The Impact of Political Trust Among the Egyptian Youth on Adaptation to the COVID-19 Pandemic

Aliaa Qamer*

Abstract:
This study aimed to test the impact of pandemic-related trust on the self-reported coping mechanisms of Egyptian youth in adapting to COVID-19 in the midst of the pandemic. Researcher-administered questionnaires were completed by a total of 610 respondents, ranging in age from 18 to 39 years old. Three simple regression models were employed using the MPlus general modeling program.

Findings supported the three hypotheses, showing that pandemic-related trust was a positive predictor for each of the three dimensions of adaptation to the COVID-19 pandemic: compliance with pandemic control measures, support for pandemic control measures, and acceptance of COVID-19 vaccines.

Key words: pandemic-related trust, compliance with pandemic control measures, support for pandemic control measures, and acceptance of COVID-19 vaccines.

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تأثير الثقة السياسية لدى الشباب المصري على التكيف مع جائحة كورونا

أ. علياء عبد الخالق قمر

ملخص الدراسة:

هدفت هذه الدراسة إلى اختبار تأثير الثقة المرتبطة بوباء كورونا على أساليب الشباب المصري عينة الدراسة في التكيف مع جائحة كورونا، وذلك في مرحلة متأخرة من الجائحة. تم تطبيق الدراسة على عينة عمدية من مشاهدي الاتصال التلفزيوني الحكومي وقت الجائحة، وقد شملت العينة 610 مبحوثًا ممن تتراوح أعمارهم بين 18 إلى 39 عامًا.

تم استخدام ثلاثة نماذج انحدار بسيطة باستخدام برنامج النمذجة البناءية MPlus.

أكدت النتائج الفرضيات الثلاثة للدراسة بأن الثقة المتعلقة بالجائحة يمكن أن تكون مؤشرًا إيجابيًا لكل من الأبعاد الثلاثة للتكيف مع الجائحة، وهي:

1. اتباع الإجراءات الوقائية لمكافحة فيروس كورونا.
2. دعم قرارات الحكومة لمكافحة الجائحة.
3. قبول اللقاحات المضادة لفيروس كورونا.

الكلمات المفتاحية: الثقة السياسية، الشباب المصري، جائحة كورونا

*باحثة دكتوراه في قسم الإذاعة والتلفزيون بكلية الإعلام، جامعة القاهرة
**الأستاذ بقسم الإذاعة والتلفزيون بكلية الإعلام، جامعة القاهرة
Introduction:
The debate regarding the relationship between political trust and adapting to control measures is a recurring one, continuously reemerging with almost every new epidemic or pandemic. This study contributes to this debate by analyzing how pandemic-related trust correlates with adapting to COVID-19 control measures among Egyptian youth.

It proceeds from the argument that, amid the pandemic, understanding the dynamics of trust, how it facilitates and hinders policy responses, and the likely effects of these responses on trust are all fundamental questions in policy and future trust research (Devine et al., 2020).

Previous studies have typically argued that political trust correlates with adherence to epidemic or pandemic control measures. However, the current study suggests that mere adherence may not be sufficient, especially in light of the scientific community's recommendation that countries determine their own adaptation strategies (Nature, 2022), given the long-term nature of the pandemic (Nature, 2022, p. 165).

Accordingly, this study suggests that compliance with pandemic control measures is only one of the three dimensions of effective adaptation to the COVID-19 pandemic. In addition to complying with these measures, support for them and acceptance of COVID-19 vaccines are considered equally important.

Theoretical Framework
This study analyzes the dynamics of pandemic-related trust, arguing that it represents the most critical aspect of political trust to be studied during the COVID-19 crisis. Furthermore, it posits that pandemic-related trust serves as a positive predictor for the three dimensions of adaptation to the COVID-19 pandemic. These are:

Compliance with Pandemic Control Measures
A review of the literature analyzing the correlation between political trust and adherence to pandemic control measures reveals a lengthy debate spanning historical epidemics and pandemics to recent years. While most prior researchers established a connection between trust and
compliance, their views diverged on the strength, type, and mediating factors of this correlation.

Since the outbreak of the COVID-19 pandemic, researchers have kept proving the positive and significant relationships between public trust in the government and the likelihood of adopting personal protective measures and complying with COVID-19 recommendations (e.g., Kestilä-Kekkonen et al., 2022; Lavallee et al., 2021; Robinson et al., 2021; Saechang et al., 2021; Newton, 2020), especially among young adults.

Detailed analysis highlighted some particular facets of political trust and distrust that contributed to levels of mass behavioral compliance and elite policy support at the height of the COVID-19 crisis (Weinberg, 2022). This included variables like the feeling of being well informed and perceived country-level freedom that were all proven to positively predict self-reported adherence with pandemic control measures (Lavallee et al., 2021).

Even those researchers who argued that political trust was not sufficient to sustain participants’ willingness and actual behavior to comply with governmental restrictions during the COVID-19 pandemic still proved its absence to reduce compliance significantly (Lalot et al., 2022). The significance of age was also proven. For instance, younger respondents with the least political trust reported a lower willingness to distance themselves (Olsen & Hjorth, 2020).

Support for Pandemic Control Measures

Little research has focused on the potential correlation between political trust (as an indicator) and support for COVID-19 control measures (as an outcome variable).

The importance of studying this potential link was highlighted by the current study, especially in light of a pandemic acknowledged by the scientific community to be "here to stay" (Nature, 2022, p. 165). Countries were encouraged to determine their own adaptation strategies, particularly with the emergence of new variants that exposed the need to live with a constantly evolving disease (Nature, 2022).

Therefore, this study suggests that support for control measures is a crucial variable for the recommended adaptation to the pandemic.
During the COVID-19 pandemic, political trust was demonstrated to have a relationship not only with the intention to adopt personal protective actions but also with support for key public policies (Robinson et al., 2021).

**Acceptance of COVID-19 Vaccines**

Since publishing the first reports of COVID-19 vaccinations outside clinical trials on December 13\textsuperscript{th}, 2020, in the United Kingdom (Mathieu et al., 2021, p. 948), the debate regarding vaccination has never stopped. It continuously intensifies with the evolution of each new variant, so much so that it sometimes makes the scientific community lose hope that vaccines and previous infections could generate herd immunity (Nature, 2022).

Specialists' perspectives about the future at the start of the COVID-19 vaccination program were comprised of three main themes: (1) personal and professional growth (with renewed life perspectives and increased resilience); (2) reinvention of intervention (with improved management of emotions, teamwork, and alternative ways of intervening); and (3) hope to leverage the knowledge gained (hope that vaccination will bring conditions to recover older adults' well-being and opportunities to use the good lessons learned) (Dias et al., 2023).

However, vaccine hesitancy continues to extend in different societies, leading only a few people to 'definitely' take a vaccine (Loomba et al., 2021), especially in developing nations (Mallapaty, 2022).

For this reason, the current study highlights the importance of studying vaccine acceptance in combating the COVID-19 pandemic and facing the scientific worry that unvaccinated people could be a potential breeding ground for new variants (Mallapaty, 2022). This study also argues that this importance should increase, especially when studying a country where approximately two-thirds of respondents are unwilling or hesitant about COVID-19 vaccination (Kawabata, 2021).

Based on prior findings recommending trust to increase the acceptance of COVID-19 vaccines (Lee & Chen, 2021), this study argues that pandemic-related trust could serve as a relevant predictor for vaccine acceptance among Egyptian youth.
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Problem Statement:

Building on prior research, this study highlights the importance of studying the dynamics of pandemic-related trust among Egyptian youth and how it may likely affect their: 1. compliance with pandemic control measures; 2. support for pandemic control measures; and 3. acceptance of COVID-19 vaccines.

The Egyptian youth have been chosen for several reasons. They were identified as vulnerable to demoralization (a state of hopelessness and helplessness) during and post-COVID-19 (Fronek & Briggs, 2021). Representing the majority of Egypt's population (CAPMAS, Population Estimates by Sex and Age Group, 2022), they also exhibited increased negative emotional and behavioral responses during the pandemic's peak (Papp & Kouros, 2021). Furthermore, young adults reported the highest levels of social isolation compared to other age groups during the pandemic (Clair et al., 2021). Finally, the 18–39 age group demonstrated both lower COVID-19 vaccine acceptance (29%) and higher perceived government inaction against the virus (52.1%) (Reuben et al., 2021).

Method and Data Collection:

The study applies the survey method to leverage the advantage of investigating its research question in realistic settings. A researcher-administered questionnaire was completed by a total of 610 respondents aged 18 to 39. This method relied on face-to-face interviews covering different areas in the three governorates: Cairo, Giza, and Qalyubia. Four interviewers, two males and two females, were employed to minimize potential gender bias. Purposive sampling was employed to ensure respondents reflected various demographic characteristics of the targeted youth respondents (including diverse social and educational backgrounds).

Time Frame of the Study:

The study was conducted in Egypt between January 18th and March 26th, 2022, coinciding mainly with the peak of the Omicron wave.
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Sample Size Calculation:
The study used the following formula to calculate the sample size needed to meet the desired statistical constraints:

\[ N = \frac{z^2 \times \hat{p}(1-\hat{p})}{\varepsilon^2} \]

where: \( z \) is the z score
\( \varepsilon \) is the margin of error
\( N \) is the sample size
\( \hat{p} \) is the population proportion

Therefore:

\[ N = \frac{1.96^2 \times 0.5(1-0.5)}{0.05^2} = 384.16 \]

Table 1: z-scores for different confidence levels

<table>
<thead>
<tr>
<th>Confidence Level</th>
<th>z-score (±)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.92</td>
<td>1.75</td>
</tr>
<tr>
<td><strong>0.95</strong></td>
<td><strong>1.96</strong></td>
</tr>
<tr>
<td>0.96</td>
<td>2.05</td>
</tr>
</tbody>
</table>

This means that approximately 385 or more measurements or surveys are required to achieve a 95% confidence level that the real value falls within ±5% of the measured or surveyed value. However, the researcher employed a larger sample size in an effort to augment the precision of the confidence interval. This is due to the relationship between sample size and confidence interval width: as sample size increases, the width of the confidence interval decreases, resulting from a reduction in the standard error.

Hypotheses:
The present study hypothesizes that:

**H1**: Pandemic-related trust has a significant positive effect on compliance with pandemic control measures.

**H2**: Pandemic-related trust has a significant positive effect on support for pandemic control measures.
**H3:** Pandemic-related trust has a significant positive effect on acceptance of COVID-19 vaccines.

**Hypothesized Model:**

Fig. 1: Hypothesized Model of Effects

**Variables and Measurements**

(1) Pandemic–Related Trust:

As previous research showed that national differences in evaluating the governmental response to the COVID-19 pandemic exist on a large scale across different countries around the world (Lazarus et al., 2021), this 17-point cumulative Likert scale was based on some statements emerging from the Egyptian context. Participants were asked to what extent they agreed or disagreed with each of the following statements:

1. I trust the accuracy of the pandemic information provided by the Egyptian government;
2. I trust the advice presented by the Egyptian government for protection against the pandemic;
3. I trust the effectiveness of the governmental decisions in controlling the pandemic; and
4. I have complete confidence in the pandemic vaccines provided by the Egyptian government. Responses to the four statements were rated on a five-point scale ranging from 1 (strongly disagree) to 5 (strongly agree).

The scale included three levels of trust: low (less than 10), medium (10–less than 15), and high (15 or more). Its statistics were as follows:
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Table 2: Pandemic-Related Trust Scale Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Range</th>
<th>Min.</th>
<th>Max.</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pandemic-Related Trust</td>
<td>610</td>
<td>16.00</td>
<td>4.00</td>
<td>20.00</td>
<td>14.0279</td>
<td>3.25453</td>
<td>-0.313</td>
<td>0.099</td>
</tr>
</tbody>
</table>

Further analysis of this scale showed its p-plots and histogram to relatively follow the normal distribution.

Reliability: Internal consistency of the “pandemic-related trust” scale was acceptable (Cronbach’s α= 0.794, Guttman split-half coefficient= 0.788).

Validity: Factor analysis was employed for all 4 items, using principal components analysis with varimax rotation. The analysis yielded one factor explaining a total of 62.300% of the variance in the data.

(2) Compliance with Pandemic Control Measures:

This 60-point cumulative Likert scale was based on a measurement that asked participants to rate how diligently they followed each of the ten pandemic precautions to avoid becoming infected with the coronavirus pandemic. These ten precautions were: 1. Keeping a bucket of alcohol in your home; 2. Washing your hands frequently with water and soap; 3. Keeping an alcohol bottle, hand sanitizer, or wipes with you when you are outside your home; 4. Reducing physical interactions with others, including shaking hands, kissing, or hugging; 5. Avoiding getting out before wearing a convenient face mask; 6. Wearing a face shield for extra protection; 7. Wearing gloves for hand protection; 8. Following the signs of social distancing in public places; 9. avoiding congested areas as much as possible; and 10. avoiding public transportation as much as possible. Responses were rated on a six-point scale ranging from 0 (not careful at all) to 5 (very careful).
The scale included three levels of compliance: low (less than 20), intermediate (20–30), and high (more than 30). Its statistics were as follows:

<table>
<thead>
<tr>
<th>Compliance</th>
<th>N</th>
<th>Range</th>
<th>Min.</th>
<th>Max.</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistics</td>
<td>610</td>
<td>49.00</td>
<td>10.00</td>
<td>50.00</td>
<td>24.2377</td>
<td>10.26724</td>
<td>0.135</td>
<td>0.099</td>
</tr>
<tr>
<td>Std. Error</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.476</td>
</tr>
<tr>
<td>N</td>
<td>610</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.198</td>
</tr>
</tbody>
</table>

Further analysis of this scale showed its p-plots and histogram to follow the normal distribution.

**Reliability:** Internal consistency of the “compliance with pandemic control measures” scale was good (Cronbach’s $\alpha= 0.865$, Guttman Split-Half Coefficient= 0.818).

**Validity:** Factor analysis was employed for all 10 items, using principal components analysis with varimax rotation. The analysis yielded two factors explaining a total of 58.286% of the variance in the data.

**Support for Pandemic Control Measures:**

This 21-point cumulative Likert scale was created based on some of the pandemic control measures undertaken by the Egyptian government until the time of its creation. Participants were told that "the Egyptian government took several decisions to prevent the spread of the coronavirus pandemic; some supported them while others did not." They were then asked to what extent they supported each of the five mentioned decisions undertaken by the government. These five decisions were: 1. Imposing a fine for not wearing face masks in public transportation and gatherings; 2. Implementing a partial lockdown for some public facilities; 3. Forcing citizens, employees, and students to take the Coronavirus vaccines; 4. Banning different types of public gatherings (like weddings, celebrations, and funerals), except in open places; and 5. Suspending direct flights to and from some countries, like South Africa. Responses were rated on a five-point scale ranging from 1 (totally dis-support) to 5 (totally support).
The scale included three levels of support: low (less than 15), moderate (15–20), and high (more than 20). Its statistics were as follows:

Table 4: Support Scale Statistics

<table>
<thead>
<tr>
<th>Measures' Support</th>
<th>N</th>
<th>Range</th>
<th>Min.</th>
<th>Max.</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>610</td>
<td>20.00</td>
<td>5.00</td>
<td>25.00</td>
<td>18.3082</td>
<td>4.61277</td>
<td>-0.372</td>
<td>0.099</td>
</tr>
</tbody>
</table>

Further analysis of this scale showed its p-plots and histogram to relatively follow the normal distribution.

Reliability: Internal consistency of the "support for control measures" scale was good (Cronbach’s $\alpha$= 0.814, Guttman split-half coefficient= 0.714).

Validity: Factor analysis was employed for all 5 items, using principal components analysis with varimax rotation. The analysis yielded one factor explaining a total of 58.127% of the variance in the data.

(4) Acceptance of COVID-19 Vaccines:

This 11-point cumulative Likert scale depended on a measurement that included three questions: 1. Do you support the idea of getting vaccinated with any of the Coronavirus-approved vaccines?; 2. Have you taken or are planning to take any of these vaccines out of your own free will or because they became mandatory?; and 3. Do you think that the decision to impose vaccinations was delayed?. Responses to the first question were rated on a five-point scale ranging from 1= strongly oppose, to 5= strongly support. Responses to the second question were rated on a six-point scale ranging from 1= I would not take it at all, to 6= I took both shots out of my own free will. Meanwhile, responses for the third question were 1= no, 2= yes. The number of points given to each of the three questions depended on the nature as well as the relative importance of each question, with more important questions receiving more points.
The scale included three levels of vaccine acceptance: low (6 or less), intermediate (7–10), and high (more than 10). Its statistics were as follows:

Table 5: Vaccine Acceptance Scale Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Range</th>
<th>Min.</th>
<th>Max.</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vaccine Acceptance</td>
<td>610</td>
<td>10.00</td>
<td>3.00</td>
<td>13.00</td>
<td>8.2672</td>
<td>2.91799</td>
<td>-0.033</td>
<td>-1.255</td>
</tr>
</tbody>
</table>

Further analysis of this scale showed its p-plots and histogram to skew from the normal distribution and have increased kurtosis.

Reliability: Internal consistency of the “acceptance of the COVID-19 vaccines” scale was sufficient (Cronbach’s $\alpha = 0.629$, Guttman Split-Half Coefficient= 0.143).

(5) Demographic Variables:

As demographic variables, participants were asked to identify their: gender, age, governorate, area of residence (rural or urban), level of education, employment status, current job, and average family income per month.

Main Findings

(A) Independent Variable:

Pandemic–Related Trust

Table 6: Pandemic–Related Trust

<table>
<thead>
<tr>
<th>Pandemic–Related Trust</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>59</td>
<td>9.7</td>
</tr>
<tr>
<td>Medium</td>
<td>277</td>
<td>45.4</td>
</tr>
<tr>
<td>High</td>
<td>274</td>
<td>44.9</td>
</tr>
<tr>
<td>Total</td>
<td>610</td>
<td>100</td>
</tr>
</tbody>
</table>

The relatively high levels of pandemic-related trust among most respondents are in line with prior literature indicating that citizens of assertive states like Egypt place greater trust in their governments during crises than people living in countries with greater participatory mechanisms (Albrecht & Loewe, 2022).
However, this finding appears inconsistent with earlier research highlighting the low levels of trust in the Egyptian government in general (Dawood, 2011). Even structural transformations like the January 25th revolution couldn't fundamentally change Egyptians' relationship with power, characterized by distrust in the government and its decisions and a tendency to be more negative or critical of public institutions (Bakry, 2018).

The discrepancy between these prior findings and the current study can be interpreted in light of the Egyptian government's early attempts to combat the pandemic. These efforts included increased spending on health (Elkhashen et al., 2021), strengthening medicine regulatory and management systems (Abd Elsalam, 2021), early enforcement of curfews and lockdowns, as well as various other pandemic-control measures. Although these measures were ultimately inadequate for containing the rising infection rates, the current study argues that they led to relatively high levels of pandemic-related trust, particularly concerning "the advice presented by the Egyptian government for protection against the pandemic" and "the effectiveness of the governmental decisions to control the pandemic," aspects that ranked highest among trust-related items in the questionnaire among Egyptian youth respondents.

Furthermore, the current study suggests that pandemic-related trust is a crucial predictor of success in implementing pandemic control measures, particularly among youth. This is since youth with lower trust levels (including in the government's measures to combat the virus) were less likely to comply with the control measures (Nivette et al., 2021).

Additionally, the study finds further correlations with age, governorate, area of residence, level of education, and income. A positive correlation is found between pandemic-related trust and age (with a correlation coefficient of 0.086 and a statistically significant p-value of less than 0.05). This finding aligns with previous research in Tunisia demonstrating an increase in government trust with age (Albrecht & Loewe, 2022). It can be concluded, then, that younger citizens tend to find it more challenging for the government to gain their political satisfaction and trust. This might be because younger citizens have
access to diverse media that facilitates global information sharing. Accordingly, they are better informed about the various approaches implemented by other governments around the world. This comparative perspective might be the reason why younger citizens hold lower levels of pandemic-related trust.

Cairo residents (M= 13.2259, SD= 3.55060) show the lowest levels of pandemic-related trust, followed by residents of other governorates (M= 13.4737, SD= 2.14394), then Giza residents (M= 14.3889, SD= 2.63340). Finally, trust is highest among Qalyubia residents (M= 15.0881, SD= 3.06136). This pattern is statistically significant (F= 12.620, p< 0.05).

These findings suggest a similar trend to the observation that younger citizens have lower levels of trust. The centralization of public services in Cairo grants its residents better access to media outlets, better internet connections, and the ability to compare Egyptian procedures with those of other governments. This increased exposure might raise their expectations and make it more difficult for the government to achieve their satisfaction and trust.

Similarly, residents of urban areas (M= 13.6067, SD= 3.32144) show lower levels of pandemic-related trust than residents of rural areas (M= 15.1636, SD= 2.77245). This is also significant (T= 5.367, p< 0.05). One possible explanation is that urban residents have better access to information, which contributes to building trust and ultimately influences their self-reported trust levels.

Contrary to prior literature showing no significant effect of education (Albrecht & Loewe, 2022), this study finds negative correlations. Participants with postgraduate degrees (M= 12.5000, SD= 2.54274) show the lowest levels of trust, followed by university graduates (M= 13.7590, SD= 3.11435), and those with intermediate education or less (M= 14.2464, SD= 3.32314) show the highest levels (F= 4.866, p< 0.05). This aligns with prior findings demonstrating that about one-third of last year’s university students questioned the government's handling of the pandemic (Mansour, 2021).

These findings suggest that as the level of education increases, pandemic-related trust tends to decrease. Better-educated citizens are often better
informed about globally approved scientific methods to combat the pandemic. This might lead them to have higher expectations from the Egyptian government and consequently hold lower levels of trust.

In contrast to previous research that found no relationship between income and pandemic-related trust (Albrecht & Loewe, 2022), this study finds that those in the middle-income bracket (M= 12.3188, SD= 3.31881) have the lowest levels of trust, followed by high-income participants (M= 12.5833, SD= 2.58620). Then, the low-income participants (M= 14.3230, SD= 3.19006) have the highest levels (F= 14.630, p< 0.05). This might be due to the specific struggles faced by the middle class in Egypt since the pandemic outbreak. This class, often referred to as the engine of economic growth, was already suffering and had diminished significantly even before the pandemic.

However, no significant correlations are found with gender (T= -1.575, p> 0.05) or employment status (T= 1.158, p> 0.05), aligning with prior findings showing no significance for occupation (Albrecht & Loewe, 2022).

(B) Dependent Variables:

1) Compliance with Pandemic Control Measures

<table>
<thead>
<tr>
<th>Compliance with Pandemic Control Measures</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>198</td>
<td>32.5</td>
</tr>
<tr>
<td>Intermediate</td>
<td>251</td>
<td>41.1</td>
</tr>
<tr>
<td>High</td>
<td>161</td>
<td>26.4</td>
</tr>
<tr>
<td>Total</td>
<td>610</td>
<td>100</td>
</tr>
</tbody>
</table>

The table reflects how limited the high levels of compliance with pandemic control measures are, even during the peak of the 5th COVID-19 wave in Egypt. These findings align with prior research who found that compliance dropped in later months when less stringent lockdowns were implemented, ultimately leading to slower pandemic decline (Wright & Fancourt, 2021).

This can be interpreted in terms of four main reasons: First, the finding that compliance with pandemic control measures among youth can best be indicated through their knowledge, emotion, and behavioral
intention (especially emotion, which has the greatest influence) (Masek et al., 2022). Second, compliance fatigue sets in as citizens must adhere to numerous safety measures over time. Third, depression and anxiety during the pandemic have been shown to be negatively correlated with adherence to control measures across countries (Lavallee et al., 2021). Fourth, the Egyptian authorities' lack of effort to strengthen society’s psychological resilience and expand mental health support services during the pandemic. This lack of effort is concerning because prior findings showed a negative correlation between the self-confidence and optimistic coping styles mean scores on the one hand and the depression, anxiety, and stress mean scores on the other hand. Using the helpless coping style increased depression, anxiety, and stress levels, while using the optimistic coping style and visiting a physician during the pandemic decreased them. In addition, seeking social support as a coping style exacerbated depression, while the testing during the pandemic increased stress levels (Altundal Duru et al., 2023).

Thus, the current study agrees with prior research recommending the Egyptian government to exert more effort to encourage appropriate behavior by citizens (El Baradei et al., 2021).

In addition, it has to be noted that respondents tend to be more compliant with some measures than others. Despite this high overall compliance rate, "washing hands frequently with water and soap," for example, saw 46.4% of respondents report being very careful, highlighting a missed opportunity for government to further encourage youth compliance with this essential measure crucial for combating not only COVID-19 but also numerous other epidemics and pandemics in our poorest continent, Africa. Conversely, "wearing a face shield for extra protection" and "wearing gloves for hand protection" had the highest percentages of respondents reporting no careful compliance at all (64.4% and 59.5%, respectively). This aligns with findings observing that young adults generally comply with COVID-19 public health measures, despite higher non-compliance with some specific measures like cleaning/disinfecting mobile phones and maintaining recommended physical distance (Nivette et al., 2021).
Further investigation reveals correlations between compliance with pandemic control measures and each of the following: governorate, area of residence, level of education, and average family income per month.

Compliance with pandemic control measures is lowest among Cairo residents \( (M= 22.4556, \ SD= 10.40713) \), followed by Qalyubia residents \( (M= 24.1824, \ SD= 10.86095) \) and Giza residents \( (M= 26.2284, \ SD= 8.29748) \). It is the highest among residents of other governorates \( (M= 33.0526, \ SD= 11.46237) \). This difference is statistically significant \( (F= 9.820, \ p< 0.05) \). This might be because of the rapid lifestyle of Cairo residents, which hinders them from strictly complying with pandemic control measures the way they should. However, this remains an alarming finding, since the densely populated nature of Cairo necessitates greater compliance with such measures, especially in public transportation and public places.

Similarly, residents of rural areas \( (M= 23.3394, \ SD= 9.09670) \) show lower levels of compliance than those of urban areas \( (M= 24.5708, \ SD= 10.65903) \), since \( T= -1.317, \ p< 0.05 \). This aligns with prior findings on differences in perceptions of various pandemic-related issues between residents of rural and urban areas. Specifically, these differences included the impact of the pandemic and safety advice for isolated victims \( (Lynch & Logan, 2023) \). Although this finding can reflect the higher awareness among urban residents compared to their rural counterparts, it still indicates shortcomings in government messaging directed at urban residents, where the high population density requires more compliance with pandemic control measures. Accordingly, the researcher highlights the importance of thoroughly studying the community context, especially when designing such essential health messages.

In contrast to prior research proving non-compliance with hygiene-related measures to be more prevalent in individuals with higher education \( (Nivette et al., 2021) \), this study finds a positive correlation between compliance and education. Participants with intermediate education or less \( (M= 22.1498, \ SD= 9.72438) \) have the lowest compliance, while university graduates \( (M= 27.9940, \ SD= 9.88019) \) have higher compliance. Whereas participants with postgraduate
degrees (M= 32.2667, SD= 10.09586) have the highest levels of compliance, since F= 31.756, and p< 0.05. This finding follows the logic that the more educated someone is, the greater awareness they gain. Education can be argued to gain greater importance during a global health crisis like this, requiring great awareness and conscious decisions to follow scientific standards for combating the pandemic.

Also, contrary to prior findings by Wright & Fancourt (2021), and Nivette et al. (2021) who linked low compliance to high income or higher socioeconomic status, this study finds a positive correlation between compliance and income. Low-income participants (M= 23.8259, SD= 10.27418) have the lowest compliance, followed by middle-income participants (M= 24.7246, SD= 10.21084). High-income participants (M= 31.7083, SD= 7.21399) show the highest levels, since F= 6.981, and p< 0.05. This aligns with prior findings by Lavallee et al. (2021) confirming self-reported adherence to be positively predicted by higher social status. This finding also follows the logic that the higher the income is, the more the individual becomes able to afford essential supplies (like masks, face shields, alcohol, chlorine, wipes, more soap, and tissues) to avoid infection and transmission.

In contrast to previous research claiming that female sex positively predicts self-reported adherence (Lavallee et al., 2021) and higher non-compliance among males (Nivette et al., 2021), this study finds no correlation between compliance and gender (T= -5.978, p> 0.05). This might be due to the difference between the types of samples analyzed in these prior studies and the youth sample analyzed in the current study. It can be noted that both genders within the youth group almost complied with pandemic control measures in the same way.

Additionally, contrary to previous findings that low compliance was strongly related to younger age (Wright & Fancourt, 2021) and that self-reported adherence was positively predicted by higher age (Lavallee et al., 2021), this study finds no correlation between compliance and age (r= 0.033, p> 0.05) or employment status (T= -0.781, p> 0.05). This might be because the entire sample in this study falls within the 'youth' age group. So, we can not consider age as a significant factor when it
comes to compliance with pandemic control measures among participants in this study.

2) Support for Pandemic Control Measures

Table 8: Support for Pandemic Control Measures

<table>
<thead>
<tr>
<th>Support for Pandemic Control Measures</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>137</td>
<td>22.4</td>
</tr>
<tr>
<td>Moderate</td>
<td>248</td>
<td>40.7</td>
</tr>
<tr>
<td>High</td>
<td>225</td>
<td>36.9</td>
</tr>
<tr>
<td>Total</td>
<td>610</td>
<td>100</td>
</tr>
</tbody>
</table>

Because pandemic control measures have been shown to result in fewer infected cases (Shulman & Rowley, 2021), widespread public support for such measures has become critical for successfully implementing them. This will consequently result in controlling the pandemic, especially with some scientists proposing novel techniques such as using animal health methods to improve COVID-19 surveillance (Foddai et al., 2020). As a result, the study sample's moderate-to-high levels of support for pandemic control measures are a positive finding. Another conclusion is that in fear of the pandemic spreading, and among all other measures, the sample of the study supports "imposing a fine for not wearing face masks in public transportation and gatherings" the most, followed by "banning the different types of public gatherings, except in open places." This is probably because both measures are directly related to controlling the spread of the pandemic. Furthermore, both are methods of preventing oneself and others from adhering to rigid restrictions that disrupt the individual's flow of life. This is contrary to most of the other restrictions, like curfews, closures, vaccine enforcement, and flight suspensions.

Further analysis indicates correlations with governorate, area of residence, and average family income.

Support is lowest among Giza residents (M= 17.3889, SD= 4.61869), followed by Cairo residents (M= 18.0889, SD= 4.21269), then the other governorates’ residents (M= 19.4211, SD= 2.87355). Whereas, support is highest among Qalyubia residents (M= 19.4843, SD= 5.16053), since F= 6.324, and p< 0.05. This can be interpreted, again, in terms of the
centralization of Egyptian political and economic services in Cairo and Giza. Accordingly, the lives of the residents of both governorates are too busy to support, or at least accept, extra restrictions hindering their already crowded flow of life.

Similarly, residents of rural areas (M= 18.2667, SD= 5.37171) show slightly lower levels of support than do residents of urban areas (M= 18.3236, SD= 4.30415), since T= -0.135, and p< 0.05.

A positive correlation between support for pandemic control measures and income is found. Low-income participants (M= 18.1257, SD= 4.72681), show the lowest levels of support, followed by middle-income participants (M= 19.0145, SD= 3.85583), and then high-income participants (M= 20.2083, SD= 3.48885), since F= 3.274, and p< 0.05. Once more, this might be because the higher the income, the more luxury the individual has to pay attention to the pandemic and support its control measures.

However, there are no significant correlations with gender (T= -0.760, p> 0.05), age (r= 0.071, p> 0.05), level of education (F= 0.809, p> 0.05), or employment status (T= -0.918, p> 0.05). This can be concluded as a positive finding since the Egyptian youth are shown to support the COVID-19 pandemic control measures, regardless of their gender, age, employment status, and even level of education.

3) Acceptance of COVID-19 Vaccines

<table>
<thead>
<tr>
<th>Acceptance of COVID-19 Vaccines</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>210</td>
<td>34.4</td>
</tr>
<tr>
<td>Intermediate</td>
<td>210</td>
<td>34.4</td>
</tr>
<tr>
<td>High</td>
<td>190</td>
<td>31.2</td>
</tr>
<tr>
<td>Total</td>
<td>610</td>
<td>100</td>
</tr>
</tbody>
</table>

With only 15.2% strongly supporting the COVID-19 vaccines, 26.7% taking both shots, and 63.4% opposing the decision to impose vaccination, vaccine hesitancy can be concluded among this study's respondents. This is consistent with prior findings indicating that only fewer people "definitely" take a vaccine (Loomba et al., 2021). Such
vaccine hesitancy was found to be more prevalent in developing nations (Mallapaty, 2022). Around two-thirds of respondents from different Arab countries were found to be unwilling or hesitant about the COVID-19 vaccination (Kawabata, 2021). Such a small number of people ready for the vaccine is smaller than that likely required for herd immunity (Loomba et al., 2021). This has driven a scientific concern that unvaccinated people could be a source of new COVID-19 variants, such as Omicron (Mallapaty, 2022).

In addition, this very low percentage of participants who have high levels of acceptance of COVID-19 vaccines also reflects a governmental failure, especially for both the ministry of higher education and scientific research and the ministry of health and population. Both ministries did not work hard enough to encourage more citizens to carry the responsibility for taking the COVID-19 vaccines and encourage others as well. The failure of the communication strategies adopted by both ministries also included putting non-specialized government officials on the front lines of propagating the importance of the COVID-19 vaccines. Accordingly, the messages delivered by such officials lacked readability and trustworthiness. In addition, even when some specialized government officials, like the Egyptian minister of health and population, were brought in to propagate the COVID-19 vaccines, they kept delivering poor and terrifying messages instead of clear and encouraging ones. This included telling citizens that they have to "take any available type of COVID-19 vaccine" without even thinking, adding that they "have to thank God that they can have any." It also included telling citizens that some experiments are going to be conducted on some of those who are going to take anonymous COVID-19 vaccines, where "neither the injector nor the injected will be able to know what type of COVID-19 vaccine was injected" during the experiment.

The researcher thus concludes that adopting such poor communication strategies by both Egyptian ministries could be highly alarming, especially with the widespread misinformation related to the COVID-19 vaccination. Instead, the representatives of both ministries are advised to follow more appropriate communication strategies that have to be clear, transparent, and informative. This is based on prior
scientific findings confirming the effectiveness of appropriate knowledge about COVID-19 vaccines in combating misinformation acceptance (Hwang & Jeong, 2023). This is in addition to the findings showing that rebuttals by the specialized official sources, rather than those by social media users, indirectly increased people’s willingness to receive the vaccine by reducing their psychological reaction to persuasive messages and their belief in the misinformation contained in the comments (Sun & Lu, 2023).

Further analysis shows correlations between acceptance of COVID-19 vaccines and each of the following: age, governorate, and average family income per month.

Age is positively correlated with acceptance of COVID-19 vaccines, since r = 0.096, and p< 0.05. This finding is consistent with the logic that older adults are vulnerable to more risks related to the COVID-19 infection. However, this is inconsistent with prior findings indicating those aged 18–35 were around 7.5 times more likely to get vaccinated than those aged 36–55 (Kawabata, 2021).

Vaccine acceptance is also lowest among Cairo residents (M= 7.6630, SD= 2.68157), followed by Giza residents (M= 8.4444, SD= 3.07666), then, Qalyubia residents (M= 8.9560, SD= 2.97105). Whereas the other governorates’ residents (M= 9.5789, SD= 2.58877) show the highest levels of vaccine acceptance, since F= 8.602, and p< 0.05.

Middle-income participants (M= 7.4493, SD= 2.67635) also show the lowest levels of vaccine acceptance, followed by low-income participants (M= 8.3172, SD= 2.90881). Then, high-income participants (M= 9.5417, SD= 3.27014) show the highest levels, since F= 5.145, and p< 0.05. This is consistent with prior findings indicating that participants from large Arab families were more willing to get vaccinated (Kawabata, 2021).

In contrast to previous findings that confirmed significant effects for gender, level of education (Kawabata, 2021), and area of residence (Sandu, 2023), this study finds no correlations between gender (T= -0.508, p> 0.05), area of residence (T= 3.048, p> 0.05), level of education (F= 0.403, p> 0.05), employment status (T= -2.118, p> 0.05), and vaccine acceptance. This might be because fewer Egyptian youth
accept the COVID-19 vaccine, regardless of their gender, area of residence, employment status, or even level of education.

**Hypotheses Testing:**

**H1**: Pandemic-related trust has a significant positive effect on compliance with pandemic control measures.

A simple ordinary least squares’ (OLS) regression is used to test if pandemic-related trust significantly predicts compliance with pandemic control measures.

A scatterplot is used to display the predicted relationship between the independent variable (predictor) and the dependent variable (compliance with pandemic control measures). The output is as follows:

![MPlus Scatterplot](image)

**Fig. 2: MPlus Scatterplot for the Predicted Impact of Pandemic-Related Trust on Compliance with Pandemic Control Measures**

The output of the regression model for the impact of pandemic-related trust on compliance with pandemic control measures indicates that the overall regression is statistically significant ($R^2 = 0.038, p = 0.012$).

The fitted regression model is:

**Compliance with pandemic control measures** = 15.596 + 0.616 (pandemic-related trust) + 101.230
This can be illustrated through the following diagram:

![Diagram](image)

Fig. 3: MPlus Diagram for the Impact of Pandemic-Related Trust on Compliance with Pandemic Control Measures
where: pantrust= Pandemic-related trust, and compl= Compliance with pandemic control measures.
It is found that pandemic-related trust positively predicts compliance with pandemic control measures ($\beta= 0.616, p= 0.000$), which indicates accepting H1.

H2: Pandemic-related trust has a significant positive effect on support for pandemic control measures.
A simple regression model is used to test if pandemic-related trust significantly predicts support for pandemic control measures.
A scatterplot is used to display the predicted relationship between the independent variable (predictor) and the dependent variable (support for pandemic control measures). The output is as follows:

![Scatterplot](image)

Fig. 4: MPlus Scatterplot for the Predicted Impact of Pandemic-Related Trust on Support for Pandemic Control Measures
The output of the regression model for the impact of pandemic-related trust on support for pandemic control measures indicates that the overall regression is statistically significant \( R^2 = 0.158, p = 0.000 \).

The fitted regression model is:

\[
\text{Support for pandemic control measures} = 10.415 + 0.563 \times \text{pandemic-related trust} + 17.894
\]

This can be illustrated through the following diagram:

![Diagram](image)

**Fig. 5: MPlus Diagram for the Impact of Pandemic-Related Trust on Support for Pandemic Control Measures**

where: pantrust= pandemic-related trust, and support= support for pandemic control measures.

It is found that pandemic-related trust positively predicts support for pandemic control measures \( (\beta = 0.563, p = 0.000) \), which indicates accepting H2.

**H3**: Pandemic-related trust has a significant positive effect on acceptance of COVID-19 vaccines.

A simple regression model is used to test if pandemic-related trust significantly predicts acceptance of COVID-19 vaccines.

A scatterplot is used to display the predicted relationship between the independent variable (predictor) and the dependent variable (acceptance of COVID-19 vaccines). The output is as follows:
The Impact of Political Trust Among the Egyptian Youth on Adaptation to the COVID-19 Pandemic

Fig. 6: MPlus Scatterplot for the Predicted Impact of Pandemic-Related Trust on Acceptance of COVID-19 Vaccines

The output of the regression model for the impact of pandemic-related trust on acceptance of COVID-19 vaccines indicates that the overall regression is statistically significant ($R^2 = 0.194$, $p = 0.000$).

The fitted regression model is:

Acceptance of COVID-19 Vaccines = $2.729 + 0.395$ (pandemic-related trust) + $6.853$

This can be illustrated through the following diagram:

Fig. 7: MPlus Diagram for the Impact of Pandemic-Related Trust on Acceptance of COVID-19 Vaccines

المجلة العلمية لبحوث الإذاعة والتلفزيون– العدد السادس والعشرون (الجزء الثاني) يوليو/ديسمبر 2023
where: pantrust = pandemic-related trust, and accept = acceptance of COVID-19 vaccines.

It is found that pandemic-related trust positively predicts acceptance of COVID-19 vaccines. \( \beta = 0.395, p = 0.000 \), which indicates accepting H3.

**Discussion**

With slightly less than 1 in each youth group (of five to seven) agreeing to complete the questionnaire and almost all respondents expressing their fear of detention, this study contributes to the literature on political trust in authoritarian countries in terms of public health crisis management. It presents pandemic-related trust as the most relevant type of political trust to be studied amid the COVID-19 pandemic.

Undoubtedly, the outbreak of the COVID-19 pandemic amplified the preexisting democratic regression in authoritarian countries, exhibiting the reliance of governments on soldiers to provide public services and assist in disaster relief (Croissant, 2020).

In 2021, the World Justice Project ranked Egypt 136th among 139 countries in their rule of law index. Egypt’s alarmingly low ranking was based on eight factors: constraints on government powers, absence of corruption, open government, fundamental rights, order and security, regulatory enforcement, civil justice, and criminal justice (World Justice Project, 2021). However, findings supported the perceived advantage of autocratic governance to fight health crises, especially in Egypt (Albrecht & Loewe, 2022).

Prior literature showed that China, which has not undergone any democratization and maintains one-party rule (Zhai, 2022), scored low in the rule of law index, ranking 98th (World Justice Project, 2021). Despite this, Chinese citizens perceived their democracy as being as high as that of the United States and Taiwan (Zhai, 2022). It was also identified as among the few countries in the world with a high level of trust (Edelman Trust Barometer, 2022), attracting considerable attention in prior research on political trust (e.g., Song et al., 2022; Wu & Wilkes, 2018; Zhao & Hu, 2017; Jiebing et al., 2016; Liang, 2016; Li, 2016; Cui et al., 2015; Chen et al., 2010). Similarly, on the country-level, Egyptians exhibited significantly greater trust in their state authorities than did citizens of other countries in the region (Albrecht...
This high political trust despite lower levels of democracy led to increased policy effects on infection and death rates (Chen et al., 2022).

The findings of this study generally point to high levels of pandemic-related trust. This is contrary to prior findings proving the Egyptian youth to have less trust in political institutions (Saleh, 2020; Bakry, 2018) and the Egyptian government (Dawood, 2011). This contradiction between the current and prior findings results from two key factors.

First, the nature of the sample in the current study. The current study utilized a purposive sample of youth news viewers characterized by being attentive to governmental televised communication in media with a pro-government perspective. Such communication generally aims at enhancing the portrayal of the Egyptian government, especially in terms of their response to the COVID-19 pandemic. Thus, levels of pandemic-related trust among these young viewers are positively influenced by such communication.

Second, based on prior findings, with the government announcing the lockdown, the public’s confidence in the government and its ability to handle the pandemic well increases (e.g., de León et al., 2022; Fancourt et al., 2020). Accordingly, the Egyptian government’s early implementation of curfews and lockdowns is also suggested to have positively impacted the levels of political trust among respondents.

The high levels of trust among respondents are further demonstrated to positively impact the three key factors identified for positive adaptation to the pandemic: compliance with pandemic control measures, support for such measures, and acceptance of COVID-19 vaccines. This aligns with previous findings highlighting the strong influence of variations in trust in relevant institutions on planned behaviors for COVID-19 vaccination (Sandu, 2023).

This also coheres with the finding that, when comparing the moderating effects of political trust and democracy, political trust emerged as a more important enabling factor. Therefore, in addition to making scientifically supported policies, fostering political trust should be an important goal for governments to be better prepared for future pandemics (Chen et al., 2022).
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References:


Bakry, 2018:


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