on Goffman’s approach to stigma, focusing on the relationship between the “mark” (attribute) and “undesirable characteristics” (stereotypes) (Jones et al., 1984).

The dimension of *Concealment* is the level to which the stigmatized identity or condition can be concealed (e.g., a physical disability and facial piercings score low on concealability (high visibility) and being atheist scores high (low visibility)). The stigma’s *Course* refers to its persistence over time (e.g., being short or Latino scores highest on persistence; being unemployed scores low). *Disruptiveness*

manifests in social interactions (e.g., if one does not know how to interact with someone blind, it disrupts the conversation). *Unappealing Aesthetics* refers to physical appearance (e.g., repulsive). *Origin* refers to the source of the stigma (i.e., congenital or acquired), and *Peril* to the level of threat or contagion that it poses (Jones et al., 1984).

Consequences of Stigma

Because stigma is relationship and context-specific (Major & O'Brien, 2005), its manifestations and consequences depend on the stigma's characteristics, the characteristics of the stigmatizing group (outgroup), the stigmatized group (ingroup), and the shared values of the groups. For example, people against COVID-19 vaccines are stigmatized in some contexts as being uneducated and dangerous to their children and the community. That same group, in another context, stigmatizes those who take the vaccine and accuses them of becoming mutants or 'homosexuals' (O'Neill, 2021).

Ample evidence has been found that links stigma to an array of negative outcomes, including, but not limited to, social (e.g., social distance; Pachankis et al., 2018; isolation; Bandstra et al., 2008), structural (e.g., institutional racism; Hatzenbuehler, 2016), socioeconomic (e.g., unemployment; Brouwers, 2020), political (e.g., social marginalization; Brewis & Wutich, 2019), and physical and mental health consequences (e.g., cardiovascular disease and depression; Jetten et al., 2018). On the social level, when measuring the behavioral consequences of stigma manifested as discrimination, Social Distance is a straightforward measure of negative behavioral effects of stigma as an interpersonal outcome and is widely considered a direct consequence of stigma. For a deeper understanding of stigma mechanisms and their consequences, Pachankis et al. (2018) suggest that a classification scheme or a "cluster" system would not only improve researchers' communication in stigma studies and unify the related language but also allow them to make generalizations from one stigma to another.

Stigma Dimensions and Clusters

A recent study by Pachankis and colleagues (2018) proposed an extensive classification of stigmas into five clusters and analyzed their impact on social and health outcomes. Pachankis et al.'s taxonomy work (2018) used the six dimensions proposed by Jones and Colleagues (1984) as a base for classification and included two studies. The first gathered ratings from stigma experts and the general public on the six dimensions of 93 kinds of stigmas. The second part of the study measured associations of these dimensions with the outcomes of the stigmas, including health, wellbeing, and psychosocial mechanisms through psychometric scales that measure health impairments including depression and anxiety, and stigma-specific mechanisms such as stigma centrality, stigma salience, and everyday discrimination. For example, participants were asked to rate, on a scale from 0 to 6, to what extent the general population sees the *status* of someone overweight [and 92 other stigma statuses] as concealable [and the 5 other dimensions]. The rating scores of 193 respondents of 93 stigmas along 6

dimensions were computed, and the stigmas were assembled into five clusters using k-means cluster analysis. Classification of stigmas was based on shared characteristics from the dimensional ratings collected and their associated consequences (Pachankis et al., 2018).

Cluster 1 was labeled the “Awkward” cluster. It included stigmas seen as highly visible, persistent, and disruptive, and not aesthetically unappealing, onset controllable, and perilous. Stigma statues in this cluster include, for example, Autism, Blind completely, Deaf completely, Short, Unattractive, and Using a wheelchair all the time.

Cluster 2 was labeled the “Threatening” cluster because the stigmas that belong to it pose a larger threat to interactions. Stigmas in this cluster score high on Origin and Peril, moderately high on Concealability and Aesthetics, and moderately on Course and Disruptiveness. Amongst the 5 clusters, stigmas in Cluster 2 are considered the highest stigmatized, with 8 out of the 14 stigmas in this cluster ranking in the top 10 most stigmatized. Stigmas in Cluster 2 include Sex offender, Homeless, Injection drug use, Infected with HIV, Bacterial sexually transmitted disease, Genital herpes, Gang member, Criminal record, and Alcohol dependency.

Cluster 3, “Sociodemographic Cluster,” was the smallest and included stigmas seen as course persistent and not seen as concealable, onset controllable, aesthetically unappealing, or perilous. This cluster included Asian, Black, Latino, Middle Eastern, Native American, and Old age.

Cluster 4, “Innocuous Persistent,” included stigmas seen as moderately concealable, course persistent and onset controllable, and not seen as disruptive, aesthetically unappealing, or perilous. The stigmas in this cluster included Atheist, Jewish, Infertile, Teen parent, Non-heterosexual, Lung and Prostate Cancers, and Unemployed.

Cluster 5 was labeled “Unappealing Persistent” because of the moderate and chronic nature of its dimensions. Stigmas in this cluster scored moderately on all dimensions except for *Course Persistence* which scored somewhat lower. Stigmas in cluster 5 include Illiteracy, Muslim, Having sex for money, Polyamorous, Undocumented immigrant status, Transgender, and Schizophrenia remitted (Pachankis et al., 2018)

Stigma and Social Distance

In the first part of their study, Pachankis et al. (2018) measured Social Distance by assessing the willingness of respondents to interact with individuals in 93 stigmas. As expected, Cluster 2 (Threatening) was the cluster that scored the highest on Social Distance, representing high unwillingness for interaction with stigmas in this cluster.

When studying stigma related to infectious diseases transmissible by contact, social distance scales would not accurately measure discrimination because of the specificity of such diseases; *Physical-social distance* is a requirement to eradicate those diseases. The same challenge arises when measuring *social distancing* behavior as a result of *compliance* with regulations versus stigmatizing

behavior. Not making this distinction could falsely imply that stigma is beneficial for ending infectious diseases, and therefore a closer examination of the stigma characteristics is needed.

Social Stigma and Infectious Diseases

Research has repeatedly shown an association between infectious diseases pandemics and social stigma manifesting in cognitive, affective, and behavioral consequences, ranging from anxiety and depression to misconceptions to risky health behaviors (Overholt et al., 2018; Venable et al., 2006; Williams et al., 2011). This study explored the social stigma related to the novel Coronavirus COVID-19 in Lebanon.

The Coronavirus disease 2019 (COVID-19), which is caused by Severe Acute Respiratory Syndrome Coronavirus (SARS-CoV-2), was identified in Wuhan, China, in December 2019 and led to the worldwide pandemic declared by the World Health Organization (WHO, 2020a) and the first case discovered in Lebanon was in February 2020 (Yassine, 2020). The pandemic burdened the health care system, and the situation was worsened by the Beirut Port explosion, which displaced more than 300,000 people (Gianaris, 2020), in addition to the collapse in the economy, which was considered by the World Bank one of the top global crises since 1850 (Jansen, 2021). In addition to these challenges in eradicating the virus, and even though the vaccine became available in March 2021 (Francis, 2021), a barrier to ending the pandemic is the social stigma associated with the virus.

A literature review of 1254 studies that assessed stigma related to Covid-19 and lessons learned from previous infectious diseases pandemics (e.g., Ebola, SARS, HIV, MERS) was conducted by Muhidin et al. (2020). Although no original articles about COVID-19 stigmatization experience were found at the time of the cited review, studies related to previous infectious diseases showed that the associated stigmatization has significant effects on psychological wellbeing and behavior as well as severe negative effects on eradicating these infections. Studies linked stigma in general, and stigma of infectious diseases in particular, to consequences seen across these pandemics, contributing to the expansion of these diseases and difficulty in containing them. The psychological, emotional, and behavioral outcomes include people being in denial of infection, avoiding testing, disclosure, adherence to treatment, and seeking treatment and medical care, in addition to long term consequences linked to trauma, depression, anxiety, cognition, social isolation, and other psychological problems (e.g., Infectious diseases and social stigma, H1N1, Williams et al., 2011; MERS-CoV, H1N1, EBOLA, Farag et al., 2016; SARS, Lee et al., 2005; Mak et al., 2006; EBOLA, Van Bortel et al., 2016; Overholt et al., 2018; Tenkorang, 2017; HIV, Venable et al., 2006; Dlamini et al., 2009; Turan et al., 2017; Kimera et al., 2020).

Underlying Elements and consequences of stigma related to infectious diseases

One of the elements associated with stigmatized individuals of an infectious disease is related to quarantine. A review of the literature on the psychological impact of quarantine suggested its

associations with post-traumatic stress symptoms and found that these individuals [who were quarantined] report higher stigmatization and social rejections (Brooks et al., 2020). Behavioral outcomes of COVID-19 stigmatization, which included not seeking medical care and avoiding testing, have emerged in studies (Bruns et al., 2020). As time progresses, studies confirm the similarities and differences in these trends between COVID-19 stigma and other infectious diseases of similar outcomes.

Evidence has emerged showing a detailed overview of the pandemic's effect on mental wellbeing (Javed et al., 2020), and even though psychological outcomes of COVID-19 are not the focus of this study, it is important to highlight some of the morbidities that came to light in recent studies about COVID-19 stigma. One alarming comportment associated with COVID-19 that has been observed is self-harm. A recent study screened online newspapers in four languages in India and found an increased rate of suicide (especially amongst males) in the first week of diagnosis and 50% of the suicide cases occurring at the care centers during treatment (Sripad et al., 2021). Stigma and discrimination were factors associated with increased suicide risk and were also seen in previous infectious diseases pandemics (Keita et al., 2017).

Fear Factor in Infectious Diseases

No one is left untouched by a pandemic and its aftermaths. The uncertainty and chronic preparedness for the unknown leaves people in a state of absurd reality. Although the fear factor is present in other categories of stigma, when it comes to infectious diseases, fear does not differentiate between *stigmatizers* and those who are the *target of stigma*. It spreads faster than the virus and may have more destructive consequences than the infection. "In strict neuropsychological terms," Pappas et al. (2009, p. 744) defined fear as "a normal reaction to an evolving threat, preparing the individual, both physically and mentally, for an acute response to possible harm." In a pandemic of infectious disease, additional fear factors include the virus being transmissible and invisible (Pappas et al., 2009), all of which may affect cognition and behavior (e.g., worrying and compulsive handwashing).

During a pandemic, the level of fear can make people act irrationally, which contributes to the spread of the disease (Ahorsu et al., 2020). One outcome of stigma that has been studied is the decision to disclose one's identity. This outcome is predominantly studied in concealable stigmatized identities, such as depression and HIV. Studies on Adolescents with Perinatal HIV (APHIV) showed that fear of stigma was negatively related to disclosure of HIV status to peers (Madiba & Mokgatle, 2016), and fear of unintended disclosure of HIV status reduced adherence to medication (Denison et al., 2015; Madiba & Josiah, 2019).

The focus of interventions to eradicate infectious diseases is related chiefly to cognitive and behavioral aspects such as awareness-raising, information dissemination, and recommendations for good health practices. Although not as much focus is given to the affective factors (such as fear) related

to ending the pandemic, researchers developed and continue to work on measures to assess fear of COVID-19 and fear of its stigma. Following the literature that showed a relationship between stigma and fear related to infectious diseases and the spread of the infections, an initial scale to measure fear of COVID-19 [infection, not stigma] was developed a few months after the COVID-19 outbreak and confirmed that fear of COVID-19 is correlated with its transmission (Muhidin et al., 2020).

It is important to note that the fear of infection and fear of its stigma are different elements of fear related to infectious diseases, and the distinction must be noted by researchers where appropriate. However, scales to measure fear of COVID-19 stigma are scarce, but because of the global attention and funding COVID-19 research is receiving, more tools are emerging and made accessible. In the current study, standardized psychometric measures related to COVID-19 were employed where available. Others were adapted from other stigma studies (e.g., stigma related to mental illness and HIV) to ensure the measures have the highest possible reliability and validity, hoping that the few non-standardized measures can form a base for future COVID-19 stigma scales development.

Aim and Objectives

This exploratory research study addresses COVID-19 perceptions, attitudes, and related behaviors, and has a correlational design. Applying the work of Pachankis et al. (2008) on other stigmas to COVID-19 stigma, the objectives of this study were (a) to obtain ratings of COVID-19 stigma across the six dimensions outlined above in the Lebanese population, (b) extrapolate its placement in one of the Stigma Clusters, (c) to test the relationship between Perceived stigma of COVID-19 and behavioral outcomes, and (d) to investigate the role of fear as an affective response to stigma in mediating these behaviors. Thus, the study answered the following questions:

1. What are the salient COVID-19 stigma dimensions by raters, and to what *cluster* does it belong (Pachankis et al., 2018)?
2. How do COVID-19 dimensional ratings relate to *Interpersonal-Social Distance*?
3. How does the perception of COVID-19 stigma influence people's health behaviors; level of noncompliance with recommendations for good health practices, testing, and infection disclosure.
4. What is the role of affective responses to COVID-19 perceived stigma (fear of infection and fear of stigma) in the relation between perceived stigma and health behaviors?

Hypotheses

Cluster

All three infectious diseases in Pachankis et al.'s (2018) study were placed in Cluster 2, and since COVID-19 is an infectious disease with shared characteristics, the first hypothesis tested in this study places COVID-19 stigma in a cluster:

H1 COVID-19 stigma's dimensional scores are closest to Cluster 2, the "Threatening" cluster

Stigma outcomes

Following the studies above that showed a relationship between stigma and social distance (Pachankis et al., 2018) and stigma related to infectious diseases such as MERS-CoV, H1N1, EBOLA, SARS (Farag et al., 2016; Lee et al., 2005), and HIV (Madiba & Mokgatle, 2016) with behavioral outcomes including testing, compliance with treatment and regulations, and disclosure of infection, the next hypotheses test the association between stigma and behavioral outcomes: People who have a higher Perceived stigma of COVID-19 are

H2 more likely to have higher interpersonal-social distance;

H3 less likely to test for infection;

H4 less likely to disclose testing;

H5 less likely to disclose an infection;

H6 more likely to comply with physical-social distancing recommendations.

Poor Health

Based on the ample studies that showed an association between stigma and poor health (e.g., Jetten et al., 2018), the following hypothesis is:

H7 Felt stigma is negatively correlated with self-reported health indicators.

Mediation

Regarding the role of fear in stigma and behavioral outcomes, several studies found that fear mediates between diverse types of stigma and health practices. In addition to the aforementioned studies depicting the relation between fear of HIV stigma and disclosure and treatment-seeking behavior, a study with individuals with substance use problems by Benz and colleagues (2021) found that fear of stigma mediates the relationship between internalized stigma and treatment-seeking behavior. Fear of negative evaluation partially mediated the relation between academic stress, anxiety, and depression (Nonterah et al., 2015). More specific to Infectious diseases, in a recent study related to COVID-19, Gundogan (2021) found that fear of COVID-19 mediated the relationship between psychological resilience and life satisfaction. Following the studies that found fear of infection and

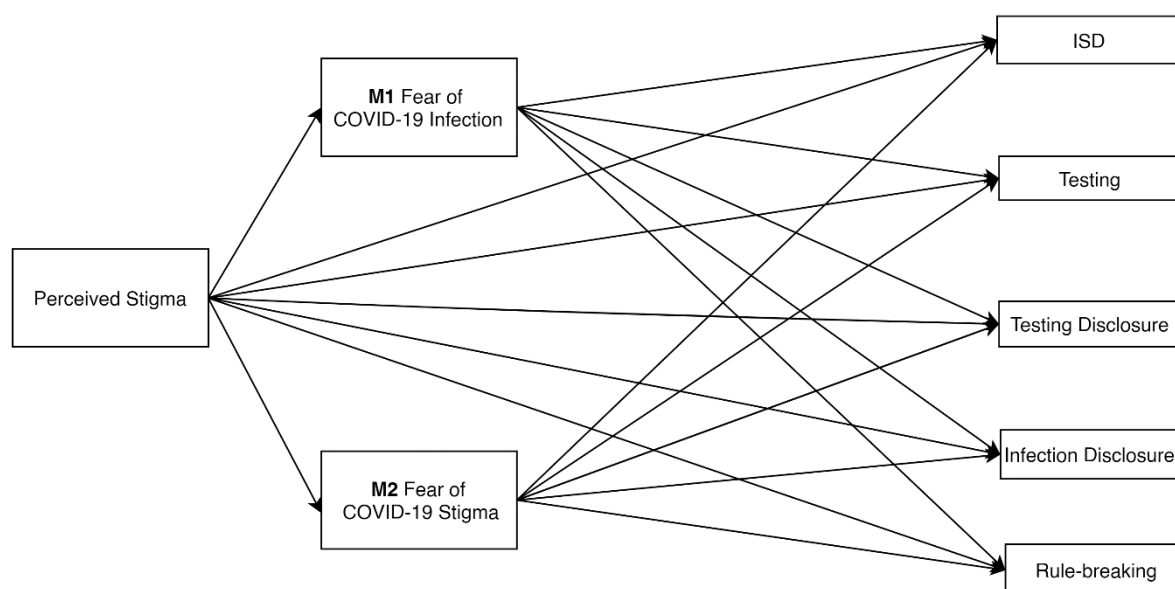
stigma mediates various relationships, the following hypotheses in this study test the role of fear in these relationships:

H8 Fear of COVID-19 Infection mediates the relationship between stigma and behavioral outcomes (See figure 1. Mediation model);

H9 Fear of COVID-19 Stigma mediates the relationship between stigma and behavioral outcomes (See Figure 1. Mediation Model).

Figure 1

Mediation Model



Method

Participants

Inclusion criteria were being (i) 18 years old or older, (ii) Lebanese living in Lebanon or abroad, (iii) from any nationality living in Lebanon, and (iv) can read English or Arabic. 94 respondents (e.g., peers, friends, and family members) completed the first draft to check for language, time, and other possible issues. Feedbacks were integrated, and in the second round of distribution, participants were recruited through social media posts on Facebook, Instagram, LinkedIn, and a paid/sponsored Facebook Ad on Instagram for \$15 that ran for three days in Lebanon. 729 respondents completed the questionnaire, and all questionnaires were filled online.

Residence. Participants residing in Lebanon were 87.1% Lebanese (n=636), 6% Syrians (n=44), 4% Palestinians (n=29), 0.7% from other nationalities (n=5), and 2.1% Lebanese living abroad (n=15). All 8

districts (*Muhafaza*) of Lebanon were represented; 18.2% in the *North Governorate* (n=130); 19.3% in *Mount Lebanon* (n=138); 15.8% in *South Governorate* (n=113); 14.4% in *Beirut* (n=103); 8.1% in *Akkar* (n=58); 9.37% in *Nabatieh* (n=67); 7.8% in *Bekaa* (n=55); 6.15% in *Baalbek-Hermel* (n=44); 1.1% Prefer not to say (n=8).

Sex. 84.8% of respondents reported being female (n=618), 14.3% male (n=104), 0.1% nonbinary (n=1), and 0.8% other (n=6).

Age. The age range was 18-67 ($M=24.3$, $SD=6.76$).

Family status. 69.7% reported being single (n=508); 30.3% partnered/married (n=221); 18.4% have children (n=134); 31.3% take care of an elderly person (n=228).

Education. 0.4% of participants reported having had no formal education (n=3); 1% Primary school (n=7); 3.8% Middle school or Brevet (n=28); 16.1% Secondary school or Baccalaureate (n=118), 13.82% Vocational (n=101), 49.38% (n=361); Bachelors; 14.8% Masters (n=108); 0.7% PhD (n=5).

Income. The majority reported a monthly income less than \$100 as a family (n=370, 50.8%); 22.2% preferred not to answer (n=162); 18.4% between \$100 and \$500 (n=134); 4.53% between \$500 and \$1500 (n=33); 2.6% between \$1500 and \$3000 (n=19); 1.5% more than \$3000 (n=11). 76.3% reported their income almost never suffices them till the end of the month (n=556); 23.7% almost always suffices (n=173).

Religion. 40.2% reported being Sunni (n=293); 28.5% Shi'a (n=208); 17.4% preferred not to say (127); 7.8% Christian (n=57); 2.7% Druze (n=20); 1.6% Agnostic/Atheist (n=12); 1.6% other (n=12).

COVID-19 Status and chronic illnesses. No participant reported having COVID-19 at the time of filling the questionnaire nor selected "Prefer not to answer," 16.6% of participants were not sure if they had it (n=121), 40.1% (n=292) reported never being diagnosed with COVID-19, and 43.3% reported that they have recovered from COVID-19 (n=316). The majority of participants (65.9%; n=520) reported that one or more of their family members recovered from COVID-19; 21.4% reported no one in their family had COVID-19 (n=169); 10.8% reported that one or more family members have died from COVID-19 (n=85); 1.5% reported that one or more family members had COVID-19 at the time the questionnaire was completed (n=12); 0.4% preferred not to answer (n=3). The majority reported that they and their family members have no chronic illnesses (44.7%, n=361), 12.6% reported having a chronic illness, and 42.7% reported that a family member has a chronic illness (n=345). 122 participants (16.7%) reported they received at least one shot of the vaccine, 595 (81.6%) did not receive any shots, and 12 (1.6%) preferred not to say.

Procedure

The survey started with an informed consent page which introduced the study about society's perceptions and attitudes towards the Coronavirus COVID-19 and its associated behaviors – the term stigma was not mentioned. After having given their consent, participants provide information about

their age, relationship status, whether they have children, income, residency status, residence governorate/district in Lebanon (and country if living abroad), religious denomination, Poor Health Rating (CDC 2014), whether they take care of an elderly person, whether they or any family members have a chronic illness, and whether they or their family members ever received a COVID-19 diagnosis.

Next, participants answered a series of scales in this order: Rating dimensions proposed by Jones et al. (1984) and adapted by Pachankis et al.'s (2018), COVID-19 Perceived Stigma (CV19-PS) adapted from Quinn & Chaudoir's (2009), Fear of COVID-19 Scale (FCV-19-Infection) adapted from Ahorsu et al. (2020), Interpersonal-Social Distance (ISD) adapted from Pachankis et al. (2018), Rule-Breaking adapted from Clark et al. (2020), COVID-19 Testing, Testing Disclosure, if a list of people infected with COVID-19 exists in their place of residence, Fear of COVID-19 Stigma Scale (FCV-19-Stigma), COVID-19 Felt Stigma (CV-19-FS) adapted from Berger et al. (2001)

Finally, the participants were redirected to a separate link that explains they have been redirected because they participated in the survey, thanks them for participating, explains that the link is separate and cannot be traced to the survey, and offers them an opportunity to participate in an optional draw to win a money prize of \$100, \$50, and \$20 by listing their preferred mean of contact in case they won.

The questionnaire was available in English and Arabic (Classic Arabic and Levantine/spoken), and the translations were reviewed by two translators for language accuracy and one Arabic-speaking psychologist for contextual accuracy; edits were made according to feedback.

The survey for this paper was generated using Qualtrics software (Qualtrics, Provo, UT) and the data was computed using IBM SPSS version 26.

Measures

General poor health

Like Pachankis et al.'s (2018) study, general poor health was assessed using one item from the Behavioral Risk Factor Surveillance System Survey by the Centers for Disease Control and Prevention (CDC 2014), which has been used across stigmatized populations. Participants responded to the question, "On a scale from 1 (Poor) to 5 (Excellent), how would you rate your general health?". Whereas Pachankis et al.'s (2018) second study measured associations between perceptions along stigma dimensions and health & psychosocial mechanisms (e.g., emotional dysregulation, mastery, self-esteem, and social support), this study measured associations with behavioral outcomes. This scale was used to confirm an association between COVID-19 Stigma and poor health.

Stigma dimensions.

Respondents indicated the position of COVID-19 stigma along each of the six dimensions proposed by Jones et al. (1984) and adapted in Pachankis et al.'s (2018) study. The stigma (identity/condition) that participants were asked to rate was, explicitly, 'a person who was diagnosed with COVID-19 in the

past and has recovered from it.’ Respondents were asked to rate COVID-19 stigma’s Concealability (“How easily is the identity of a person who recovered from COVID-19 able to be concealed in a typical social interaction between typical members of the population? That is, how easy it is to know that someone had the Coronavirus just by talking or interacting with them?” [0= totally concealable in casual social interaction], [6= never able to be concealed in casual social interaction]), Course (“To what extent does the general population expect the condition to improve or persist, worsen, or recur?” [0= temporary, expected to totally disappear over a short period of time], [6= persistent, expected to remain unchanged, worsen, or recur over the life course]), Disruptiveness (“To what extent does the condition or identity disrupt typical social interactions taking place among typical members of the population, assuming the condition or identity is known (people know that the person had COVID-19 in the past and recovered from it)?” [0= does not disrupt normal social interaction], [6= normal social interaction is extremely difficult]), Aesthetics (“To what extent does the condition prompt physical revulsion among typical members of the population in typical social interactions, assuming the identity is known (people know that the person had COVID-19 in the past and recovered from it)?” [0= condition is not generally seen as repulsive], [6= condition or identity is generally seen as extremely repulsive]), Origin (“To what extent do people in general see an individual with this condition as being responsible for it?” [0= condition is seen as totally out of individual’s control], [6= condition is seen as totally under the individual’s control]), and Peril (“In the general population, to what extent do people who interact with an individual with this condition perceive some kind of contagion, threat, peril, or physical danger to themselves in typical social interactions, assuming the condition is known (people know that the person had COVID-19 in the past and recovered from it)?” [0= there is no perceived contagion, peril, or physical danger to oneself], [6= there is extreme perceived contagion, peril, or physical danger to oneself]).

COVID-19 Perceived Stigma (CV-19-PS)

To measure Perceived stigma amongst COVID-19 “out-groups” (participants who were never diagnosed) and COVID-19 “in-groups” (participants who indicated they have recovered from COVID-19), an 8-item adaptation of Quinn & Chaudoir’s (2009) 15-item scale that measures anticipated stigma was used. This 8-item COVID-19 Perceived Stigma (CV-19-PS) aimed to measure the extent to which participants believed they would be stigmatized if their COVID-19 identity were disclosed. Participants who were never diagnosed (COVID-19 outgroup) were asked to anticipate the stigma by imagining how they would respond if they had had COVID-19. Participants responded to the question: “If others believe that you have had COVID-19 in the past, how likely do you think the following would occur” by rating the items on a 4-point Likert scale (extremely likely, somewhat likely, somewhat unlikely, extremely unlikely). The items included statements such as “Friends avoiding you,” “current friends stop hanging out with you,” “people threatening or harassing you,” “people act as if you are inferior,”

“people treating you with less respect,” and “people act as if you are dishonest” (Quinn & Chaudoir, 2009, p. 640). Cronbach’s alpha was high for participants who are a target of COVID-19 stigma (participants previously diagnosed and recovered; $n=316$; $\alpha=.91$), for those who anticipated it (participants who were never diagnosed; $\alpha=.891$; $n=292$), and for all the respondents combined ($\alpha=.900$; $n=729$). No significant difference between the two groups was observed.

COVID-19 Felt Stigma (CV-19-FS)

Berger et al. (2001) developed a scale to measure HIV stigma. One of the subscales labeled “Personalized Stigma” encompassed questions about the ‘Personalized’ or ‘Felt’ experience of stigma by individuals living with HIV. 9 out of the 18 items were modified in this study to measure people’s experienced or personalized stigma with COVID-19. Participants were asked to indicate their level of agreeability with statements including “I have lost friends by telling them I have COVID-19”, “People seem afraid of me because I had COVID-19”, and “Some people act as if it was my fault I had COVID-19” (Berger et al., 2001). Respondents who reported never being diagnosed with COVID-19 were asked to imagine they recovered from it and answer accordingly. One distinction between the COVID-19 Felt Stigma scale (CV-19-FS) and the Perceived Stigma scale (CV-19-PS) is that the questions in the CV-19-FS are asked from the point of view of the stigmatized and not the ‘stigmatizers’ (society’s perceptions) as in the CV-19-PS and Pachankis et al.’s dimensions. Those who reported they have recovered from COVID-19 were reporting their felt and personalized experience with stigma. Because about half of the respondents stated their COVID-19 status as recovered, the benefit of adopting this scale allowed measuring stigma experience and not merely its anticipation. The scale had acceptable internal reliability (Cronbach’s $\alpha=.88$).

When writing this study, to my knowledge, no scale to measure COVID-19 stigma was developed and made accessible, neither Perceived nor Felt. However, due to the novelty of the disease and international interest in the topic, studies were exponentially being published at the same time this study was being conducted, and a *COVID-19 Infection Stigma Scale (CISS)* has emerged in May 2021 in a study with an Egyptian sample (Elgohari et al., 2021), and achieved high internal reliability ($\alpha=.82$). Although it was not implemented in this study time, a comparison between the CISS and all the items and scales used revealed a remarkable similarity.

Due to the interconnectedness of stigma components, some items in the different scales are overlapping (e.g., Perceived Stigma CV-19-PS and Felt Stigma CV-19-FS). Indeed, the CISS developed by Elgohari et al. (2021) included 14 items that resembled the items in the CV-19-PS scale [perceived stigma] but showed even higher similarity to the CV-19-FS scale [Felt stigma], which is derived from HIV stigma, with some items being almost identical (e.g., feeling rejected by others; feeling inferior; feeling isolated; feeling avoided; the news of infection must remain hidden and not disclosed).

One reason the CISS resembled the CV-19-FS scale more than the CV-19-PS scale is that it measured stigma in people who are a target of it – all COVID-19 positive participants. This extreme similarity gives more confidence in the adapted scale in this study. Nonetheless, this means that the CISS might not be suitable to measure Perceived or anticipated stigma from the point of view of the stigmatizer as the CV-19-PS scale used in this study.

Fear of COVID-19 Infection (FCV-19-Infection)

The primary emotional response measured in this study is fear. A distinction was made between fear of the virus and fear of its stigma through two sets of questions. Fear of the disease was measured using 5 items from the 7-item Fear of COVID-19 Scale (FCV-19S) developed by Ahorsu et al. (2020). Participants indicated their level of agreement on a 4-point Likert scale from strongly disagree to strongly agree) with statements related to their fear of COVID-19 (e.g., “I am afraid of losing my life because of the Coronavirus” and “When I watch news and stories about Corona on social media, I become nervous or anxious”). The test showed high internal reliability in this study (Cronbach α =.83).

Fear of COVID-19 Stigma (FCV-19-Stigma)

As stated in the scale above, no scale, to my knowledge, has been developed yet to measure fear of COVID-19 stigma, so fear of COVID-19 stigma in the Lebanese population was measured with three items relevant to the context. In many areas in Lebanon, one way the locals choose to fight the spread of the virus is by publishing a list of names of infected individuals online (Facebook group of the village) and through messaging apps (WhatsApp broadcasts) so that people avoid them. Having no choice of discretion once diagnosed may result in people not testing at all because a positive test not reported may cause the person to feel blame and guilt. To measure their fear of COVID-19 Stigma, participants were asked if such a list exists in their village or place of residence and then responded using a 4-point Likert scale (strongly agree to strongly disagree), to the following statements: “I am afraid that my name will be added to that list,” “I am afraid that if my name is on that list, people will treat me differently in the future after I heal”; If I recovered from COVID-19, I would be afraid that people know I had it.” Participants who indicated that such a list does not exist in their place of residence were asked to imagine it did and respond accordingly. The three items achieved acceptable internal reliability (α =.77) and were averaged into one score: FCV-19-Stigma ($M= 1.78, SD=.78$).

Interpersonal-Social Distance (ISD)

Social distance in Pachankis et al.’s (2018) study was assessed with an adaptation of the Social Distance Scale (SDS) by Link et al. (1987), which is used to assess the willingness of individuals to interact in various ways with people with mental illness. In Pachankis et al.’s (2018) study, social distance was measured as an ‘interpersonal outcome’ of stigma. Due to the aforementioned challenge in the validity of using such scale to measure social distance of an infectious disease transmissible by contact, and because some of the items might not fit the conservative population in Lebanon (e.g.,

“how willing are you to get involved in an intimate relationship with someone with this condition?”) the whole scale was not adapted and, instead, 2 items were asked : "Assuming you had an extra room in your house that you want to rent out, how would you feel about renting a room in your home to a person who had COVID-19 in the past?" and “How do you feel about visiting someone who recovered from COVID-19?” Participants rated the items on a 4-point Likert scale (1=definitely willing, 4=definitely unwilling). The items were averaged ($M=1.63$, $SD=.69$) and labeled as “Interpersonal-Social Distance (ISD).” Social Distance in this context and study referred to physical-social distance as a health practice (and measure of compliance with recommendations), while Interpersonal-Social Distance (ISD) referred to the willingness of people to interact with people who recovered from COVID-19 (and measure social distance in terms of discrimination) with higher scores representing greater desire to distance oneself from persons who recovered from COVID-19. Hence, the ISD in this study is the equivalent of the SDS in Pachankis et al.’s (2018) study.

Rule-breaking

The first behavioral outcome measured in this study is people’s risky health practices in the form of (non) compliance with health regulations. - (non) compliance was measured in this study with an adaptation of Clark et al.’s (2020) noncompliance scale asking participants if they performed any of the following activities during lockdowns: (i) “visited someone else’s home,” (ii) “have someone over who does not live with you,” (iii) “went out or interacted with people without wearing a mask,” (iv) “get together outdoors with people who did not live with you,” and (v) “broke social distancing recommendations.” The question started with the statement: “Some people have altered their behavior since the beginning of the pandemic, while others have continued to pursue various activities. Some may also want to change their behavior but cannot do so for different reasons. Have you done any of the following activities during lockdowns?” Participants responded with frequency of (non) compliance/ breaking the rules on a frequency scale (often to never) and these 5 items were averaged into ‘Rule-breaking’ and had high internal reliability ($\alpha =.84$).

Testing

Participants responded to the question, “Have you ever tested for COVID-19? (PCR or other test) (you can choose more than one option) [Never; Yes; for traveling purposes; Yes, because I wanted to be on the safe side; other reason (specify); prefer not to say].” This item included multiple options to screen the responses of individuals who tested for purposes not related to the suspicion of an infection.

Testing Disclosure

Participants indicated their intention to disclose/avoid disclosing that they went for testing on a 4-point agreeability Likert scale (“If I go for testing (PCR or other COVID-19 test) or have a plan to do so, I would avoid disclosing this information to people”).

Infection Disclosure

Participants indicated their intention to disclose/avoid disclosing a positive COVID-19 status (“If I ever get diagnosed with COVID-19, I will inform everyone I came in contact with” [“Strongly disagree”; “Somewhat disagree”; “Somewhat agree”; “Strongly agree”; “Only if I am sure that I came in contact with them”; “Prefer not to say”]).

Results

Mean ratings of COVID-19 stigma by 729 respondents in Lebanon for each of the 6 dimensions were computed, the scores were compared to the mean scores of all the 93 stigma statuses (Pachankis et al., 2018) and given a rank on each dimension with the other stigmas. Next, the mean scores were subtracted from the mean scores for every dimension in every cluster and rearranged in ascending order, with the smallest differences representing a closer resemblance to that dimension or cluster. Furthermore, the arithmetic mode of the closest cluster was listed from the closest to the farthest, and a quantitative and a qualitative grade was given to COVID-19 stigma dimensions. Finally, a mediation model between COVID-19 Perceived stigma and behavioral outcomes with fear of COVID-19 and fear of COVID-19 stigma was implemented.

Mean Dimensional Stigma

The mean score of COVID-19 stigma on the 6 dimensions was 3.08 ($SD=1.08$), making it the 13th highest stigma, just below “Alcohol dependency current” ($M=3.16$), “Multiple facial piercings” ($M=3.18$), and “HIV average symptoms” ($M=3.26$), and just above “Homeless” ($M=3.03$), “Mental retardation” ($M=3.01$), and “Smoking cigarettes daily” ($M=2.99$). Table 1 displays the mean scores of COVID-19 stigma for all participants along the 6 dimensions and their standard deviations. Post hoc comparisons of the means using Tukey HSD showed a marginally significant difference between groups [$F(2, 726) = 3.02, p = .50$]. Participants who reported never being diagnosed ($M=2.98, SD=1.09$) rated COVID-19 stigma significantly lower than the those who reported being unsure of diagnosis ($M = 3.26, SD = .99, p = .041$), but not significantly different from those who had recovered ($M = 3.09, SD = 1.10, p = .38$). The Recovered group showed no significant differences from the 2 other groups. Figure 2 displays the mean plots of mean dimensional scores for the 3 groups.

In comparison with the mean scores in Pachankis et al.’s (2008) sample, COVID-19 stigma ranks 26th on Visibility between “Smoking cigarettes daily”, and “Bipolar disorder symptomatic”; 66th on Course, between “Psoriasis current average severity” and “Multiple facial piercings”; 11th on Disruption between “Gang member currently” and “Depression symptomatic”; 23rd on Unappealing Aesthetics between “Alcohol dependency current” and “Facial scars”; 46th on Origin between “Transgender” and “Diabetes type 2”; 12th on Peril between “Bacterial sexually transmitted disease” and “Genital Herpes”.

Table 1

Mean scores of COVID-19 Dimensions, ISD, and correlations between dimensions and ISD for all participants and according to COVID-19 infection status

	Visibility	Persistent Course	Disruption	Unappealing Aesthetics	Controllable Origin	Peril	Average score
All Participants							
Mean	2.54	3.34	3.26	2.82	3.18	3.33	3.08
Std. Deviation	1.86	1.87	2.26	2.05	2.00	2.13	1.08
Interpersonal-Social Distancing (ISD) Dimensional Correlations							
ISD (r) (n=729)	-.09*	.02	.17**	.12**	.20	.12**	1.71**
Social Distance	-.09	-.06	.71**	.72**	.46**	.87**	
Never diagnosed	.14*	.08	.22**	.17**	-0.05	.15*	.225**
Recovered	.05	-.06	.12*	.09	.05	.09	.114*
Unsure	.06	.05	.19*	.09	.10	.14	.218*

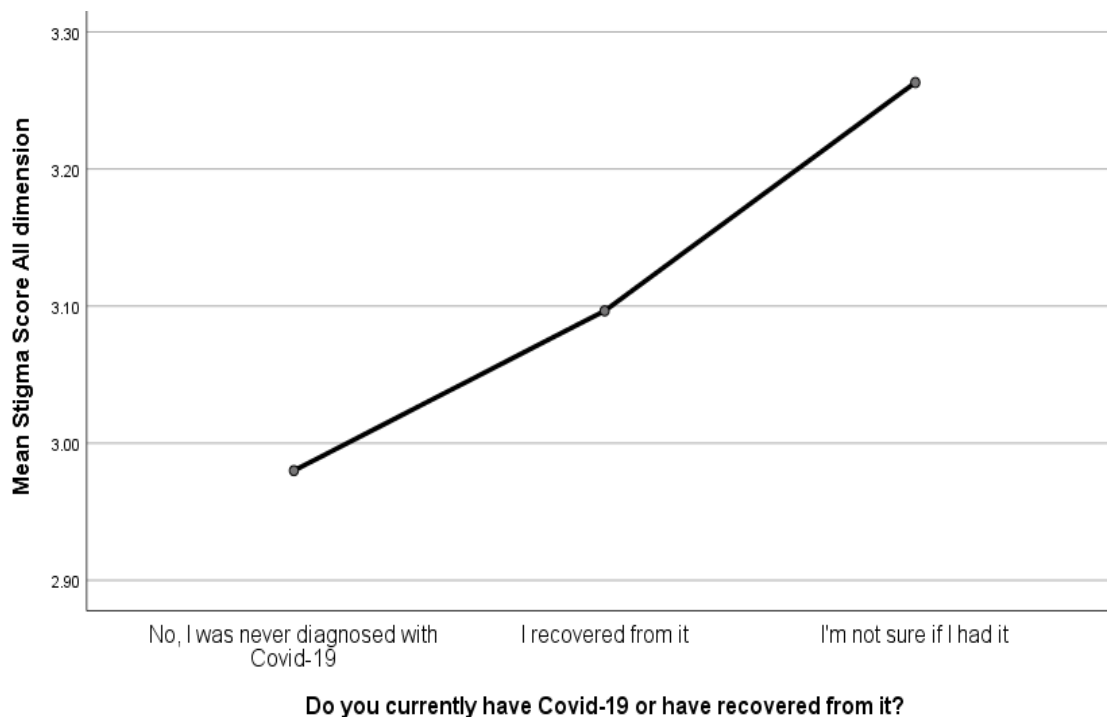
Note. Social Distance Scale scores were copied from Pachankis et al. (2008, p. 457) for comparison.

*. Correlation is significant at the .05 level (2-tailed).

**. Correlation is significant at the .01 level (2-tailed).

Figure 2

Mean COVID-19 Stigma Plots According to Infection Status



Dimensions

COVID-19 stigma scored highest on the dimensions of Persistent Course ($M=3.34$, $SD=1.87$) and Peril ($M=3.33$, $SD=2.13$) followed by Disruption ($M=3.26$, $SD=2.26$) and Controllable Origin ($M=3.18$, $SD=2.00$), and the lowest scores were given to Unappealing Aesthetics ($M=2.82$, $SD=2.04$) and Visibility ($M=2.54$, $SD=1.86$) (See Table 1). As shown in Figure 3, the Unsure group had the highest stigma rating followed by Recovered then Never diagnosed, on all dimensions with the exception of Controllable Origin, where the order is reversed. A comparison between the 3 groups based on COVID-19 infection status as determined by one-way ANOVA showed no statistically significant differences between raters on the dimensions of Concealability, Course, Aesthetics, and Origin, but a significant difference in the dimensions of Disruption ($F(2,726) = 3.85$, $p = .02$) and Peril ($F(2,726) = 3.60$, $p = .03$). On Disruption, Post hoc comparisons using the Tukey HSD test indicated that the mean score for the group of participants who reported Never being diagnosed with COVID-19 ($M=2.04$, $SD=2.26$) was significantly different from the group that reported being Unsure if they had it ($M=3.72$, $SD=2.24$). However, the group of participants who reported having Recovered from COVID-19 ($M=3.27$, $SD=2.25$) did not significantly differ from the Never diagnosed and Unsure groups. Similarly, on the dimension of Peril, the Never diagnosed group ($M=3.14$, $SD=2.11$) significantly differed from the Unsure group ($M=3.75$, $SD=1.96$) and both groups had no significant difference from the Recovered group ($M=3.34$, $SD=2.20$).

The results indicate that those who reported never being diagnosed with COVID-19 rated the identity of someone who recovered from COVID-19 as more disruptive and perilous than those who reported being unsure if they had the virus.

Interpersonal-Social Distance (ISD)

The average score (M) of ISD for COVID-19 stigma was 1.63 ($SD=.69$) for all participants. The correlation coefficients (r) of ISD with the dimensions are displayed in Table 1; the scores of the Social Distance Scale (SDS) from Pachankis et al. (2018, p. 457) were copied for comparison. ISD for all participants ($n=729$) and participants who were never diagnosed ($n=292$) was slightly but significantly correlated with Concealability, Disruption, Unappealing Aesthetics, and Peril (see Table 1). The results suggest that people who rate COVID-19 identity as more visible, disruptive, aesthetically unappealing, and perilous show higher interpersonal-social distance towards those who have recovered from COVID-19 infection.

Comparing the groups according to COVID-19 infection status using one-way ANOVA showed a significant difference ($F(2,726) = 5.26, p < .01$). Those who reported never being diagnosed ($M=1.71, SD=.71$) were significantly different from the group of respondents who reported having recovered ($M=1.53, SD=.66$) from COVID-19. However, both groups showed no significant difference with those who reported being Unsure if they had it ($M=1.68, SD=.72$).

Figure 3

COVID-19-Dimensional Stigma Scores per Infection Status

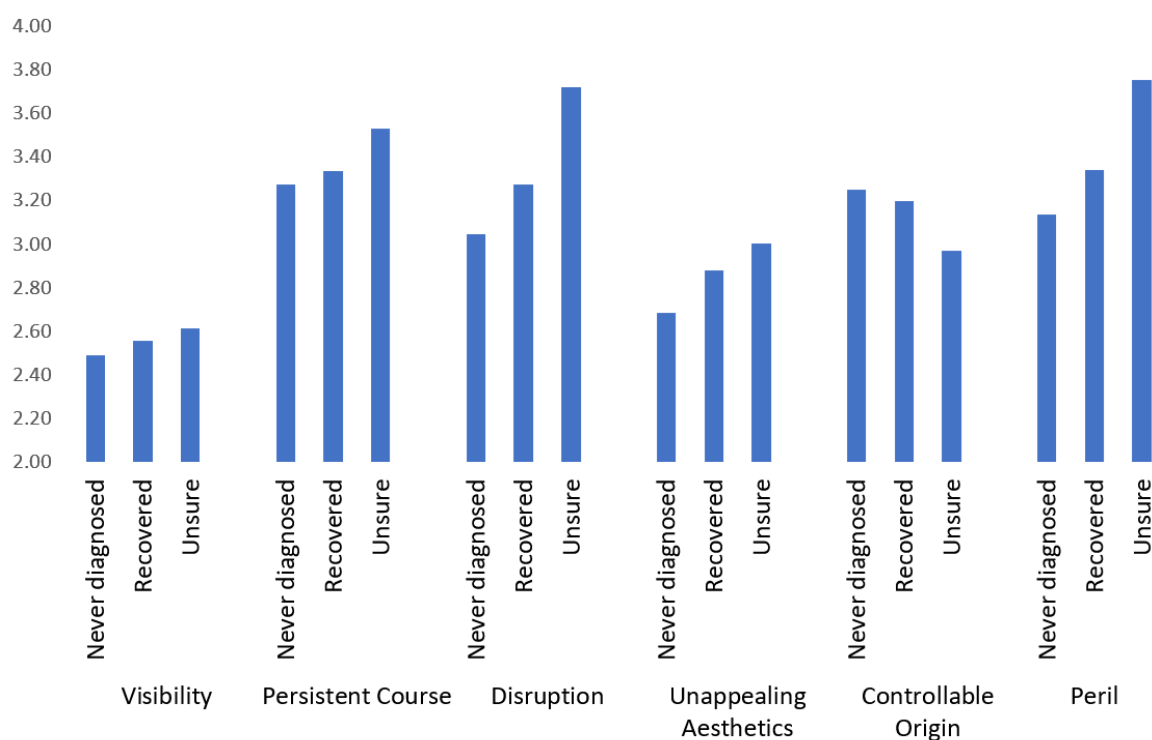


Table 1 displays ISD scores segregated by COVID-19 infection status and the correlation coefficient for the dimensions with ISD.

Clusters

The dimensional mean scores of COVID-19 ratings were compared with the dimensional scores of each cluster in Pachankis et al.'s (2018) study. The difference between the scores was calculated, and a *Similarity Score* was assigned to each cluster, where a lower score indicated a greater similarity between COVID-19 and the cluster (see Table 2). The Lebanese sample rated the COVID-19 recovered identity closest to Cluster 5 on the concealability dimension (Mean difference=0.90); Clusters 5,4,2 on Course ($M=0.23, 0.48, 0.50$, respectively); Disruption: cluster 1 ($M=0.13$) and 2 ($M=0.69$); Unappealing aesthetics: Cluster 1 ($M=0.51$) and 5 ($M=0.53$); Origin: Cluster 4 ($M=0.62$) and 5 (0.81); Peril: Cluster 2 ($M=0.37$) and 5 ($M=1.86$). When the mean difference of all dimensions per cluster was averaged, COVID-19 stigma showed to be most similar to Cluster 2 (Mean difference=.93) – Threatening Cluster – which includes stigmas such as Drug dealing and Genital Herpes, and Cluster 5 ($M=.97$) – Unappealing Persistent – which includes stigmas such as Obesity and Sex work. Scores were farthest from Cluster 3 – Sociodemographic Cluster ($M=2.20$) – which includes stigmatized such as Asian and Old age and Cluster 4 ($M=1.62$) – Innocuous Persistent – which includes stigmas such as Atheist and Infertile. The cluster that ranked in the middle in terms of its distance with COVID-19 stigma is Cluster 1 ($M=1.44$) – Awkward cluster – which includes stigmas such as Blind completely and Short.

Table 2 displays the mean differences of every cluster along the 6 dimensions. Also, Table 2 displays the mean difference of all the dimensions for all the clusters in ascending order from the lowest difference (high similarity) to the highest (low similarity). Table 3 lists the mean dimensional scores per cluster from the highest (first) to the lowest similarity (fifth). For comparison, Figure 4 displays a replication of Pachankis et al.'s (2018, p. 461) illustration of the mean dimensional ratings of the clusters with one addition: Covid-19 stigma. (See Figure 4).

Mean Dimensional Scores

The results support the first hypothesis (**H1**) with COVID-19 stigma showing the highest similarity to Cluster 2, the Threatening cluster

COVID-19 Stigma Variables

Mean scores for all the scales used were calculated and segregated into three groups according to COVID-19 infection status (see Table 4). The results showed a positive correlation between Mean Dimensional Stigma (average rating of 6 dimensions), Perceived Stigma, Felt Stigma, ISD, Fear of Infection, and Fear of Stigma. These variables were negatively correlated with Testing Disclosure (see Table 5). Rule-breaking was negatively correlated with ISD and Fear of Infection.

The mean score of the only independent variable in the analysis, Perceived Stigma (CV-19-PS), was 1.98 ($SD=0.79$) for all participants ($n=729$). To check for group differences in the scores of Perceived

Stigma before moving to the regression analysis, one-way ANOVA test was performed and group differences based on infection status of CV-19-PS scores were found to be statistically nonsignificant [$F(2, 726) = 2.258, p = .11$]. Similarly, using one-way ANOVA, no significant differences were found between the groups for the variables of Felt stigma ($M=1.93, SD=.72$), Fear of stigma ($M=3.23, SD=.77$), Testing Disclosure ($M=3.41, SD=.88$), and Infection Disclosure ($M=.79, SD=.41$).

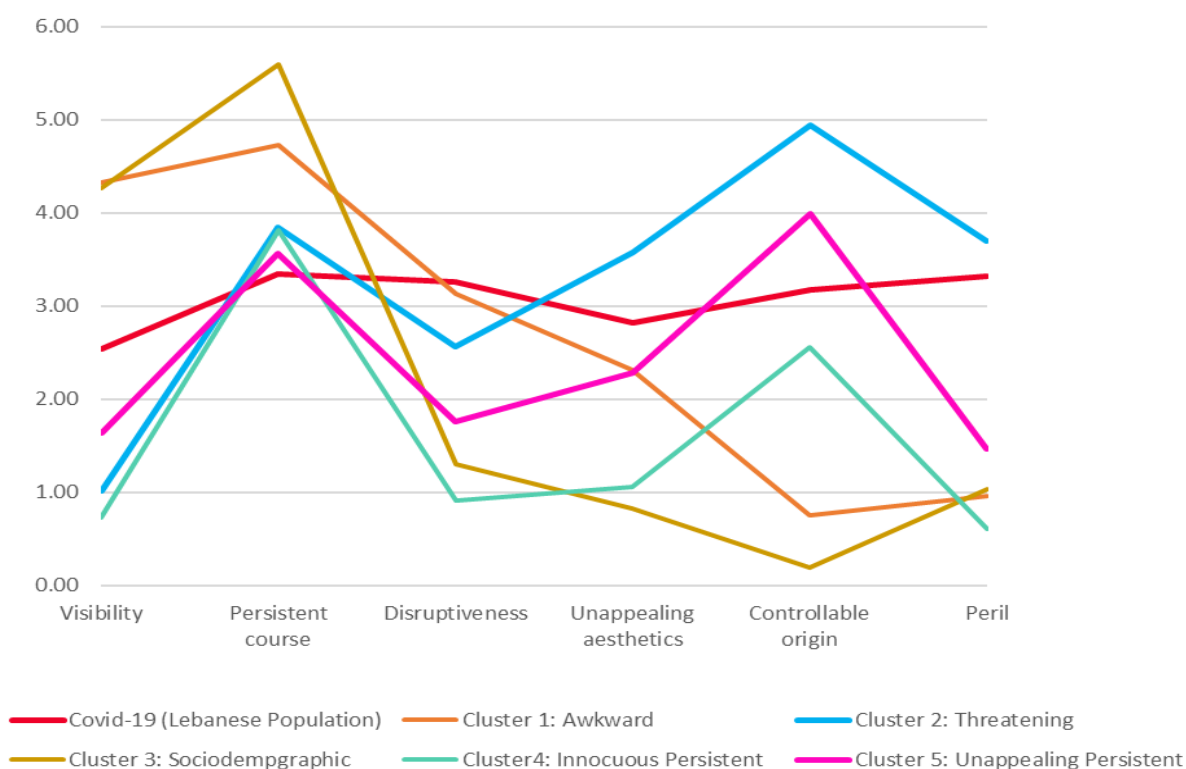
Linear Regression

Simple linear regression was calculated to test if Perceived Stigma Predicts ISD (H2), Testing (H3), Testing Disclosure (H4), Infection Disclosure (H5), and Rule-breaking (H6).

H2. ISD. The results showed that COVID-19 Perceived Stigma significantly predicted Interpersonal-Social Distance for all groups [$F(1, 727) = 27.422, p < .01$]. Thus, **H2** was supported.

Figure 4

Mean Dimensional Rating of COVID-19 stigma and Clusters



Note. The figure was reproduced, and the cluster scores were recomputed with the scores of COVID-19 in the current sample. From *The Burden of Stigma on Health and Well-Being: A Taxonomy of Concealment, Course, Disruptiveness, Aesthetics, Origin, and Peril Across 93 Stigmas*. by Pachankis, J. E., Hatzenbuehler, M. L., Wang, K., Burton, C. L., Crawford, F. W., Phelan, J. C., & Link, B. G. (2018), *Personality and Social Psychology Bulletin*, 44(4), p. 461.

Table 2*Dimensional Ratings and difference between Covid-19 and the 5 clusters*

Cluster	Visibility	Persistent Course	Disruption	Unappealing Aesthetics	Controllable Origin	Peril	Mean diff. (Similarity).
2	1.52	.50	.69	.76	1.76	.37	.93
5	.90	.23	1.50	.53	.81	1.86	.97
1	1.79	1.39	.13	.51	2.42	2.37	1.44
4	1.81	.48	2.35	1.76	.62	2.72	1.62
3	1.72	2.25	1.96	1.99	2.99	2.29	2.20

Table 3Ranked Clusters for COVID-19 scores along 6 Dimensions (*Mean difference*)

Rank	Visibility	Persistent Course	Disruptiveness	Unappealing aesthetics	Controllable origin	Peril
First	5 (0.90*)	5 (0.23)	1 (0.13)	1 (0.51)	4 (0.62)	2 (0.37)
Second	2 (1.52)	4 (.048)	2 (0.69)	5 (0.53)	5 (0.81)	5 (1.86)
Third	3 (1.72)	2 (0.50)	5 (1.50)	2 (0.76)	2 (1.76)	3 (2.29)
Fourth	1 (1.79)	1 (1.39)	3 (1.69)	4 (1.76)	1 (2.42)	1 (2.37)
Fifth	4 (1.81)	3 (2.25)	4 (2.35)	3 (1.99)	3 (2.99)	4 (2.72)
Qualitative grade	Low	High	High	Low	Medium	High
COVID-19 (M)	2.54	3.34	3.26	2.82	3.18	3.33

Note. M = Mean score of COVID-19 stigma by raters of the Lebanese population

(*) = Mean difference between COVID-19 scores and Clusters: Similarity score

H3. Testing. Since most (73.2%, $n=284$) of those who reported having recovered said they tested, they were filtered out in the analysis for Testing and Testing Disclosure (H4). In addition, those who reported the reason they tested was traveling, or other purposes were excluded. The results showed that 66.6% ($n=251$) Never tested and 33.4% ($n=126$) tested ($M=1.33$, $SD=.47$). The relationship between Perceived stigma and Testing was nonsignificant [$F(1, 375) = .331$, $p = 5.66$]; thereby, the third hypothesis was not supported.

H4. Testing Disclosure. Simple linear regression revealed a positive association between Perceived Stigma and Testing Disclosure [$F(1, 727) = 16.767$, $p < .01$], indicating that people who score higher on Perceived Stigma are less likely to disclose testing to others, thereby supporting the fourth hypothesis.

H5. Infection Disclosure. No respondents preferred not to answer, the majority (72.7%, $n=530$) strongly agreed that they will inform those they came in contact with; 6% ($n=44$) somewhat agreed; .0.7% ($n=5$) somewhat disagreed and 0.8% ($n=6$) strongly disagreed. Of the total participants ($n=585$) who responded on the 4-point Likert scale, 98.1% agreed that they would disclose an infection. The results show that almost no participants would refrain from disclosing an infection to those they came in contact with. In this item, participants were offered the option of “only if I am sure I came in contact with them”; 19.8% ($n=144$) reported they would inform those with whom they came in contact only if they were sure they came in contact with them.

Infection disclosure responses were split into two groups, those who would hesitate [0] to disclose and those who would not hesitate [1]. 21.3% ($n=155$) of hesitant participants represent low Infection Disclosure, and they included respondents who disagree and those who would only inform others of infection if they were sure of contact. Those who did not hesitate (78.7%, $n=574$) included those who agreed that they would disclose infection.

One-way ANOVA showed a significant difference between groups based on infection status ($F(2,726) = 3.138$, $p = .04$). While those who were never diagnosed ($M=.80$, $SD=.40$) and those who recovered ($M=.80$, $SD=.40$) showed no difference in their level of hesitation, the Unsure group ($M=.70$, $SD=.50$) showed a marginally significant difference from the other two groups ($p = .05$). However, when calculating linear regression to test the relation between Perceived Stigma and Infection Disclosure, none of the groups showed a significant association, and therefore the 5th hypothesis was not confirmed.

H6. Rule-breaking. One-way ANOVA revealed that the Never diagnosed and Recovered groups were not significantly different from each other in Rule-breaking, but both groups were found to have significantly higher Rule-breaking than the Unsure group [$F(2, 723) = 8.407$, $p < .01$]. The correlation between Perceived stigma and Rule-breaking was found to be statistically nonsignificant $r(724) = -.048$, $p = .20$ for all groups, and therefore, the results did not support the 6th hypothesis.

Table 4*Mean scores of all scales segregated by COVID-19 infection status*

	Recovered (n=316)		Never diagnosed (n=292)		Unsure (n=121)		Total (n=729)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Perceived Stigma	1.91	.82	2.01	.76	2.08	.78	1.98	.79
Interpersonal-Social Distance	1.53	.66	1.71	.71	1.67	.72	1.63	.69
Fear of COVID-19	2.59	.75	2.67	.74	2.86	.70	2.67	.74
Felt Stigma	1.87	.73	1.98	.72	2.00	.70	1.93	.72
Fear of Stigma	3.25	.74	3.24	.76	3.14	.87	3.23	.77
Rule-breaking	2.56	.84	2.50	.73	2.22	.75	2.48	.79
Infection Disclosure	.80	.40	.80	.40	.70	.46	.79	.41
Testing Disclosure	3.34	.91	3.49	.84	3.37	.86	3.41	.88

Note. M = Mean score of Covid-19 stigma by raters of the Lebanese population

H7. General Poor Health. Using one-way ANOVA, no significant correlations were found between Poor Health ($M=3.61$, $SD=.91$) and Felt Stigma in the Never Diagnosed and Unsure Groups. However, in the Recovered group, self-reported Health ratings showed a significant negative correlation with Perceived Stigma ($r=-.14$, $p = .014$, Fear of Infection ($r = -.16$, $p < .01$ and Felt Stigma ($r=-.21$, $p < .01$, thereby confirming the 7th hypothesis.

Mediation

The mediation compared the 3 groups on the effect of a single predictor (Perceived Stigma) on 5 dependent variables (ISD, Testing, Testing Disclosure, Infection Disclosure, Rule-breaking) through 2 Mediators: (M1) Fear of COVID-19 Infection FCV-19-In and (M2) Fear of COVID-19 Stigma FCV-19-Stigma. To investigate linear regressions, several mediating analyses were performed using PROCESS macro (Hayes, 2013), particularly model number four.

Fear of COVID-19 (M1). The effect of the independent variable on Fear of COVID-19 Infection (M1) was nonsignificant ($B = .072$, $SE = .057$, $p = .209$) for all of groups. Thus, the first mediation hypothesis (H8) was not confirmed, and its effect on the dependent variables was not tested. People who were Unsure of infection scored significantly higher than people who recovered from it [$F(2,726) = 5.75$, $p < .01$]

Fear of stigma (M2). The results showed a significant positive correlation exists between the independent variable and the Mediator M2 for all the groups ($B = .320$, $SE = .056$, $p < .01$) (Never Diagnosed, $r(314) = .32$, $p < .01$; Recovered, $r(290) = .29$, $p < .01$; Unsure, $r(119) = .28$, $p < .01$) so a mediation analysis was tested between the predictor and the dependent variables that had a significant correlation with the predictor, namely, Interpersonal-Social Distance (ISD) and Testing Disclosure.

Interpersonal-Social Distance. For the group that reported never being diagnosed, the effect of the independent variable on Interpersonal-Social Distance was statistically significant ($B = -.184$, $SE = .064$, $p = .004$). The indirect effect of CV-19-PS on ISD was significant [$B = .055$, $SE = .023$, 95% C.I (.015, .105)]. The direct effect of CV-19-PS on ISD was also significant ($B = .111$, $SE = .033$, $p < .01$) which suggests a partial mediation exists between Perceived Stigma and Interpersonal-Social Distance through the mediator Fear of Stigma (M2).

Testing Disclosure. Like ISD, the indirect effect of CV-19-PS on Testing Disclosure through the mediator Fear of Stigma was statistically significant [$B = -.081$, $SE = .027$, 95% C.I. (-.137, -.034)]. The 95% confidence interval did not intercept zero, suggesting a partial mediation between Perceived Stigma and willingness to Disclose Testing. The results suggest that the second mediation hypothesis (H9) was partially supported for ISD and Testing Disclosure.

Table 5*Correlations*

	1	2	3	4	5	6	7	8	9	10
1. Perceived stigma	1.00									
2. Mean Dimensional Stigma	.41**	1.00								
3. Felt Stigma	.53**	.32**	1.00							
4. Interpersonal-Social Distance	.19**	.17**	.23**	1.00						
5. Fear of Infection	.086*	.23**	.17**	.241**	1.00					
6. Fear of Stigma	.30**	.22**	.41**	.25**	.29**	1.00				
7. Rule-breaking	.05	-.01	0.02	-.11**	-.23**	.03	1.00			
8. Testing	-.06	-.06	-.092*	-.19**	.12**	-.096*	.07	1.00		
9. Testing Disclosure	-.15**	-.10**	-.25**	-.17**	-.12**	-.27**	.00	-0.01	1.00	
10. Infection Disclosure Hesitation	.00	.01	-.07	-.05	0.04	-.12**	.00	.07	.14**	1.00

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Discussion

Dimension and Clusters

In this study, stigma related to people who recovered from COVID-19 was rated on the dimensions proposed by Jones et al. (1984) using rating items proposed by Pachankis et al. (2018), making it the only infectious disease of its transmissibility mode to be rated and tested as the 94th stigma in the taxonomy research. COVID-19 is an infectious disease, and when trying to place it in a stigma cluster, it is natural to look at the placement of other infectious diseases. Only 3 infectious diseases were included in Pachankis et al.'s (2018) study; HIV, Genital Herpes, and Bacterial Sexually Transmitted Infection. The 3 stigmas all fall in Cluster 2, the Threatening cluster, and share a high resemblance on the dimensional rating.

Albeit the results confirmed the first hypothesis with COVID-19 stigma being most similar to Cluster 2, the assumption should not be automatic. One similarity that COVID-19 stigma does not share with the other infectious disease is the mean of transmission. Whereas the infectious diseases in Pachankis et al.'s (2018) study are transmitted through sexual activity, COVID-19 can be transmitted by contact (World Health Organization, 2020b), which consequently impacts the dimension of Controllable Origin. In addition, a wide conjecture that HIV and Herpes can be treated but not cured creates another difference with COVID-19 and affects a second dimension: Persistent Course.

Pachankis et al.'s (2018) study did not include any infectious diseases transmissible by contact, which would compare better with COVID-19 (e.g., EBOLA). Nonetheless, the element that scored the highest on all four diseases [HIV, Herpes, Bacterial STI, COVID-19] is Peril which is what significantly pushed the scores of COVID-19 towards that cluster. This indicates the substantial effect of threat in determining the development of stigma related to infectious diseases. This notion can be explained from several perspectives in the development of stigma and its components – stereotypes, prejudice, discrimination. A particularly relevant approach to explaining stigma related to infectious disease is evolutionary. This approach proposes that distancing from the infected protects from parasitic infection; (Kurzban & Leary, 2001) and helps us avoid diseases (Phelan et al., 2008).

Stigma Consequences

The association between COVID-19 Stigma and poor health was supported in the results of this study. Participants who reported higher Felt and Perceived Stigma rated their general health significantly lower. This confirmation adds yet another layer of resemblance to base inferences about the consequences of COVID-19 stigma from the findings of Pachankis et al. (2018). In their second study, Pachankis et al. (2008) tested the associations of the stigma dimensions with health and wellbeing, starting with two exploratory factor analyses (EFAs) that yielded the following factors: (a) Health impairment (consisted of depression, anxiety, and general poor health), (b) Stigma importance (consisted of stigma centrality and stigma salience), (c) Stigma perception (consisted of stigma

consciousness, perceived stigma, and everyday discrimination), (d) Emotion regulation difficulties (consisted of difficulties in emotion regulation and rumination), and (e) Stress adjustment resources (consisted of mastery, self-esteem, and social support).

COVID-19 stigma in the Lebanese population received the highest scores on Persistent Course and Peril, followed by Disruption. According to the findings of Pachankis et al. (2018, p. 466), “Persistent-course stigmas demonstrated negative associations with health impairment as well as positive associations with stigma importance and stress adjustment resources.” The inference between the two studies is that those who suffer from COVID-19 stigma would have more health impairments, but this depends on stigma importance. “Disruptiveness was positively associated with health impairment, stigma importance, stigma perception, and emotion regulation; and was negatively associated with participants’ stress adjustment resources.” The second comparison suggests that people who recovered from COVID-19 would additionally have higher maladaptive emotional regulation and lower stress adjustment resources. In the third comparison, “Peril was positively associated with stigma perception and stress adjustment resources and was also negatively associated with stigma importance” and suggests that COVID-19 stigma would be associated with stigma consciousness, perceived stigma, and everyday discrimination (Stigma perception factor) and negatively associated with salience and centrality (stigma importance factor).

From the findings, clusters 2, 3, 5 experienced more health impairments than 3 and 4, implying that those affected by COVID-19 Stigma would have more health impairments. Moreover, the negative association between health and stigma was found only with those who have recovered from COVID-19. This indicates that COVID-19 stigma is present amongst the Lebanese population and influences health.

For Disclosure, respondents showed more willingness to disclose an infection than to disclose testing. The high willingness to disclose an infection can be explained as a moral obligation to contain the infection. However, when it comes to morality, feelings of guilt may cause one to respond in a socially desirable manner. Larsen et al. (2020) found no social desirability bias related to COVID-19 surveys. However, in 3 studies measuring the impact of ‘face-saving’ questions, Daoust et al. (2020) found that face-saving questions and guilt-free options increased reporting of non-compliance. When there is no moral obligation in disclosure, such as testing with no infection, the difference between the two disclosure items implies avoidance of disclosure if there is no need. The disclosure question was asked in terms of “disclosure avoidance” rather than willingness, so discretion is expressed as an active choice. Moreover, the presence of disclosure avoidance is further supported when a guilt-free option is added to the infection disclosure items [“only if I am sure I came in contact with them”] because it suggests that people would avoid disclosure even with a possibility of infecting others, a risk that respondents are willing to take if they were unsure of contact.

Even though no significant relationship was found between stigma and infection disclosure, a noteworthy observation is that the Unsure group was significantly less willing to disclose infection than the other two groups. This provides another example of how people who report being unsure of infection behave differently than those who report never being diagnosed or recovered.

Group differences

Although behavioral outcomes can be expected to be similar, the mixed results in this study showed diverse associations with stigma. Group differences across outcomes showed unique trends in the correlations based on infection status. On Rule-breaking, those who reported having recovered from COVID-19 and those who reported they were never diagnosed had similar responses that were different from those who reported they were unsure if they had the virus. The Unsure group was also different from the other groups on their scores of Interpersonal-Social Distance.

The common element between those variables [ISD and Rule-breaking] is distancing, both social and physical, and the reasons those who were unsure show higher difference can be interpreted through fear of infection. Indeed, the results showed that those who were unsure showed a significantly higher fear of infection than the other groups. This may explain the difference between the Unsure and Recovered group who were already infected with the virus and have little to no more fear of infection.

Contextual characteristics

Many health conditions are highly stigmatized, but a unique characteristic emerging with COVID-19 stigma is that even its precaution measures and treatment are being stigmatized. "Some anti-maskers have claimed that being forced to wear a face-covering violates their religious rights," and a state representative said that it "dishonors god" (Dorrough Smith, 2020, para. 3). In the US, Perry et al. (2020) found that although religiosity was a predictor of precautionary measures, Christian nationalism was the second leading predictor of incautious behavior. Being a country with high religious diversity, religion can be an important aspect to consider in Lebanon.

Limitations

In the taxonomy study by Pachankis et al. (2018), the ratings were done by experts and by the general public. This thesis is not an exact replication of the study, and experts' ratings were not obtained. One limitation to this study is the findings related to the clustering COVID-19 stigma. Despite being supported, the results are mere assumptions that can highlight trends in the dimensions and inform future studies but cannot be considered statistically accurate because the samples being compared are different and the nature of the COVID-19 stigma is rapidly changing in different parts of the world. Also, the clusters did not have any infectious diseases similar to COVID-19, which can make comparisons easier.

Another limitation is related to the topic's novelty and limited literature available at the time it was conducted.

Recommendations for future research

Because stigma is contextual and deals with groups, group identification, group norms, and social identity, these aspects should be explored in future research. For example, how would a COVID-19 stigma support group look like? What is the relationship between (COVID-19 recovered) group membership and health outcomes?

People may experience discrimination based on their relation to stigmatized groups (e.g., families of the infected) and group belonging (e.g., ethnic minorities), which can lead to a decrease in health practices such as getting tested and wearing masks (Turner-Musa et al., 2020). Black men interviewed by Times Magazine reported fear of wearing face coverings because of their associations with criminal activities (e.g., "Can y'all imagine me walking in here with a bandana on my face?" (de la Garza, 2020, para. 1). Evidence of stigmatization of ethnic groups includes Russian Jewish immigrants associated with the typhus and cholera outbreaks in 1892 and Native Americans associated with the Hantavirus outbreak in 1993 (Person et al., 2004). Discrimination against Asian people in the 2003 SARS outbreak affected the behavior of this group in seeking care, in addition to its effect on their mental health (Person et al., 2004)

The ethnicity in the sample was highly homogenous, so ethnic disparities were not considered in this study. However, if it was to be replicated, researchers should take ethnicity as an essential factor in stigma manifestation with vulnerable groups (e.g., Asians, Blacks, and health workers).

Conclusion

This study addressed stigma related to a COVID-19 pandemic using the available resources at the time and building on other studies related to infectious diseases. The findings suggest that social stigma has a negative effect on the wellbeing of the stigmatized and contributes to the continuation of the pandemic. Stigma mitigation should be addressed and prioritized in public health responses combating the COVID-19 pandemic (Bruns et al., 2020). Because the results confirmed that fear plays a role that influences interpersonal and physical behaviors, the role of fear in stigma creation needs to be further investigated. "For preventive programs of infectious diseases to be effective, their associated stigma must be actively addressed" (Mak et al., 2006, p. 1921). The results are not surprising because they confirm what we know from previous pandemics. What is surprising is that countries and interventions can still not build on this knowledge in social psychology to reduce stigma and the question isn't about our knowledge of social stigma related to infectious diseases. The real question is 'Haven't we learned anything from HIV, EBOLA, and other pandemics'?

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Annex

Annex A. Questionnaire English Version

Start of Block: Informed Consent

Q1

Introduction

My name is Hilal Kassem and I am a master student in social and cultural psychology at the University Institute of Lisbon (ISCTE-IUL) in Portugal and the University of Limerick in Ireland. My study aims to explore people's attitudes towards the Corona virus Covid-19 and its associated behaviors. If you agree to participate in this study, you will be asked a series of questions regarding your personal opinion about people's beliefs related to Covid-19 and related information. The questionnaire is completely anonymous, does not collect any names, and cannot be traced. You have the right to withdraw from the study at any point. To participate in this study, you must be 18 years old or older. Completing the survey takes about 15 -20 minutes.

Optional Money Prize

After submitting your response, you will be directed to another page through a separate link to participate in a draw for money prize of \$100, \$50, and \$20. Participating in the draw is optional.

For any questions about the study, please do not hesitate to contact me on the following email: hkmli@iscte-iul.pt

Thank

you

Hilal

Kassem

If you agree to participate, please indicate so in the question below to start.

Q2 Do you consent to participate in this research project?

Yes, I consent (1)

No, I don't consent (2)

Skip To: End of Survey If Do you consent to participate in this research project? != Yes, I consent

End of Block: Informed Consent

Start of Block: Demographics

Q3 How old are you?

—



Q4 Sex
Male (1)
Female (2)
Non-binary (3)
Other (4)



Q5 Relationship status
Single (1)
Partnered/ married (2)



Q6 Do you have any children?
Yes (1)
No (2)

Page
Break



Q7 Education

- No formal Education (1)
- Primary school (2)
- Middle school or Brevet (3)
- Secondary school or Bacallaureate (4)
- Vocational (5)
- University bachelors or License (6)
- Masters (7)
- PhD (8)



Q8 How much is your monthly income as a family?

- less than \$100 (1)
- between \$100 and \$500 (2)
- between \$500 and \$1500 (3)
- between \$1500 and \$3000 (4)
- more than \$3,000 (5)
- prefer not to answer (6)



Q9 Does your monthly income suffice you till the end of the month?

- Almost always (1)
- Almost never (2)



Q10 Residency status

- Lebanese living in Lebanon (1)
 - Syrian living in Lebanon (2)
 - Palestinian (3)
 - Other nationality living in Lebanon (4)
 - Lebanese living abroad (specify country) (5)
 - I am from another country (specify) (6)
-



Q11 Governorate/ Muhafaza. If you don't live in Lebanon click on "Not applicable"

- Akkar (1)
- Baalbek-Hermel (2)
- Beirut (3)
- Beqaa (4)
- Mount Lebanon (5)

Nabatieh (6)
North Governorate (7)
South Governorate (8)
Prefer not to say (9)
Not applicable (10)



Q12 Religion and religious denomination

Druze (1)
Christian (2)
Shi'a (3)
Sunni (4)
Agnostic/Atheist (5)
Other (6)
Prefer not to say (7)

Page
Break

End of Block: Demographics

Start of Block: Health rating

X→

Q13 On a scale from 1 (Poor) to 5 (Excellent), how would you rate your general health?

- 1 (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)

End of Block: Health rating

Start of Block: Covid-19 Status

X→

Q14 Do you take care of an elderly person?

- No (1)
- Yes (2)

X→

Q15 Do you or anyone in your family has a chronic illness? You can choose more than one option

No (1)

A family member has a chronic illness (specify - optional) (2)

I have a chronic illness (specify - optional) (3)

X→

Q16 **Do you currently have Covid-19 or have recovered from it?**

No, I was never diagnosed with Covid-19 (1)

I recovered from it (2)

I currently have Covid-19 (3)

I'm not sure if I had it (4)

Prefer not to answer (5)

X→

Q17 Has any of your family and friends been diagnosed with Covid-19? (multiple answers possible)

No one in my family had Covid-19 (1)

One or more of my family members have been diagnosed with Covid-19 and recovered from it (2)

one or more family members currently have Covid-19 (3)

One or more family members have died from Covid 19 (4)

Prefer not to say (5)

Page
Break

End of Block: Covid-19 Status

Start of Block: Covid-19 Characteristics

Q18 In the following questions, we are asking your opinion on social perception on the Covid-19 disease. Please answer these questions based on your understanding of general social perception, rather than your own personal opinion. Assume that the general social perception represents the perspective of people who do not belong to the group of people with Covid-19.

X→

Q19

How easily is the identity of a person who recovered from Covid-19 able to be concealed in a typical social interaction between typical members of the population? That is, how easy it is to know that someone had the corona virus just by talking or interacting with them? **[0= totally concealable** in casual social interaction], **[6= never able to be concealed** in casual social interaction]

- 0 (1)
- 1 (2)
- 2 (3)
- 3 (4)
- 4 (5)
- 5 (6)
- 6 (7)

X→

Q20

To what extent does the general population expect the condition to improve or persist, worsen, or recur? **[0= temporary**, expected to totally disappear over a short period of time], **[6= persistent**, expected to remain unchanged, worsen, or recur over the life course]

- 0 (1)
- 1 (2)
- 2 (3)
- 3 (4)
- 4 (5)
- 5 (6)
- 6 (7)

X→

Q21 To what extent does the condition or identity disrupt typical social interactions taking place among typical members of the population, assuming the condition or identity is known (people know that the person had Covid-19 in the past and recovered from it)? **[0= does not disrupt normal social interaction]**, **[6= normal social interaction is extremely difficult]**

- 0 (1)
- 1 (2)
- 2 (3)
- 3 (4)
- 4 (5)
- 5 (6)
- 6 (7)



Q22 To what extent does the condition prompt physical revulsion among typical members of the population in typical social interactions, assuming the identity is known (people know that the person had Covid-19 in the past and recovered from it)? **[0= condition is not generally seen as repulsive]**, **[6= condition or identity is generally seen as extremely repulsive]**

- 0 (1)
- 1 (2)
- 2 (3)
- 3 (4)
- 4 (5)
- 5 (6)
- 6 (7)



Q23 To what extent do people in general see an individual with this condition as being responsible for it? **0 [condition is seen as totally out of individual's control]**, **6 [condition is seen as totally under the individual's control]**

- 0 (1)
- 1 (2)
- 2 (3)
- 3 (4)
- 4 (5)
- 5 (6)
- 6 (7)



Q24

In the general population, to what extent do people who interact with an individual with this condition perceive some kind of contagion, threat, peril, or physical danger to themselves in typical social interactions, assuming the condition is known (people know that the person had Covid-19 in the past and recovered from it)?

[0= there is no perceived contagion, peril, or physical danger to oneself], **[6= there is extreme perceived contagion, peril, or physical danger to oneself]**

- 0 (1)

- 1 (2)
- 2 (3)
- 3 (4)
- 4 (5)
- 5 (6)
- 6 (7)

X→

Q25 To what extent do people see a person with this condition as having a moral blemish or shame (3ayb)?
 [0= condition is **not** generally **seen as a moral blemish or shameful**], [6= condition is generally seen as an **extreme moral blemish or shameful**]

- 0 (1)
- 1 (2)
- 2 (3)
- 3 (4)
- 4 (5)
- 5 (6)
- 6 (7)

End of Block: Covid-19 Characteristics

Start of Block: Perceived discrimination

X→

Q26 Please rate the following statements on the probability of occurring. If others believe that you have had Covid-19 in the past, how likely do you think the following would occur:

	Extremely unlikely (1)	Somewhat unlikely (2)	Somewhat likely (3)	Extremely likely (4)
People threatening or harassing you. (1)				
Current friends stop hanging out with you. (2)				
Friends avoiding you. (3)				
People not wanting to get to know you better. (4)				
People act as if you are inferior (5)				

People act
as if they are
afraid of you
(6)

Treated
with less
respect than
others (7)

People act
as if you are
dishonest (8)

Page
Break

End of Block: Perceived discrimination

Start of Block: Fear of Covid-19



Q27 In the following question, indicate your level of agreeability with the following statements about the Coronavirus Covid-19

	Strongly agree (1)	Somewhat agree (2)	Somewhat disagree (3)	Strongly disagree (4)
I am most afraid of the Coronavirus (1)				
It makes me uncomfortable to think about Corona (2)				
My hands become clammy when I think about Corona (3)				
I am afraid of losing my life because of Corona (4)				
When I watch news and stories about Corona on social media, I become nervous or anxious (5)				

Page
Break

End of Block: Fear of Covid-19

Start of Block: Social distance

X→

Q28 Assuming you have an extra room in your house that you want to rent out, how would you feel about renting a room in your home to a person who had Covid-19 in the past?

definitely unwilling (1)

somewhat unwilling (2)

somewhat willing (3)

definitely willing (4)

X→

Q29 How would you feel about visiting someone who recovered from Covid-19

Definitely willing (1)

Somewhat willing (2)

Somewhat unwilling (3)

Definitely unwilling (4)

End of Block: Social distance

Start of Block: Behavior

X→

Q30 Some people have altered their behavior since the beginning of the pandemic, while others have continued to pursue various activities. Some may also want to change their behavior but cannot do so for different reasons. Have you done any of the following activities during lock-downs?

	Always (1)	sometimes (2)	Never (4)	Rarely (3)
Visited someone else's home (1)				
Have someone over who does not live with you (2)				
Get together outdoors with people who did not live with you (3)				
Went out or interacted with people without wearing a mask (4)				
Broke social distancing				

recommendations
(5)

X→

Q31 Have you ever tested for Covid-19? (PCR or other test) (you can choose more than one option)

Never (1)

Yes, for traveling purposes (2)

Yes, because I had symptoms (3)

Yes, because I wanted to be on the safe side (4)

Other _____ reason _____ (specify) (5)

Prefer not to say (6)

X→

Q32 If I go for testing (PCR or other Covid-19 test) or have a plan to do so, I would avoid disclosing this information to people

Strongly disagree (1)

Somewhat disagree (2)

Somewhat agree (3)

Strongly agree (4)

X→

Q33 In your village or place of residence, does a "list" of names of people with Covid-19 exist which is shared with other people?

Yes, a list exists (1)

No, it doesn't (2)

Not sure (3)

End of Block: Behavior

Start of Block: Covid-19 name list

X→

Q34 If such a list exists, indicate your level of agreeability with the following statements. If this does not apply to you, please respond by imagining that such a list exists.

	Strongly agree (1)	Agree (2)	(3)	Disagree	Strongly Disagree (4)
I am afraid that my name will be added to that list (4)					
I am afraid that if my name					

is on that list,
people will
treat me
differently in
the future after
I heal (5)

If I
recovered from
Covid-19, I
would be afraid
that people
know I had it
(6)

Page
Break

Q35 Just a few more questions and we are done.

Page
Break



Q36 If I ever get diagnosed with Covid-19, I will inform everyone I came in contact with

Strongly disagree (1)

Somewhat disagree (2)

Somewhat agree (3)

Strongly agree (4)

Only if I am sure that I came in contact with them (5)

Prefer not to answer (6)

Page
Break

End of Block: Covid-19 name list

Start of Block: Block 8

Q37 The following question is about your experience with Covid-19 stigma. If you were never infected with Covid-19, imagine that you did and respond based on how you think you might have experienced them. Indicate your level of agreeability with the following statements.



Q38 To what extent do you agree with the following statements?

	Strongly disagree (1)	Somewhat disagree (2)	Somewhat agree (3)	Strongly agree (4)
1. I have lost friends by telling them I have Covid-19 (1)				
2. I feel hurt by how people reacted to learning I have Covid-19 (10)				
3. People avoid touching me if they know I had Covid-19 (11)				
4. Most people with Covid-19 are rejected when others learn they had it (12)				
5. People seem afraid of me because I have had Covid-19 (13)				
6. I feel set apart, isolated from the rest of the world (14)				
7. I regret having told some people				

that I had
Covid-19 (15)

8. Some
people act as
though it's my
fault I had
Covid-19 (16)

9. As a
rule, telling
others has
been a
mistake (17)

X→

Q39 Did you receive at least one shot of the vaccine?

I did not take any vaccine shot (1)

I took one or more shots (2)

Prefer not to say (3)

Display This Question:

If Did you receive at least one shot of the vaccine? = I did not take any vaccine shot

X→

Q40 Why didn't you take the vaccine? (multiple answers possible)

I'm still not eligible. I am waiting for my turn (1)

I have not registered in the Ministry of Public Health (2)

I am still unsure if I want to take it (3)

I am afraid of its side effects (4)

The vaccine might kill me (5)

The vaccine is a conspiracy and it does not really protect from Covid-19 (6)

Other (specify) (7)

X→

Q41 Please rate your level of agreeability with the following statements if you've received the vaccine. If you didn't receive the vaccine, plan to take it, or will not take it, please answer based on how you imagine your response would be if you received it.

	Strongly disagree (1)	Disagree (2)	Agree (3)	Strongly agree (4)
I avoid telling a lot of people (1)				

I only tell
close people
(7)

I will not
tell anyone (8)

I will share
it on social
media (10)

End of Block: Block 8
Annex B. Questionnaire Arabic Version

Cov_id-19 Perception

Annex B. Questionnaire Arabic Version

Start of Block: Informed Consent

مقدمة

اسمي هلال قاسم وأنا طالب ماجستير لبناني في علم النفس الاجتماعي والثقافي في معهد لشبونة الجامعي في البرتغال وجامعة ليمريك في ايرلندا. تهدف دراستي إلى استكشاف مواقف الناس تجاه (ISCTE-IUL) والسلوكيات المرتبطة به. ان كنت توافق\توافقين على المشاركة (Covid-19) فيروس كورونا كوفيد تسعة عشر في هذه الدراسة ، فسيتم طرح سلسلة من الأسئلة عليك فيما يتعلق برأيك الشخصي حول معتقدات الناس حول الاستبيان سري تمامًا ولا يجمع أي أسماء ولا يمكن تتبعه. لديك الحق في الانسحاب من الدراسة Covid-19. في أي وقت. للمشاركة في هذه الدراسة ، يجب أن يكون عمرك 18 عامًا أو أكثر. تعبئة هذه الاستمارة تتطلب دقيقة تقريباً

جائزة مالية اختيارية
بعد إرسال ردك ، سيتم توجيهك إلى صفحة أخرى من خلال رابط منفصل للمشاركة في السحب على جائزة مالية قدرها 100 دولار و 50 دولارًا و 20 دولارًا. المشاركة في السحب اختيارية

لأي استفسارات حول الدراسة ، لا تتردد في الاتصال بي عبر البريد الإلكتروني التالي: hkml@iscte-iul.pt

شكرا هلال قاسم

Q1. إذا كنت توافقين على المشاركة ، يرجى الإشارة إلى ذلك في السؤال أدناه للبدء



Q2 هل توافق او توافقين على المشاركة في هذا البحث؟

نعم أوافق (1)

لا أوافق (2)

Skip To: End of Survey If Do you consent to participate in this research project? != Yes, I consent

End of Block: Informed Consent

Start of Block: Demographics

Q3 (قديش عمرك؟) ما هو عمرك؟



Q4 الجنس

ذكر (1)

أنثى (2)

غير ثنائي (3)

آخر (4)



Q5 الحالة الاجتماعية

- أعزب /عزباء (1)
مرتبطه / او متزوج /ة (2)

X→

- Q6 هل لديك أولاد؟
نعم (1)
لا (2)

Page
Break

X→

Q7 المستوى التعليمي

- لا تعليم رسمي (ما فتت على المدرسة) (1)
 المدرسة الابتدائية (2)
 المدرسة المتوسطة أو الريفية (3)
 الثانوية العامة أو البكالوريا (4)
 مهني (5)
 البكالوريوس أو الرخصة الجامعية (ليسانس) (6)
 ماجستير (7)
 دكتوراه (8)

X→

Q8 كم هو دخلك الشهري كعائلة؟

- أقل من 100 دولار (1)
 بين 100 دولار و 500 دولار (2)
 بين 500 دولار و 1500 دولار (3)
 بين 1500 دولار و 3000 دولار (4)
 أكثر من 3000 دولار (5)
 افضل عدم الاجابة (6)

X→

- هل يكفيك دخلك الشهري حتى نهاية الشهر؟
 Q9 (يكفيك معاشك لآخر الشهر؟)
 معظم الأحيان نعم (1)
 معظم الأحيان لا (ما بكفي) (2)

X→

Q10 حالة الإقامة

- لبناني/ة مقيم/ة في لبنان (1)
 سوري/ة مقيم/ة في لبنان (2)
 فلسطيني/ة (3)
 جنسية أخرى (4)
 لبناني/ة مقيم/ة (الخارج) حدد الدولة (5)
 انا من بلد اخر (حدد) (6)

X→

Q11 المحافظة

- عكار (1)
 بعلبك - الهرمل (2)
 بيروت (3)
 البقاع (4)
 جبل لبنان (5)

- (6) النبطية
- (7) محافظة الشمال
- (8) محافظة الجنوب
- (9) افضل عدم الإجابة
- (10) لا ينطبق

X→

Q12 الدين والمذهب

- (1) درزي
- (2) مسيحي
- (3) شيعة
- (4) سنة
- (5) ملحد/ لا أدري
- (6) آخر
- (7) افضل عدم الإجابة

Page
Break

End of Block: Demographics

Start of Block: Health rating

X→

على مقياس من 1 (ضعيف) إلى 5 (ممتاز) ، كيف تقيم/ين صحتك العامة؟

من واحد لخمسة ، قد يش بتعطي علامة لصحتك بشكل عام؟
(منيحة) 1

2

3

4

Q13 (كثير منيحة) 5

(1) 1

(2) 2

(3) 3

(4) 4

(5) 5

End of Block: Health rating

Start of Block: Covid-19 Status

X→

Q14 هل تعتني بشخص مسن؟

(1) لا

(2) نعم

X→

هل أنت أو أي فرد من أفراد أسرتك مصاب بمرض مزمن؟ (أنت أو حدا من عيلتك عندو مرض مزمن؟)

Q15 يمكنك اختيار أكثر من إجابة

(1) لا

(2) أحد أفراد الأسرة

(3) مصاب بمرض مزمن (يرجى التحديد - اختياري)

(4) أعاني من مرض

(5) مزمن (يرجى التحديد)

X→

Q16 هل أنت مصاب حاليًا بفيروس الكورونا كوفيد 19 أو تعافيت منه؟

(1) لا

(2) تعافيت منه

(3) مصاب/ة حاليًا بالكوفيد 19 (معني كورونا هلق)

(4) لست متأكدًا مما إذا كنت قد اصبت (مش متأكد/ة إذا كان معني كورونا)

(5) أفضل عدم الاجابة

X→

- ؟ (ممکن اختیار اکثر من إجابة Covid-19 هل تم تشخيص إصابة أي من أفراد عائلتك أو أصدقائك بـ Q17 (حدا من عيلتك كان معو كورونا؟)
- (ما حدا) Covid-19 لم يكن أحد في عائلتي مصابًا بـ (1)
- (معو كورونا وصح) (حدا من عيلتي كان Covid-19 تم تشخيص إصابة فرد أو أكثر من أفراد عائلتي بـ (2)
- (في حدا من عيلتي هلق معو كورونا) Covid-19 واحد أو أكثر من أفراد الأسرة مصاب حاليًا بـ (3)
- (حدا من عيلتي توفي من الكورونا) Covid 19 توفي فرد أو أكثر من أفراد الأسرة بسبب (4)
- افضل عدم الإجابة (5)

Page
Break

End of Block: Covid-19 Status

Start of Block: Covid-19 Characteristics

يلبي مكتوب بالأحمر هو مثل السؤال يلي فوقو بالعامية. مش ضروري تقرا التنين على سبعة أبعاد: قابلية Covid-19 في الأسئلة التالية ، نطلب منك تقييم حالة أو هوية الإصابة بـ الكورونا الإخفاء ، المسار ، خلخلة الاجتماعيات ، الجماليات ، الأصل ، الخطر ، العيب / العار الأخلاقي. الرجاء الإجابة على هذه الأسئلة بناءً على فهمك للإدراك الاجتماعي العام ، بدلاً من رأيك الشخصي. افترض أن التصور Covid-19 الاجتماعي العام يمثل منظور الأشخاص الذين لا ينتمون إلى مجموعة الأشخاص المصابين به. رح نسألك كم سؤال عن نظرة الناس للكورونا. جاوب أي حسب كيف بتحسي المجتمع بشوف الكورونا ومش (حسب رأيك الشخصي فيه) Q18

X→

ما مدى سهولة إخفاء هوية الشخص الذي تعافى من الكوفيد-19 في تفاعل اجتماعي عادي بين أفراد المجتمع؟ أي ما مدى سهولة معرفة إصابة شخص ما بفيروس كورونا بمجرد التحدث معه أو التفاعل معه؟ [يمكن إخفاؤه تمامًا في التفاعل الاجتماعي] ، [6] لا يمكن إخفاؤه أبدًا في التفاعل الاجتماعي] 0

من صفر ل ستة ، برأيك قديش سهل تعرف اذا حدا كان معو كورونا وطاب منو؟ (صفر) مش ممكن يبين ، (ستة) Q19 (يبين بسهولة)

- (1) 0
- (2) 1
- (3) 2
- (4) 3
- (5) 4
- (6) 5
- (7) 6

X→

إلى أي مدى يتوقع عامة الناس أن تتحسن الحالة أو تستمر أو تسوء أو تتكرر؟ [مؤقت ، من المتوقع أن يختفي تمامًا خلال فترة زمنية قصيرة] ، [6] مستمر ، من المتوقع أن يظل دون تغيير] 0 [أو أن يتفاقم ، أو يتكرر على مدار العمر ،

من صفر ل ستة برأيك لأي درجة الناس بتتوقع الحالة تتحسن أو تسوء أو تتكرر؟ Q20 (صفر) مؤقت وبيختفي تمامًا مع الوقت ، (ستة) بضل الكورونا وممكن يسوء أو الواحد يرجع ينصاب فيه)

- (1) 0
- (2) 1
- (3) 2
- (4) 3
- (5) 4
- (6) 5
- (7) 6

X→

إلى أي مدى تعطل الحالة أو الهوية التفاعلات الاجتماعية العادية التي تحدث بين الأفراد العاديين في المجتمع ، على افتراض أن الحالة معروفة (يعرف الناس أن الشخص كان مصابًا بـ كوفيد 19 في الماضي

- وتعافى
[لا يعطل التفاعل الاجتماعي الطبيعي]، [6] التفاعل الاجتماعي الطبيعي صعب للغاية] 0
(لأي درجة بيتعطل الحديث أوبيتأثر بين الناس إذا كان معروف أنو الشخص كان معو كورونا)
Q21 (صفر = ما بغير شي بالحديث أو التعامل) ، (سنة = كتير بياثر على الحديث أو التعامل)
(1) 0
(2) 1
(3) 2
(4) 3
(5) 4
(6) 5
(7) 6

X→

- ، إلى أي مدى تثير الحالة الاشمنزاز بين الأفراد العاديين في المجتمع في التفاعلات الاجتماعية العادية
(في الماضي وتعافى منه Covid-19 يعرف الناس أن الشخص كان مصابًا بـ) على افتراض أن الهوية معروفة
[لا يُنظر إلى الحالة أو الهوية عمومًا على أنها مثيرة للاشمزاز]، [6] يُنظر إلى الحالة أو الهوية عمومًا 0
] على أنها مثيرة للاشمزاز للهوية
من صفر لستة ، قديش بتحس/ي الناس بتشعر بالاشمنزاز من الكورونا؟ 0 (الناس ما بتشوفها مثيرة للاشمزاز
Q22 بشكل عام (6) الناس بتشوفها كتير مثيرة للاشمزاز بشكل عام)
(1) 0
(2) 1
(3) 2
(4) 3
(5) 4
(6) 5
(7) 6

X→

- إلى أي مدى يرى الناس عمومًا أن الشخص المصاب بالمرض مسؤول عن حالته؟
[تعتبر الحالة خارج نطاق سيطرة الفرد تمامًا]، [6] تعتبر الحالة تحت سيطرة الفرد تمامًا] 0
من صفر لستة ، قديش بتحس/ي الناس بتشوف أنو الإصابة بالكورونا بإيد الشخص؟
0 (أيدا مش بإيدو (6) مية بالمية)
Q23
(1) 0
(2) 1
(3) 2
(4) 3
(5) 4
(6) 5
(7) 6

X→

- عمومًا ، إلى أي مدى يرى الأشخاص الذين يتفاعلون مع الفرد المتعافي من الكوفيد-19 نوعًا من العدوى أو
التهديد أو الخطر على أنفسهم في التفاعلات الاجتماعية العادية ، على افتراض أن الهوية معروفة (يعرف الناس
في الماضي وتعافى منه)؟ Covid-19 أن الشخص كان مصاب ب
[لا ينظر له على أنه معدى أو خطر]، [6] يُنظر له على أنه معدى وخطر جدًا] 0
من صفر لستة ، قديش بتحس/ي الناس بيتعاطو مع يلي كان معو كورونا على أنو معدى أو خطر عليهن؟

- Q24 ما بشوفو معدى او خطر ابدأ (6) بشوفو كتير معدى وخطر عليهن (0)
- (1) 0
(2) 1
(3) 2
(4) 3
(5) 4
(6) 5
(7) 6

X→

6 إلى أي مدى يرى الناس أن الشخص المصاب بهذه الحالة يعاني من عيب أخلاقي؟
6 = يُنظر إلى الحالة عمومًا على أنها عيب [] ، [لا يُنظر إلى الحالة عمومًا على أنها عيب أخلاقي = 0]
شديد
[أخلاقي]

- Q25 لأي درجة الناس بتشوف الاصابة المرض عيب؟ (6=كثير عيب) (0=مش عيب ابدا)
- (1) 0
(2) 1
(3) 2
(4) 3
(5) 4
(6) 5
(7) 6

End of Block: Covid-19 Characteristics

Start of Block: Perceived discrimination

X→

في الماضي ، فما مدى احتمالية حدوث ما يلي في رأيك Covid-19 إذا اعتقد الآخرون أنك قد أصبت بـ Q26 إذا الناس عرفت انو كان معك كورونا , قديش بتحس/ي انو الجمل يلي تحت محتمل يصيرو؟

(4) من المحتمل جدا	(3) محتمل الى حد ما	(2) غير محتمل إلى حد ما	(1) غير محتمل أبدا
			(1) الأشخاص يهددونك أو يضايقونك
			(2) توقف الأصدقاء الحاليين عن التمسك معك
			(3) الأصدقاء يتجنبونك
			(4) الناس لا يريدون التعرف عليك بشكل أفضل
			(5) يتصرف الناس كما لو كنت أقل شأنًا

(6) يتصرف
الناس كما لو كانوا
خائفين منك

(7) يعاملك
الناس باحترام أقل
من الآخرين

(8) يتصرف
الناس كأنك غير
صادق

Page
Break

End of Block: Perceived discrimination

Start of Block: Fear of Covid-19



بهيدا السؤال حدداي Covid-19 في السؤال التالي ، حدداي مستوى موافقتك مع العبارات التالية حول قد يش بتوافقاي مع الجمل التالية :كثير بوافق)بشدة , (بوافق شوي)الى حد ما , (بعارض شوي)أعارض الى Q27 حد ما , (او كثير بعارض)أعارض بشدة)

(4) أعارض بشدة	(3) أعارض إلى حد ما	(2) أوافق إلى حد ما	(1) أوافق بشدة
			(1) أكثر ما يخيفني هو فيروس كورونا)أكثر شي يخوفني هوي (الكورونا
			(2) التفكير بالكورونا يجعلني أشعر بعدم الارتياح التفكير بالكورونا)بخليني مش مرتاح
			(3) تتعرق يداي عندما أفكر الكورونا)أيديي بيعرفو لما فكر (بالكورونا
			(4) أخشى أن أفقد حياتي بسبب كورونا)يخاف اخسر حياتي من ورا (الكورونا
			(5) عندما أشاهد الأخبار والقصص عن الكورونا على وسائل التواصل الاجتماعي أشعر بالتوتر أو القلق)لما شوف اخبار وقصص عن الكورونا على مواقع التواصل الاجتماعي (بتوتر او بقلق

End of Block: Fear of Covid-19

Start of Block: Social distance

X→

بافتراض أن لديك غرفة إضافية في منزلك تريد تأجيرها ، ما هو شعورك حيال تأجير غرفة في منزلك في الماضي؟ Covid-19 لشخص كان مصابًا به-
 فرضا انو عندكن غرفة زيادة بالبيت بدكن تأجروها ، قديش بتحس/ي انك مستعد/ة لتأجير شخص كان معو Q28 كورونا؟

- (1) بالتأكد غير مستعد/ة (ابدا مني مستعد/ة) (1)
- (2) غير مستعد الى حد ما (مش كثير مستعد/ة) (2)
- (3) مستعد/ة إلى حد ما (مستعد/ة شوي) (3)
- (4) بالتأكد مستعد/ة (4)

X→

ما هو شعورك حيال زيارة شخص تعافى من Covid-19 قديش بتحس/ي عندك استعداد تزوري شخص كان معو كورونا وتعافى منو؟ Q29

- (1) بالتأكد مستعد/ة (1)
- (2) مستعد إلى حد ما (مستعد/ة شوي) (2)
- (3) غير مستعد/ة إلى حد ما (مش كثير مستعد/ة) (3)
- (4) بالتأكد غير مستعد (ايد مش مستعد/ة) (4)

End of Block: Social distance

Start of Block: Behavior

X→

قام بعض الناس بتغيير سلوكه منذ بداية الوباء ، بينما واصل آخرون القيام بأنشطة مختلفة. قد يرغب البعض أيضًا في تغيير سلوكهم ولكن لا يمكنهم القيام بذلك لأسباب مختلفة. هل قمت بأي من الأنشطة التالية أثناء عمليات الإغلاق والحجر؟
 من بداية الكورونا لهلق في ناس غيرو عاداتن او تصرفاتن وناس كفت حياتها بشكل طبيعي. وفي ناس بدا تغير Q30 بس مش قادرة لعدة اسباب. انت عملت اي شي من هودي وقت الحجر؟

نادرا (3)	لا، أبدا (4)	احيانا (2)	دائما (1)
			(1) زرت منزل شخص آخر
			(2) استقبلت شخصا لا يعيش معك
			(3) اجتمعت في الخارج مع أشخاص لا يعيشون معك
			(4) خرجت بدون كمامة او تعاملت مع أشخاص لا يرتدون كمامة

كسرت
توصيات
الاجتماعي
التباعد (5)

X→

- Q31 (أو اختبار آخر PCR) هل سبق لك ان قمت بفحص لل
Q31 (أو غيره). فيمكن تختارو اكثر من اجابة PCR شي مرة عملت/ي اي فحص للكورونا؟ مثل ال
مطلقا) ولا مرة عملت فحص (1)
نعم من أجل السفر) نعم لأن كنت بدي سافر (2)
نعم لأنه كان لدي أعراض) نعم لأن كان عندي عوارض (3)
نعم لأنني أردت أن أكون مطمئن) نعم لأن كان بدي اتطمئن (4)
سبب آخر) يرجى (5)
التحديد) (عملت فحص لغير سبب) حدد السبب)
افضل عدم الإجابة (6)

X→

- إذا ذهبت للفحص أو لدي نية للقيام بذلك ، فسوف أتجنب الكشف عن هذه المعلومة للناس
Q32 (إذا رحمت لأعمل فحص أو بدي روح ،بتجنب قول للناس اني عملتو او رح اعملو)
أعراض بشدة) ابدا ما بتجنب (1)
أعراض إلى حد ما) ما كتير بتجنب (2)
أوافق إلى حد ما) بتجنب شوي (3)
أوافق بشدة) كتير بتجنب (4)

X→

- والتي يتم إرسالها Covid-19 في قرينك أو مكان إقامتك ، هل توجد "قائمة" بأسماء الأشخاص المصابين بـ
إلى أشخاص آخرين؟
Q33 بضيعتك أو مكان اقامتك ، هل في لائحة بتضمن اسماء الأشخاص يلي معن كورونا وبتنشر بين الناس؟
نعم (1)
لا (2)
لست متأكدا) ما بعرف او مش متأكد/ة) (3)

End of Block: Behavior

Start of Block: Covid-19 name list

X→

- في حالة وجود مثل هذه القائمة ، حدد مستوى موافقتك للجمل التالية) تخيل انها موجودة ان لم تكن)
إذا في هيك لائحة قديش بتوافق/ي على هودي الجمل؟ وإذا ما في تخايل/ي انو في وجابو على هيدا الأساس
Q34

أوافق بشدة (1) أوافق الى حد ما (2) أعارض الى حد ما (3) أعارض بشدة (4)

أخشى أن
يضاف اسمي إلى
تلك القائمة) يخاف

ينحط اسمي على
(اللائحة)

(5) أخشى أنه
إذا كان اسمي مدرجًا
، في تلك القائمة
فسيعاملني الناس
بشكل مختلف في
المستقبل بعد أن
أتعافى (بخاف إذا
انحط اسمي على
اللائحة الناس
تعاملني بشكل
مختلف بعد ما
(أتعافى)

(6) إذا
Covid-19 تعافيت من
فسأخشى أن ،
يعرف الناس أنني
كنت مصابا به (إذا
تعافيت من الكورونا
بخاف ينعرف انو
(كان معي من قبل)

Q35. بعد في كم سؤال ومنخلص

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- فسوف أبلغ كل شخص كنت على اتصال به ، Covid-19 إذا تم تشخيص إصابتي بـ Q36 (إذا طلع معي كورونا ,بخبر كل الناس يلي تعاطيت معن)
- أعارض بشدة (ما بخبر ابدا) (1)
- أعارض إلى حد ما (ما كتير بخبر) (2)
- أوافق إلى حد ما (بخبر) (3)
- أوافق بشدة (اكيد بخبر) (4)
- فقط إذا كنت متأكدًا من أنني كنت على اتصال بهم (بخبر بس اذا كنت متأكد/ة اني اتعاطيت معن) (5)
- افضل عدم الاجابة (بفضل ما جاوب) (6)

End of Block: Covid-19 name list

Start of Block: Block 8

مطلقاً Covid-19 إذا لم تكن مصاباً به. Covid-19 السؤال التالي يتعلق بتجربتك مع الهوية الخاصة به. فتخيل أنك أتت أصبت وتعافيت منه وقم بالإجابة بناءً عليه. حدد مستوى موافقتك بالعبارات التالية ، رح نسألك كم سؤال عن تجربتك مع الكورونا. إذا ما كان معك كورونا تخايل انو كان معك كورونا وشفيت منو) Q37 (وجابواي على هيدا الأساس



Q38 إلى أي مدى توافق على العبارات التالية؟

أوافق بشدة (4)	(3) أوافق إلى حد ما	(2) أعارض إلى حد ما	(1) أعارض بشدة
			<p>(1) لقد فقدت أصدقاء بإخبارهم أنني مصابة به Covid-19 خسرت اصدقاء عشان خبرتهم انو (كان معي كورونا)</p>
			<p>(10) أشعر بالأذى من رد فعل الناس حول اصابتي Covid-19 بنجرح من ردة فعل) الناس لما يعرفو ان كان معي كورونا</p>
			<p>(11) يتجنب الناس ملامسي إذا علموا أنني كنت Covid-19 مصابة به يتجنب الناس) 19 تلمسني اذا عرفو انو (كان معي كورونا)</p>
			<p>(12) يتم رفض معظم Covid-19 المصابين به عندما يعلم 19 الآخرون أنهم مصابون به) الناس بترفض يلي كان معن (كورونا)</p>
			<p>(13) يبدو 5. أن الناس يخافون مني لأنني أصبت به Covid-19 الناس) بخافو مني عشان (كان معي كورونا)</p>
			<p>(14) 6. أشعر بالانفصال والعزلة عن بقية</p>

العالم (بحس حالي
معزولة عن العالم)

اندم. 7. (15)
على أنني أخبرت
بعض الناس أنني
كنت مصابة بـ
Covid-19 (بندم)
أنني خبرت بعض
الناس أنو كان معي
(كورونا)

8. (16)
بعض الناس
يتصرفون كما لو أن
Covid-19 إصابتي بـ
هو ذنبي (بعض
الناس بتحسني انو
الحق علي كان معي
(كورونا)

9. (17)
كقاعدة عامة ، كان
إخبار الآخرين خطأ
كقاعدة ، كانت غلطة)
قول للناس كان معي
(كورونا)

X→

- Q39 هل تلقيت حقنة واحدة على الأقل من اللقاح؟
لم أتناول أي لقاح (ما اخدت اي لقاح) (1)
نعم ، اخذت حقنة على الأقل (نعم أخذت حقنة او اكثر) (2)
افضل عدم القول (بفضل ما جاوب) (3)

Display This Question:

Did you receive at least one shot of the vaccine? = I did not take any vaccine

shot If

X→

- Q40 لماذا لم تأخذ اللقاح؟ (ممکن إجابات متعددة)
ما زلت غير مؤهل .أنا في انتظار دوري (1)
لم أسجل في وزارة الصحة العامة (2)
ما زلت غير متأكد إذا كنت أريد أن أخذه (3)
أخشى من آثاره الجانبية (4)
قد يقتلني اللقاح (5)
Covid-19 اللقاح مؤامرة ولا يحمي حقًا من (6)
سبب آخر (حدد) (7)

X→

يرجى تقييم مستوى موافقتك بالعبارات التالية إذا كنت قد تلقيت اللقاح. إذا لم تتلق اللقاح ، أو تخطط لأخذه أو لن تتناوله ، تخيل أنك تلقيتَه و قم بالإجابة على هذا الأساس ، Q41 (إذا أخذت اللقاح قديش بتوافق مع هودي الجمل؟ اذا ما أخذته تخايل اي انك أخذته وجاوب اي)

أوافق بشدة (4)	(3) أوافق الى حد ما	(2) أعارض الى حد ما	(1) أعارض بشدة
			(1) أتجنب إخبار الكثير من الناس (بتجنب قول لكثير ناس اني أخذته)
			(7) أنا فقط أخبر الأشخاص المقربين (بس بقول للقراب)
			(8) لن اخبر احدا (ما بخبر حدانا)
			(10) سوف أشاركه على وسائل التواصل الاجتماعي

End of Block: Block 8