

WIDESPREAD FEAR, PTSD AND AVOIDANCE BEHAVIORS: MEXICAN YOUTH COLLECTIVE INEFFECTIVITY OUTCOMES OF COVID-19 POST- PANDEMIC

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Abstract

The first cases of COVID-19 in Mexico were detected on February 27, 2020. At that time, the government established a three-phase action plan to reduce the virus's spread among the population. This study aims to determine the association between widespread fear of COVID-19, physiological and affective coping strategies, and post-traumatic stress disorder (PTSD) criteria such as discomfort, negative cognitions, intrusions, and avoidance. These factors are seen as mediating elements associated with collective ineffectiveness in a sample of young people from northern Mexico after the COVID-19 pandemic. A cross-sectional, empirical, descriptive, and correlational study was conducted. Results indicate that most participants exhibited widespread fear of COVID-19, which correlated with avoidance, hyperarousal, intrusive thoughts, and negative cognition and mood symptoms consistent with DSM-5 criteria for PTSD. In the majority of the sample, collective efficacy responses were associated with affective and physiological coping strategies, suggesting these were the primary coping mechanisms employed. Maladaptive behavioral coping strategies were moderately associated with an improvement in collective inefficacy, while negative cognition and mood were linked to a decrease in collective efficacy. Behavioral outcomes were also moderately related to negative affective responses and somatization, characteristic of widespread fear of COVID-19. Objective uncertainties such as risk perception associated with avoidance coping strategies, which hinder social effectiveness, were found, and no planned cognitive coping actions were significant in the sample, a key factor related in the literature to promote healthier states and better community relationships.

Keywords: *widespread fear of COVID-19, PTSD criteria, coping behaviors, social effectiveness, Northern, Mexican youth*

Introduction

The COVID-19 pandemic has caused a severe worldwide impact, resulting in a significant death toll directly or indirectly associated with excess mortality. Between January 1, 2020, and December 31, 2021, there were an estimated 14.9 million excess deaths worldwide attributable to COVID-19 (World Health Organization, 2023; Wang et al., 2022). These staggering figures underscore not only the pandemic's impact but also the urgent need for all countries to develop resilient and accessible health systems capable of sustaining essential services across all settings during crises. Stronger health information systems are also necessary to combat infodemics during pandemics, while also addressing community mental health needs.

The Organization for Economic Co-operation and Development (OECD) and The World Bank (2023) have noted that Latin American countries have been among the hardest hit. Despite COVID-19, life expectancy in these countries has shown some improvement but remains unequally distributed, with no guaranteed perceived psychological well-being.

Life expectancy in Latin America has increased by 4 years since 2000, reaching 75.1 years in 2021, yet it still lags behind the OECD/World Bank average of 80.4 years. Women tend to live 5.5 years longer than men. Chile boasts the highest life expectancy, while Haiti and Guyana have the lowest. In Mexico, life expectancy is reported at 78.4 years for women and 72.1 years for men (OECD/The World Bank, 2023). Mental health issues have also been exacerbated by factors such as insufficient healthcare infrastructure and a lack of psychological support services. Fear has been extensively studied since the 1970s in fields like psychosocial and criminal psychology (Moore & Shepherd, 2007). Fear can be considered a socially constructed phenomenon due to humans' biopsychosocial attributes (Reyes-Sosa & Molina-Coloma, 2017). Social fear is a subjective element that may not be readily observable but can manifest under certain conditions, disrupting individuals and communities (Mendez, Villar & Becerril, 2009, as cited in Garcia-Castro and Barrantes, 2014). Fear is inherent in human lives and societies, remaining latent and potentially impactful.

When facing the possibility of victimization, two elements of social fear can be identified: first, fear as an amalgamation of uncertainties and social discomfort, referred to in this study as widespread fear of COVID-19. This includes anxieties, disagreements, and mistrust regarding socio-political conditions and health policies within communities and nations, fostering insecurity during health crises and uncertain scenarios such as the COVID-19 pandemic. Second, personal perceived risk, also known as previous victimization, objectively refers to the perceived likelihood of becoming a victim based on direct or indirect exposure (Ruiz, 2007). Regardless of objective victimization rates, the subjective aspect of social fear—referred to in this context as widespread fear of COVID-19—is a broad phenomenon encompassing aspects such as incivility, distrust in authorities, and inequality (Wilk & Fibinger, 2020), contributing to social fear during the COVID-19 pandemic (Chávez-Valdez et al., 2021).

Social efficacy, another element related to social fears, includes two factors: lack of social cohesion and low social support, interpreted as participation and interest in community change (Ruiz, 2007). Interactions between various social issues, including social pathologies, translate into social attitudes, including emotional ones such as fear related to specific problems and pathological phenomena (Tindle et al., 2022).

During the COVID-19 pandemic, widespread fear of COVID-19 intensified intrusion and behaviors related to PTSD criteria among Mexican communities under lockdown, impacting their quality of life. This promoted unhealthier communal beliefs, negative moods, attitudes, and behaviors contributing to poor social performance and avoidance (Chávez-Valdez et al., 2021).

Social security promotes full development for citizens; without it, the perception of uncertainty and fear tends to "normalize" and spread (García-Castro & Barrantes, 2014), leading to low tolerance, high levels of victimization, mistrust, attrition in social relations, poor social cohesion, high security costs, vulnerability, impotence, and consequently low levels of social agency and force, which are key issues for achieving social cohesion, change, and stability in communities (Chavez-Valdez et al., 2019; Ross et al., 2001), and are also mentioned as drivers of perceptions of disorders, change, and stability in communities (Zahnnow et al., 2013).

Widespread fear of COVID-19 is related to emotional coping strategies and PTSD symptoms, such as intrusion, generalized avoidance behaviors, hyperarousal, and negative mood cognitions (Chavez-Valdez et al., 2021; Ifthikar et al., 2021). Current research highlights high affective coping associated with avoidance playing a predominant role in countering the humanitarian crisis, and physiological coping strategies related to the aforementioned PTSD traits (Szepietowska et al., 2022). Unfortunately, evidence regarding fear of COVID-19 among the Mexican population and coping strategies, especially among university students, remains limited.

Several studies on the psychological effects of the COVID-19 pandemic indicate that daily direct and indirect exposure to this highly contagious virus and disease can cause stress, specific infection-related worries, work-related dysfunctions, and avoidance behaviors, increasing vulnerability to mental health disorders (WHO, 2020). Anxiety disorders and post-traumatic

stress responses have been extensively researched, highlighting a high prevalence of symptomatology traditionally associated with both disorders. Facing COVID-19 outbreaks can be a traumatic experience, with studies emphasizing high-risk groups such as youth, healthcare workers, elderly individuals, and disabled persons, warning about their potential long-lasting maladaptive reactions (Xiong et al., 2020; Usher et al., 2020; Preti et al., 2020).

In the context of the COVID-19 pandemic, widespread fear of COVID-19 is also related to emotional coping strategies and PTSD symptoms, such as intrusion, generalized avoidance behaviors, hyperarousal, and negative mood cognitions (Chavez-Valdez et al., 2021; Ifthikar et al., 2021). Current findings in ongoing research emphasize high affective coping associated with avoidance, which plays a predominant role in responding to the humanitarian crisis, and physiological coping strategies related to the aforementioned PTSD traits (Szepietowska et al., 2022).

It has been found that intrusive and avoidant coping, as mediating factors, are associated with collective ineffectiveness among young people following the COVID-19 pandemic. These coping strategies serve as reliable post-pandemic markers for several mental pathologies, including acute PTSD symptoms, whether diagnosed individually or comorbidly with mood disorders, persistent heightened arousal symptoms leading to anger outbursts and hypervigilance. Failure to prevent these conditions may lead to avoidance disorders, compulsive and addictive behaviors, and other dysfunctional behaviors in post-pandemic communities (Tindle et al., 2022).

Young people constitute a high-risk group that often does not perceive themselves as vulnerable initially, which itself represents a psychosocial risk factor. Another concern is mental health problems, with anxiety and depression being the most prevalent. A study in England reported that these mental health disorders affect one in six individuals in this age group on any given week (McManus et al., 2016). At the onset of the pandemic, concerns were raised about the challenges faced by this group, including increased anxiety levels, social isolation, loss of part-time jobs, and academic difficulties due to remote learning (Aristovnik et al., 2020; Rapanta et al., 2020; Shah et al., 2020). In Mexico, Dosil-Santamaria et al. (2022) found high levels of stress, anxiety, and depression among youth. Perez-Aranda et al. (2021) also reported that over 62.3% of university students surveyed experienced moderate to high levels of anxiety, with significant differences observed between genders.

While literature specific to Mexico is scarce, it is well-documented that university students are a vulnerable population due to factors such as academic pressure and constant evaluations. In a study involving medical students, Ifthikar et al. (2021) found that 8.6% of participants likely had PTSD, a concerning high prevalence in a relatively small sample. Additionally, Dosil-Santamaria et al. (2022) conducted a study among Mexican university students, indicating high levels of stress, anxiety, and depression among participants.

The literature underscores that the COVID-19 pandemic has increased the prevalence of anxiety, stress, depression (Bouza et al., 2023; Kupcova et al., 2023; Xiong et al., 2020), and more severe conditions such as PTSD, as referenced by Sanchez-Gomez et al. (2021), which notes that hyperarousal and avoidance are mediators between intrusion effects. The psychological effects of the pandemic include stress, infection-related worries, work-related dysfunction, and avoidance behaviors, all contributing to increased vulnerability to mental health disorders (WHO, 2020).

Fear is a core symptom underlying these issues. It is a subjective element not easily observable but can manifest under certain conditions, altering, disturbing, and disrupting individuals (Mendez et al., 2009).

Loewenstein et al. (2001) suggest that conditioned fear can be more enduring than other forms of learning. Thus, distinctions exist between risk perception—an individual's cognitive response—and emotional reactions such as fear, anger, or anxiety. However, anxiety plays a crucial role in risk-related behaviors as anticipatory emotions, both constituting dimensions of social fear that trigger avoidance behaviors (Loewenstein et al., 2001). According to Jackson (2009), individual factors largely contribute to the social fear construct, which also encompasses contextual social factors.

Widespread fear refers to the degree of fear of becoming a victim within a social context and correlates with social life. Risk perception, on the other hand, relates to previous victimization and individual predispositions that foster fear (Loewenstein et al., 2001).

Adolescents are of particular interest in this study because they may not fully perceive the potential consequences of certain behaviors or may dismiss them, leading to a predominantly affective coping style (Herres, 2015; Riesmeyer et al., 2021). This tendency is influenced by challenges within their social and political environments, and during this developmental stage, their coping mechanisms can be maladaptive due to a low perception of risk (Horowitz, 2011; Steinhoff et al., 2023). Loewenstein et al. (2001) argue that adolescent risk-taking stems from feelings of invulnerability, placing this group at higher risk than other age groups. Anticipatory visceral reactions, such as fear and anxiety in the face of risks and uncertainties, play significant roles in their decision-making processes.

This study aimed to determine the association between widespread fear of COVID-19, physiological and affective coping strategies, and post-traumatic stress criteria—specifically negative alterations in cognitions and mood (criterion D), intrusion symptoms (criterion B), avoidance (criterion C), alterations in arousal and reactivity (criterion E), and functional significance (criterion G). All these criteria were measured, and their correlations with various coping strategies were analyzed.

The primary objective was to investigate how widespread fear of COVID-19 and PTSD criteria moderate physiological and affective coping strategies among a sample of young people after the COVID-19 pandemic in northern Mexico. Discriminatory processes, social networks, health, and collective well-being were key areas of focus in understanding the collective ineffectiveness experienced by this demographic post-pandemic.

Statement of the Problem

The primary concern of this research is to investigate how widespread fear of COVID-19 influences the physiological and affective coping strategies among young people in northern Mexico. Specifically, it aims to explore the association between fear levels and post-traumatic stress criteria, such as negative alterations in cognitions and mood, intrusion symptoms, avoidance behaviors, and alterations in arousal and reactivity. Understanding these dynamics is crucial for identifying effective interventions to support mental health and well-being in this demographic post-pandemic.

Research Aim and Research Questions

This study aims to examine the impact of widespread fear of COVID-19 on physiological and affective coping strategies among young people in northern Mexico, and to assess how these factors moderate post-traumatic stress symptoms and collective effectiveness following the pandemic.

1. How does widespread fear of COVID-19 influence physiological coping strategies among young people in northern Mexico?
2. What are the associations between affective coping strategies and post-traumatic stress criteria (intrusion, avoidance, alterations in arousal and reactivity) in this demographic?
3. To what extent do physiological and affective coping strategies moderate the relationship between fear of COVID-19 and collective ineffectiveness in northern Mexican youth post-pandemic?

Research Methodology

Design

The design for this study is a cross-sectional, empirical, descriptive, and correlational study (Montero & Leon, 2007). 787 participants sampled in high schools and universities, who completed self-informed instruments in the state of Chihuahua.

This study employs a cross-sectional, empirical, descriptive, and correlational research design to explore the impact of widespread fear of COVID-19 on physiological and affective coping strategies among college students in northern Mexico. The research was conducted between August 2023 and February 2024. The scope of the study encompasses 787 participants aged 17 to 21, drawn from 48 high schools and universities in Chihuahua and Juarez cities, with a mix of private (28.2%) and public institutions.

- Type: Cross-sectional study
- Time: August 2023 to February 2024
- Scope: College students in northern Mexico

The study combines quantitative and qualitative methodologies. Quantitative methods include structured surveys using validated scales such as the Widespread COVID-19 Scale, Scale of Post-traumatic Stress Traits, Collective Efficacy Scale, and CIU Urban Coping Strategies Scale. Qualitative insights may be obtained through open-ended questions or interviews, although specific qualitative methods are not detailed here.

The research is theoretically grounded in relevant literature on fear psychology, coping mechanisms, and the impact of collective efficacy on community responses to health crises. The theoretical underpinnings guide the interpretation of findings related to fear intensity, coping strategies, and psychological outcomes among young adults during the COVID-19 pandemic.

Data Collection

Data were collected through conglomerate sampling at educational institutions, with participants providing informed consent before completing the surveys. The data collection process was conducted in classrooms to ensure uniformity in administration and to facilitate timely completion of questionnaires.

Data Analysis

Quantitative data analysis involved statistical methods such as correlations and potentially structural equation modeling (SEM), utilizing SPSS version 26 and the AMOS program. These analytical tools were employed to examine relationships between widespread fear, coping strategies, PTSD symptoms, and collective efficacy perceptions among the study participants.

Ethical Considerations

The study adhered to ethical guidelines, including obtaining institutional permissions and informed consent from all participants. Confidentiality and data protection measures were strictly followed throughout the research process to ensure participant anonymity and compliance with ethical standards.

This general description provides an overview of the research methodology, encompassing its design, approach, theoretical framework, data collection procedures, and analytical techniques employed in the study of fear responses and coping strategies among college students in northern Mexico during the COVID-19 pandemic.

Participants

A total of 787 college students were enrolled: 342 men and 445 women, aged 17 to 21, with a mean age of 18.65 (SD = 1.51), from 48 high schools and universities in the cities of Chihuahua and Juarez, 28.2% of which were private and the rest public. Sampling was done by conglomerates, and the selection of universities was random. Data collection took place from August 2023 through February 2024, and participants signed an informed consent form before answering the scales.

Sample Size and Methodology:

1. **Sample Size and Composition:** The study enrolled a total of 787 college students, consisting of 342 men and 445 women, aged 17 to 21 years, with a mean age of 18.65 years (SD = 1.51). This sample size is typically determined to provide sufficient statistical power and representativeness for studying a population of college students in northern Mexico.
2. **Sampling Method:** Conglomerate sampling was employed, which involves selecting groups (clusters) of participants rather than individuals directly. In this case, clusters were universities and high schools in Chihuahua and Juarez cities. This method helps in capturing a diverse representation of students across different educational institutions.
3. **Random Selection:** The selection of universities was randomized, which helps in reducing bias and ensuring that each institution in the target cities had an equal chance of being included in the study. This enhances the generalizability of findings to the broader population of college students in the region.
4. **Time Frame and Data Collection:** Data collection occurred from August 2023 to February 2024. This duration allows for capturing potential variations in fear responses and coping strategies related to the COVID-19 pandemic over time, including different phases of the pandemic and associated public health measures.
5. **Informed Consent:** Participants were required to sign an informed consent form before participating in the study. This ethical practice ensures that participants are aware of the study's purpose, procedures, risks, and benefits, and voluntarily agree to take part.

Practical Considerations:

- **Private vs. Public Institutions:** The inclusion of both private (28.2%) and public institutions adds diversity to the sample, considering potential differences in socio-economic backgrounds, access to resources, and educational environments.
- **Demographic Representation:** The sample includes both genders and spans a narrow age range (17-21 years), which is typical for college students. This demographic diversity allows for exploring potential gender differences in fear responses and coping strategies during the pandemic.

Overall, the study's methodology, including sample size, sampling method, random selection of universities, and ethical considerations such as informed consent, supports its reliability and validity in investigating widespread fear of COVID-19 and coping strategies among college students in Chihuahua and Juarez, Mexico. The findings from this study are expected to contribute valuable insights into how young adults in educational settings perceive and respond to pandemic-related challenges.

Measurement Scales and Procedures

1. **Widespread Covid-19 Fear Scale (Chávez-Valdez & Ríos Velasco-Moreno, 2018):** This instrument was originally derived from a criminology scale to assess subjective or emotional fear and objective risk perception of victimization (Keane, 1995). Validated in Latin America, specifically in Colombia by Ruiz (2007), it measures emotional fear related to contextual violence, but was adapted for COVID-19 fears. Items were adjusted to reflect concerns about COVID-19 (e.g., "I am afraid of infecting someone with COVID-19" and "I am afraid of being a victim of Covid-19"). The scale consists of seven items with a seven-point response format (0 = "nothing" to 3 = "a lot"), assessing fear in emotional and widespread components. Previous studies reported an internal consistency of 0.96, and in this study, it achieved an acceptable internal consistency of .80.
2. **Scale of Post-traumatic Stress Traits in the Mexican Youth Exposed to Social Violence (Pineda et al., 2002),** validated by Chávez-Valdez, Esparza-Del Villar, and Ríos Velasco-Moreno (2020):

This 24-item self-report measure evaluates five PTSD criteria and a total PTSD symptomatology score based on DSM-V criteria. Items use a four-point Likert scale (1 = disagree; 4 = agree) to assess symptoms (e.g., “I constantly have thoughts that remind me of the unpleasant situation and cause me a lot of anguish”). Previous studies reported high internal consistency (Cronbach’s $\alpha = .97$), and in this study, it was Cronbach’s $\alpha = .92$. Note, this checklist categorizes PTSD symptoms but does not diagnose the disorder clinically, which requires clinical interviews.

3. Collective Efficacy Scale (Ruiz, 2007): This scale includes seven items with four response options (from “nothing” to “a lot”). Originally measuring collective participation aspects like community cohesion and respect for norms, it was adapted for this study to gauge community participation in COVID-19 prevention measures (e.g., “In my neighborhood, people are united” and “Neighbors would take action if they see people not taking precautionary measures against COVID-19”). The scale demonstrated an internal consistency of Cronbach’s $\alpha = .87$ in this study.

4. CIU Urban Coping Strategies Scale** (Vuanello, 2006), adapted by Chávez-Valdez and Ríos Velasco-Moreno (2018): This scale assesses coping strategies across affective, physiological, cognitive, and behavioral domains. Originally developed to address community violence, it was modified for COVID-19-related situations (e.g., “When I think that someone can infect me” and “When traveling in public transportation”). The scale comprises four factors, each with high internal consistency: affective ($\alpha = .94$), physiological ($\alpha = .90$), cognitive ($\alpha = .89$), and behavioral ($\alpha = .87$).

Before data collection, permission was obtained from authorities at high schools and universities, and informed consent was obtained from participants. Data were collected in classroom settings, with questionnaires taking approximately 45 minutes to complete. Data were recorded in Excel spreadsheets, verified to minimize errors, and then exported to an SPSS file. The study employed a cross-sectional design, analyzing correlations and conducting structural equation modeling using SPSS v.26 and AMOS.

Research Results

Descriptive statistics and city comparisons are presented in Table 1, while correlations among variables are detailed in Table 2. Structural equation modeling (see Figure 1) examined how social anxiety influences individual coping strategies, which in turn affect PTSD criteria and collective efficacy, specifically indicating collective inefficacy in this model. The model was analyzed using the generalized least squares method and evaluated for goodness of fit with several indices ($\chi^2 / df = 3.16$, CFI = .91, NFI = .90, AGFI = .90, RMSEA = .07), indicating a good fit. The Kaiser-Meyer-Olkin sphericity test yielded a score of .896.

Table 1
Descriptive Statistics and Comparative Differences Table of Widespread Fear, Total Post-traumatic Stress Criteria, Coping Strategies and Collective Efficacy in Youths Between Cities

City	Chihuahua (N = 424)		Ciudad Juárez (N = 363)		t (df)	p
	M	SD	M	SD		
Widespread fear	2.73	0.79	3.29	0.78	11.45(785)	<0.01
Collective efficacy total	2.58	0.52	2.51	0.58	-1.58(785)	----
Emotional coping strategies	1.83	0.69	1.93	0.77	1.90(785)	.05

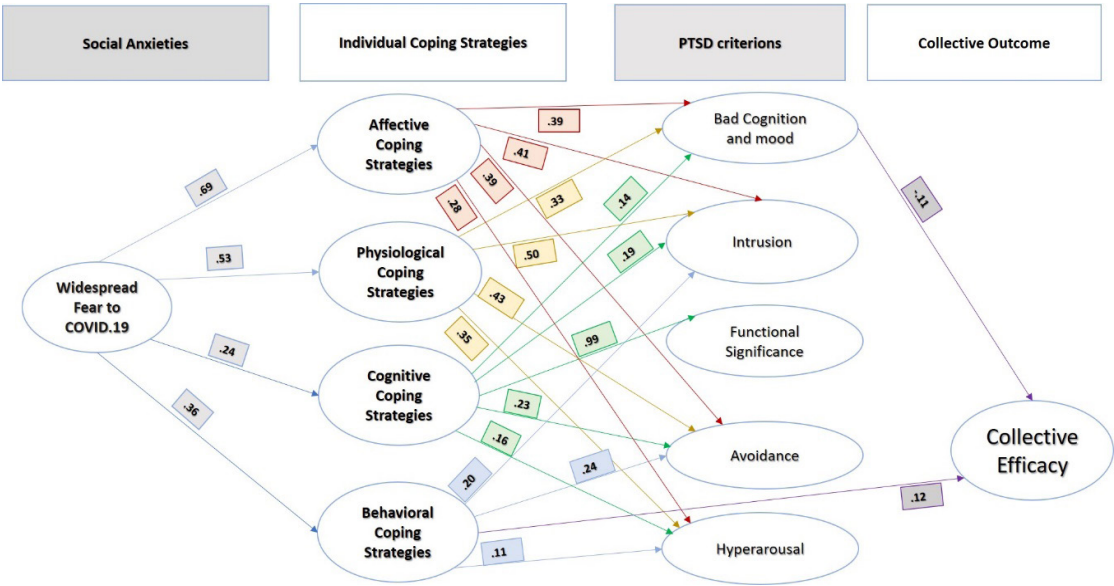
City	Chihuahua (N = 424)		Ciudad Juárez (N = 363)		t (df)	p
	M	SD	M	SD		
Physiological coping strategies	1.45	0.77	1.86	0.78	7.32(785)	<0.01
Cognitive coping strategies	1.82	0.57	1.92	0.54	2.44(785)	.02
Behavioral coping strategies	1.69	0.62	1.73	0.62	.884 (785)	0.4
PTSD (Posttraumatic stress criteria)	2.25	0.62	2.28	0.53	11.5(785)	<0.01

Table 2
Correlations of the Multiple Regressions of the Widespread Fear to COVID-19, PTSD Criteria, Coping Factors and Collective Efficacy

	Widespread Fear r (p)	PTSD Cognition and mood r (p)	PTSD Intrusion r (p)	PTSD Functional significance r (p)	PTSD Avoidance r (p)	PTSD Hyperarousal r (p)	Collective Efficacy r (p)
Widespread Fear	-----	.22 (<.01)**	.33(<.01)**	-.04 (.43)	.33(<.01)**	.21 (<.01)**	-.04 (.45)
Emotional coping	.69 (<.01)	.29 (<.01)**	.41(<.01)**	-.03 (.55)	.39 (<.01)**	.28 (<.01)**	-.09 (.06)*
Physiological coping	.53 (<.01)	.40 (<.01)**	.5 (<.01)**	.01 (.84)	.43 (<.01)**	.35 (.01)**	-.11 (.03)*
Cognitive coping	.24 (<.01)	.14 (.07)	.19(<.01)**	.00 (1.0)	.23 (<.01)**	.16 (.02)*	.03 (.50)
Behavioral coping	.36 (<.01)	.05 (.34)	.20(<.01)**	-.05 (.35)	.24 (<.01)**	.11 (.04)*	.12 (.02)*

Notes: r= Pearson´s correlations; significances at p<.001 **, p<.05*

Figure 1
SEM Structural equation model using the latent variable widespread fear to Covid-19



Notes: Only significant standardized relationship coefficients are displayed.

Based on Cohen (1992), which emphasizes the strength of associations, widespread fear of COVID-19 is strongly linked to affective and physiological coping strategies among youth. Conversely, cognitive and behavioral coping strategies exhibit lower associations. Physiological coping styles are notably correlated with intrusive and avoidance behaviors, and to a lesser extent with cognitive coping and mood, and hyperarousal responses following the COVID-19 uncertainty crisis. Emotional or affective coping strategies show moderate to low associations with four out of five PTSD criteria (except functional significance). Cognitive coping is weakly associated with all four PTSD criteria mentioned, while behavioral coping exhibits low associations with intrusion, avoidance, and hyperarousal as communal responses. Notably, these behavioral responses moderately relate to collective efficacy.

The study underscores the strong relationship between widespread fear and affective and physiological coping strategies with four of the five PTSD criteria among youth. Conversely, bad cognition and mood criteria are inversely associated with collective efficacy. Affective and physiological strategies emerge as the primary coping mechanisms associated with widespread fear of COVID-19 in post-pandemic communities, whereas cognitive coping strategies exhibit weaker associations. Consequently, higher startle and reactionary responses promoted by physiological coping may lead to unhealthy states, discriminatory processes, and strained community relationships.

Discussion

The primary objective of this study was to explore the relationship between widespread fear of COVID-19, physiological and affective coping strategies, and post-traumatic stress criteria, particularly how maladaptive cognitive and mood responses moderate collective inefficacy among youth in the aftermath of the pandemic. The results reject the null hypothesis, revealing significant associations between widespread fear of COVID-19, PTSD criteria, and collective inefficacy in the post-pandemic youth sample.

The concentrated response of COVID-19-affected communities on physiological and affective coping strategies aligns with the various post-traumatic stress criteria identified in youth, as per DSM-V, including negative cognitive and mood alterations in avoidance responses (Chávez-Valdez et al., 2021; Kindred & Bates, 2023).

Moreover, limitations in customary social interactions, activities, and coexistence due to

pandemic-induced restrictions highlight the pressing need for effective socialization and responsiveness to trauma. Neglecting criteria such as emotional containment/control, avoidance, intrusions, negative cognitions, and moods post-pandemic may exacerbate functional deterioration among communities unattended to during crisis-induced discomfort (Hayden et al., 2021; Sanchez-Gomez et al., 2021).

While functional PTSD criteria did not emerge significantly in this empirical study, it is crucial to emphasize the imperative of supporting efforts to address somatization and heightened emotional reactivity. These factors overstimulate the amygdala and hippocampus, perpetuating chronic organic arousal and undermining rational social interactions. Failure to mitigate these acute emotional discomforts stemming from widespread COVID-19 fear may exacerbate mental health challenges, anxiety, depressive disorders, and adversely affect quality of life, mental health, and social efficacy. This could potentially promote unhealthy behaviors such as aggression, discrimination, dissolution of social relationships, and addiction, thus undermining community cohesion (Sanchez-Gomez et al., 2021; Wankhade & Anjankar, 2022).

The findings demonstrate the prevalence of widespread COVID-19 fear associated with intrusion, avoidance, hyperarousal, and negative cognitions and moods, consistent with DSM-V criteria. The majority of the sample exhibited affective and physiological coping strategies, reflecting the primary coping mechanisms. Conversely, maladaptive behavioral coping strategies and negative cognition and mood were moderately linked to improved collective efficacy, highlighting the detrimental impact of reduced collective efficacy associated with negative cognition and mood (Chávez-Valdez et al., 2021; Padmanabhanunni & Pretorius, 2024).

Behavioral outcomes were moderately associated with heightened affective startle responses and somatization characteristic of widespread COVID-19 fear-induced hyperarousal. This underscores the urgent need for a psychosocial crisis awareness framework. Objective uncertainties and risk perceptions influencing communal avoidance coping strategies inhibit social efficacy. Cognitive coping strategies, though less prevalent, underscore the potential for planned action and behaviors amid uncertainty. However, they may inadvertently foster unhealthy states, discriminatory processes, and strained community relations (Lin & Chung, 2021).

Emotional coping mechanisms in response to pandemic stimuli contribute to physiological somatization, facilitating heightened risk perception and adverse responses. This phenomenon is prevalent among communities facing socioeconomic and cultural vulnerabilities. Cognitive coping amid uncertainty may engender risk perception related to health, safety, and financial concerns, particularly among privileged groups. These factors underscore the protective role of risk perception in safeguarding survival and community mental health, especially evident in socioeconomically vulnerable groups (Puechlong et al., 2021).

Communal risk perception coupled with widespread fear and anxiety precipitates a decline in collective efficacy among vulnerable groups. These findings necessitate consideration by health agencies, policymakers, and other organizations for the formulation of scientifically informed, community-oriented preventive measures. These measures are crucial for promoting mental health awareness campaigns and interventions aimed at mitigating the adverse impacts of communal coping behaviors associated with pandemic-induced mental distress (Lin & Chung, 2021; Yavuz et al., 2024).

Emotional coping responses to pandemic-induced stimuli exacerbate physiological somatization, fostering uncertainty, aggression, discriminatory practices, and dysfunctional communal states. Therefore, community-focused health interventions for COVID-19-affected populations should prioritize psychosocial therapies aimed at reducing somatization and negative beliefs and behaviors. This approach can foster community mental health resilience and minimize reactive responses to traumatic experiences, thereby facilitating emotional recovery and healing in the aftermath of pandemic adversity (Chávez-Valdez et al., 2021; Pedroza et al., 2020).

Conclusions and Implications

The conclusion of the study explores the intricate relationships between widespread fear of COVID-19, coping strategies, and post-traumatic stress criteria among youth. It emphasizes sig-

nificant findings related to affective and physiological coping strategies, as well as the implications for collective efficacy and community cohesion.

Key findings include the impact on Community: The study underscores that physiological coping responses, such as heightened startle responses and somatization, may lead to negative outcomes like aggression, discrimination, and strained community relations. These responses underscore the need for targeted psychosocial interventions, and effective community-focused interventions should prioritize psychosocial therapies aimed at reducing somatization, negative beliefs, and dysfunctional communal states. This approach could enhance community mental health resilience and facilitate emotional recovery in the aftermath of pandemic-induced distress.

Targeted Psychosocial Interventions: Implement specific psychosocial intervention programs focused on reducing somatization, modifying negative beliefs, and promoting healthier emotional states in communities affected by COVID-19 fear. These interventions could include group therapies, individualized emotional support, and stress management techniques.

Promotion of Cognitive Coping Strategies: Educate youth on effective cognitive coping strategies to better manage negative thoughts and anxiety related to the pandemic. This could include training in positive thinking, cognitive restructuring techniques, and mindfulness.

Enhancement of Collective Efficacy: Develop community initiatives that strengthen collective efficacy—the belief in the community's ability to face challenges and work together towards common goals. This could be achieved through collaborative activities, community projects, and awareness campaigns promoting mutual support.

Training for Crisis Management and Community Resilience: Provide training to community leaders, educators, and healthcare professionals on how to manage psychosocial crises and foster resilience during prolonged stress such as that caused by the pandemic. This could include workshops on effective communication skills, stress management, and emotional support.

Ongoing Research and Monitoring: Maintain ongoing research on the psychological effects of COVID-19 fear and coping strategies among youth. This would help tailor interventions and policies as the needs of affected communities evolve.

Institutional Support and Mental Health Policies: Advocate for mental health policies that promote equitable access to psychological and psychiatric support services for all populations affected by the pandemic. This includes ensuring adequate resources for psychological care and treatment of mental disorders resulting from traumatic stress.

These improvement suggestions are designed to address the study's conclusions and assist young communities in coping with emotional and social challenges arising from widespread COVID-19 fear. Implementing these interventions could significantly enhance mental health and community well-being in the post-pandemic period.

Overall, the conclusion underscores the complex interplay between widespread fear to Covid-19, coping mechanisms, PTSD criteria, and community dynamics among youth. It advocates for targeted interventions to mitigate negative outcomes and promote community well-being in the post-pandemic period.

Declaration of Interest

The authors declare no competing interest.

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