Journal of Media Horizons
ISSN: 2710-4060 2710-4052 Volume 7, Issue 6, 2026

IMPACT OF COGNITIVE BIASES ON CONSPIRACY MENTALITY IN YOUNG ADULTS

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DOI:https://doi.org/10.5281/zenodo.20845117

Keywords
Cognitive Biases, Epistemic Mistrust, Threat Sensitivity, Conspiracy Mentality

Article History
Received: 25 April 2026
Accepted: 04 June 2026
Published: 21 June 2026

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Abstract
The purpose of the present research was to study the impact of cognitive biases such as epistemic mistrust and threat sensitivity on conspiracy mentality in young adults. Present research proposed 3 hypothesis (1) Individuals in epistemic mistrust condition are likely have high conspiracy mentality as compare to control group. (2) Individuals in threat sensitivity condition are likely have high conspiracy mentality as compare to control group. (3) Individuals in combined condition are likely have high conspiracy mentality as compare to other experimental groups. The sample size was N=200 with age range 18-30. The sample divided into 4 groups i.e., epistemic mistrust group, threat sensitivity group, combined group and control group (N=50 in each group). Convenient sampling strategy was used. Qausai experimental research design between-subject was used. Demographic sheet along with tools such as Epistemic Trust, Mistrust, and Credulity Questionnaire (ETMCQ) (Campbell et al., 2021), Threat Sensitivity Scale (TSS) (March et al., 2024), Conspiracy Mentality Questionnaire (CMQ) (Imhoff & Bruder, 2014) were used. One-way ANOVA analysis was done, and the results showed that there was differences between groups.

INTRODUCTION

Conspiracy theories, lies, and misinformation are numerous on social media and the internet in today's world and alter people's perceptions of important events. This type of false information is frequently presented to young adults. Many of them consequently lose trust in important organisations, develop doubts about vaccinations, and ignore political laws and procedures. Conspiracy theories include the notion that COVID-19 was fake or that it was intentionally created in a lab. Some people thought that secret U.S. labs were producing chemical weapons in Ukraine or that the conflict had been planned by wealthy billionaires who wanted to control the world. Even though there is no evidence to support these kinds of beliefs, many people still hold them and spread them online. The present research explores the psychological factors that make certain people more susceptible to conspiracy theories.

Epistemic mistrust

Epistemic mistrust is an unwillingness to believe what other people say, particularly when it comes to new information, knowledge, or advice. The word epistemic originates from "Epistemology," the study of knowledge, how we know, and what we know. When someone does not trust information from others, even when there is no

obvious reason to do so, this is known as epistemic mistrust. People who have epistemic mistrust may disregard the advice of experts or think that people are trying to deceive them. Although a certain amount of skepticism can be beneficial, particularly in risky or unclear circumstances, excessive mistrust can lead to issues. For instance, prevent people from learning, cause them to feel alone, or cause them to hold false beliefs. It's reasonable and even good to be vigilant about what we believe, but too much mistrust may prevent people from learning, growing, or accepting the truth. People who don't trust what they know may not listen to doctors, question scientific findings, or think that the media is always lying (Fonagy et al., 2019).

There are various reasons why a person could not trust what they know. It can start from childhood. People who grow up in homes where they are ignored, lied to, or traumatized emotionally may start to think that they can't trust anyone. Sometimes, people become distrustful because of experiences that have happened to them, such as being frauded, bullied, or rejected. In certain situations, not trusting someone can be a way to defend yourself. The person tries to protect themselves by not trusting anyone or anything. But this may also keep them away from

Threat sensitivity

Threat sensitivity is a person's natural capacity to see potential danger around them and act immediately. This skill is a result of evolution; being aware of risk helped humans survive in the past (Neuberg et al., 2011). But these days, this sensitivity might make people think they are in danger even when they are not or when the situation is not apparent. People who are very sensitive to threats may feel worried and think that the world is more hazardous than it really is. This can change the way they think about things, how they perceive circumstances, and how they see other people.

The Behavioural Inhibition System (BIS) is a component of the brain that helps us deal with threats, punishments, and anything else that is new or uncertain. Gray and McNaughton (2000) say that those with a very active BIS are more worried and are particularly aware of social dangers, such as rejection, judgment, or danger. This system has a big effect on how people who are sensitive to threats respond to news, especially news regarding politics or society (Gray and McNaughton , 2000). This is why those who are more sensitive to threats may be more likely to believe in conspiracies. People who consider the world threatening are more inclined to think in conspiratorial ways. A lot of the time, these people think that negative things happen on purpose, not by chance (Imhoff & Lamberty., 2018).

Conspiracy Mentality

People who have a conspiracy mentality consider that strong and secret groups are controlling major events behind the scenes. People who think this way don't trust governments, the media, scientists, and other official organizations in general (Imhoff & Bruder, 2014). People who have a conspiracy mentality think that the public isn't being told the truth and are continually seeking hidden meanings in major events. People who believe in conspiracies frequently assume that nothing happens by chance and that the people in power don't always tell the truth. This way of thinking depends on psychological tendencies, such as being easily sensitive to threat, not trusting other people, and preferring simple answers instead of having to deal with uncertainty (Brotherton et al., 2013).

Various elements affect how people interpret the world to create a conspiracy mentality. One significant contributing factor is mistrust of authority, which occurs when people believe that institutions or leaders are using the public for their personal gain and working for their own benefit rather than the benefit of the general public (Imhoff & Bruder, 2014). Experiences like social injustice, political corruption, or past betrayal may give rise to this suspicion. Subclinical paranoia, or persistent suspicion of the intentions of others, even in the absence of clinical symptoms, is another psychological factor. This characteristic makes people more likely to believe that covert plots are behind events (Imhoff & Lamberty, 2018). Similarly, anti-establishment sentiments increase the likelihood that people will

reject official narratives and believe in alternative explanations, particularly in societies where political instability or inequality is prevalent (Mancosu et al., 2017). Conspiracy theories are strongly reinforced by the spread of false information, particularly on social media. People are frequently exposed to unsubstantiated or inaccurate claims in online echo chambers without being given the opportunity to consider opposing viewpoints. Conspiracy theories are strengthened over time by this exposure (Lewandowsky et al., 2017).

Belief in conspiracy theories is growing increasingly in our world, especially when people are scared, confused, or in a crisis. During the COVID-19 epidemic, people thought the virus was wholly fake or that it was manufactured in a lab as a biological weapon. For example, some people thought that the immunizations were part of a secret scheme to hurt or control people. Conspiracy theories also gained popularity after the attacks on September 11. Some people thought that the attacks were planned by the U.S. administration to make the case for going to war. Some people said that NASA planned the moon landing in 1969 and filmed it on a set in Hollywood. Some people think that global warming is a hoax dreamt up by scientists or governments to pursue their own political objectives.

Conspiracy mentality is not merely a random belief; it constitutes a unique cognitive framework. It brings together cognitive, emotional, and social aspects. It makes people very suspicious and mistrustful, and they want to find out what really happened.

Theoretical Framework

This study is based on two important psychological theories: Kahneman's Dual-Process Theory of Cognition (2011) and Kunda's Motivated Reasoning Theory (1990).

Dual-Process Theory (Kahneman, 2011)

Kahneman (2011) says that people think in two ways:

- System 1: quick, automatic, based on feelings, and based on gut feelings
- System 2: slow, hard, logical, and analytical

When you need to make rapid decisions or deal with everyday issues, or when people are stressed, anxious, or unsure, they tend to use System 1 more. This can make people take fast decisions, use cognitive shortcuts (heuristics), and rely on their feelings instead of thorough thought. Those people who use System 1 processing are often drawn to conspiracy theories because they are emotionally charged and easy to understand. In circumstances characterised by threat or anxiety, individuals may accept conspiratorial theories without assessing their truth. Research conducted by Swami et al. (2014) indicates that dependence on intuitive (System 1) thinking correlates with belief in conspiracy theories.

Motivated Reasoning Theory (Kunda, 1990)

Motivated reasoning is the tendency to interpret information in a way that matches what you already believe or feel. People don't think objectively; instead, they use reasoning to support what they already feel or want to believe. A lot of the time, this happens without even realising it. Franks et al. (2017) claim that motivated reasoning causes individuals to favour emotionally supportive beliefs regardless of fact, particularly in complex or complicated contexts.

Rational

The purpose of the present study was to study the impact of cognitive biases that included epistemic mistrust and threat sensitivity on conspiracy mentality in young adults. This study has social significance in the modern age, where social media and the internet provide people with an enormous amount of misinformation and conspiracies. This study can help to develop more effective awareness about the psychological factors that contribute. This study has clinical significance as conspiracy mentality leads to psychological issues. Individuals who believe in strong conspiracies often suffer from social isolation, anxiety, fear, paranoia and distress. The present study helps mental health professionals in understanding how these kinds of cognitive biases may impact mental health. Young adults who exhibit these thought

patterns may benefit from early intervention to avoid more severe psychological problems in future. This study fills a gap in the literature and contributes culturally relevant insights to the global research on conspiracy beliefs by using this quasi-experimental design on a Pakistani collectivistic culture, where belief systems and social trust may function differently.

Aim of Study

- To investigate impact of epistemic mistrust manipulation on conspiracy mentality
- To investigate impact of threat sensitivity manipulation on conspiracy mentality
- To examine the impact of both combined (epistemic mistrust and threat sensitivity) manipulation on conspiracy mentality.

Hypotheses

- Individuals in epistemic mistrust condition is likely have high conspiracy mentality as compare to control group.
- Individuals in threat sensitivity condition is likely have high conspiracy mentality as compare to control group.
- Individuals in combined condition (epistemic mistrust and threat sensitivity) are likely have high conspiracy mentality as compare to other experimental groups.

Method

Research Design

The quasi-experiment is used to study the impact of the independent variable without random assignment (Shadish et al., 2002). A quasi-experiment with a between-subjects research design was planned to study the impact of cognitive biases that included epistemic mistrust and threat sensitivity on conspiracy mentality in young adults. There were 4 groups, i.e., epistemic mistrust, threat sensitivity, combined (epistemic mistrust & threat sensitivity) and a control group. Different participants were exposed to different conditions, such as the epistemic mistrust group exposed to a condition that makes them mistrust, the threat sensitivity group exposed to a condition that makes them feel threatened, a combined condition that induces both mistrust and threat and a control group with a neutral condition without random assignment. This means that each participant experiences only one condition of the quasi-experiment.

Sampling Strategy

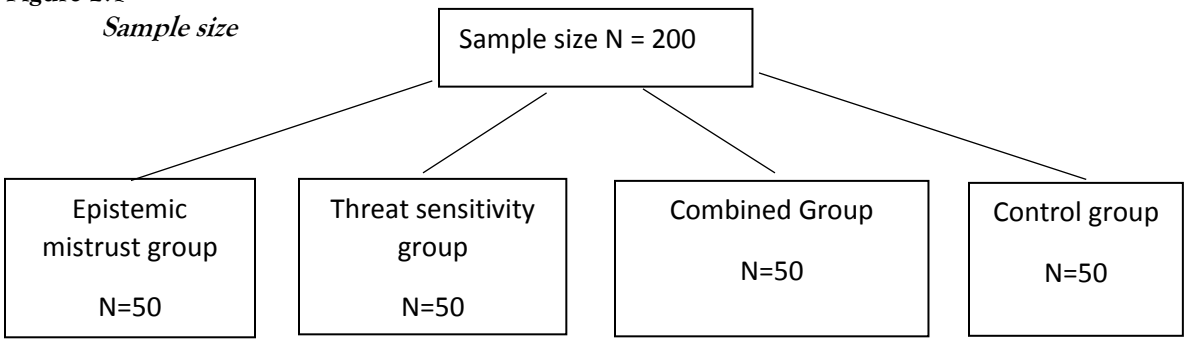
Participants were selected using non-probability convenience sampling, which includes selecting those who were easiest to reach or readily available (Etikan, Musa, & Alkassim, 2016)

Sample Size

The sample size was N=200 for the present research. It was determined using G*Power software. There were four groups in total: epistemic mistrust, threat sensitivity group, combined group that included both epistemic mistrust and threat sensitivity and control group. Each group included 50 participants. Data was recruited from different universities and canteens through convenient sampling.

Figure 2.1

Sample size



Controlling Factors

Strict inclusion and exclusion criteria were used to apply a number of controlling factors in order to lessen the impact of confounding variables.

Inclusion Criteria

The individuals with following criteria are included in the research.

- Both men and women of age range 18-30 were included in the study.
- Participants who understand the English were included in the study so that they could understand the questionnaire.

Exclusion Criteria

The individuals with following criteria are excluded in the research.

- Professionals and students of psychology were excluded from research.
- Participants having any type of psychological disorder were excluded from study. It is identified through demographics.

Measures

The following tools, along with a demographic sheet, were used for the present research. In the present research, three variables were measured, such as epistemic mistrust, threat sensitivity and conspiracy mentality. Epistemic mistrust was measured by Epistemic Trust, Mistrust, and Credulity Questionnaire ([ETMCQ] Campbell et al., 2021), threat sensitivity was measured by Threat Sensitivity Scale ([TSS] March, Hasty, & Olivett., 2024) and conspiracy mentality was measured by Conspiracy Mentality Questionnaire ([CMQ] Imhoff & Bruder., 2014).

Demographic sheet

In the demographic sheet, name initials, age, gender, field of study, occupation, items related to misinformation and distrust of authority were included.

Epistemic Trust, Mistrust, and Credulity Questionnaire ([ETMCQ] Campbell et al., 2021)

The Epistemic Trust, Mistrust, and Credulity Questionnaire (ETMCQ) was used to measure the epistemic mistrust in participants. It consisted of 15 items. There were 3 subscales: trust, mistrust and credibility. Each subscale consisted of 5 items. The scale utilised a 7-point Likert-type response set ranging from strongly disagree (1) to strongly agree (7). These were some items, e.g., " I find information easier to trust and absorb when it comes from someone who knows me well", " I'd prefer to find things out for myself on the internet rather than asking people for information", "I am often considered naïve because I believe almost anything that people tell me". The full scale showed acceptable internal reliability (α = 0.78), and for the subscales Trust (α = 0.76), Mistrust (α = 0.72) and Credulity (α = 0.81). In recent research, the internal consistency of the 3 subscales was acceptable: trust (α=.73), mistrust (α=.70), and credulity (α=.77) (Brauner et al., 2023). Our present research shows questionable reliability values of full scale is .66, whereas subscales have questionable to poor reliability, such as trust (α=.68), mistrust (α=.54), and credulity (α=.49).

Threat Sensitivity Scale ([TSS] March et al., 2024)

The Threat Sensitivity Scale was used to measure the threat sensitivity towards perceived threat. It consisted of 5 items. The scale utilised a 7-point Likert-type response set ranging from unlikely (1) to likely (7). These were some items that were modified according to the cultural context, with the permission of the author. The following items are, e.g., "Camping in the woods", "An old wooden Bridge". The modified items are "Walking alone at night in a strange place" and "A busy road". The scale showed good internal consistency in the original research, with Cronbach's alpha values ranging from.78 to 82 across five studies (March et al., 2024). Our present research shows questionable reliability values of the full scale, which is α=.67.

Conspiracy Mentality Questionnaire ([CMQ] Imhoff & Bruder, 2014)

The Conspiracy Mentality Questionnaire (CMQ) was used to measure the conspiracy mentality in participants. It consisted of 12 items. The scale utilised a 7-point Likert-type response set ranging

from not at all (1) to very much (7). These were some items, e.g., "There are many very important things happening in the university that students are not informed about", "Secret organisations can manipulate students psychologically so that they do not notice how their lives are being controlled by others", "Most students do not see how much their lives are determined by plans devised in secret". The scale shows an excellent internal reliability value, α=0.90. Recent research shows the good reliability value of the scale is 0.89 (Frenken & Imhoff, 2022). Our present study shows acceptable reliability values of the full scale of 0.77

Procedure

After reading the appropriate literature and discussing with the research supervisor, the topic was chosen for this study. Participants were recruited from various universities and educational institutes. The study only included people who met the criteria for inclusion by using a convenience sampling strategy. Four groups were designed, such as the control group, epistemic mistrust group, threat sensitivity group and combined group. Participants read the information sheet, signed the informed consent form, and then filled out the demographic form. After that, they filled out two standardised questionnaires, such as the Threat Sensitivity Scale and the Epistemic Mistrust Scale. After this, the individuals were put into one of four experimental groups: epistemic mistrust group given a scenario that was meant to make them mistrust, threat sensitivity group given a scenario that was meant to make them more aware of threats, combined group given a scenario that had both threat and mistrust and control group given a neutral situation. After reading their assigned scenario, everyone took the Conspiracy Mentality Questionnaire (CMQ) to see how likely they were to believe in conspiracy theories in general. It took about 10 to 15 minutes for each person to do the whole thing. At the end of the survey, a debriefing was done by informing the participants that the scenarios they read were made up and only used for the study. All the data that was gathered was put into SPSS for statistical analysis.

Ethical Considerations

Ethical considerations for this research were as follow:

- Study was conducted after approval given by Departmental Doctoral Program Committee.
- Permissions to use standardized tool were also taken from respective authors.
- Permission for obtaining data was taken from the respective authorities of department.
- Information sheet and informed consent was provided to the participants.
- Purpose and nature of study was elaborated to the participant
- Results of participants could be provided to them on demand.
- Confidentiality regarding the identity or other information was maintained by the researcher
- Debriefing was done at the end of the research.
- Data entry, scoring and reporting were done without any fabrication.
- Plagiarism was strictly prohibited.

Result

Descriptive Analysis

Descriptive analysis was done to study the demographics of participants

Table 1

Socio Demographic characteristics of participants (N=200)

Demographics	M	SD	*f*	%
Age	21.68	2.64		
Gender				
Male			78	39.0%
Female			122	61.0%
Field of Study				
MLT (Medical Lab Technology)			41	20.5%
Computer Science			30	15.0%
Electrical Engineering			15	7.5%
Chemistry			5	2.5%
Mass Communication			9	4.5%
Other (varied disciplines)			41	20.5%
Occupation			100+	50.5%
Student			182	91.0%
Other (e.g., doctor, housewife)			18	9.0%

Table 1 shows the sociodemographic characteristics and descriptive statistics of the 200 participants who took part in the study. The mean age of the participants is 21.68 years (SD = 2.64), which means that they were mostly young adults. There were 122 women (61%) and 78 men (39%) in the study. This shows that there are more women in the sample than men.

The participants represented a wide range of academic backgrounds. Medical Lab Technology (MLT) was the field of study that most people (20.5%, n = 41) reported. After that, there were Computer Science and its variants (15%, n = 30) and Electrical Engineering and its variants (7.5%, n = 15). There were also people from other fields, like chemistry, mass communication, and several social and biological sciences, but each comprised less than 5% of the sample.

A large number of participants (91%, n = 182) were students, and the other 9% (n = 18) consisted of individuals from several professions, including doctors, housewives, teachers, and engineers. The results show that the majority of the people in the sample were young, educated people, predominantly students, with different academic backgrounds and a slightly higher number of women.

Reliability Analysis

Reliability analysis was done to check the psychometric properties of the tools.

Table 2

Psychometric properties of the questionnaires used

Scale	M	SD	Ranges		Cronbach's α
			Potential ranges	Actual ranges	
Epistemic Trust Mistrust Credibility Questionnaire	59.86	14.35	15-105	25-95	.66
Epistemic Trust	23.50	5.64	5-35	8-35	.68
Epistemic Mistrust	22.25	5.11	5-35	5-33	.54
Credibility	18.86	5.14	5-35	5-32	.49

Threat Sensitivity Scale	20.32	6.44	5-35	5-34	.67
Conspiracy Mentality Questionnaire	65.50	12.84	12-84	19-84	.77

This table shows the psychometric properties of the scale used in present research, such as mean scores, standard deviations, and internal consistency values (Cronbach's alpha). Cronbach's alpha α=.66 and an overall mean score of 59.86 (SD = 14.35) of the Epistemic Trust Mistrust Credibility Questionnaire (ETMCQ) demonstrated questionable reliability. Subscale analysis revealed that the Epistemic Trust subscale had a mean of 23.50 (SD = 5.64), with α =.68, indicating a questionable level of internal consistency. With a mean score of 22.25 (SD = 5.11), the Epistemic Mistrust subscale had a comparatively poor alpha value of.54, suggesting that its items were less consistent. Likewise, the Credibility subscale showed unacceptable reliability (M = 18.86, SD = 5.14, α =.49).With an alpha coefficient of.67 and a mean score of 20.32 (SD = 6.44), the Threat Sensitivity Scale is within the questionable range for psychological measures. With a mean score of 65.50 (SD = 12.84) and a Cronbach's alpha of.77, the Conspiracy Mentality Questionnaire (CMQ) demonstrated acceptable internal consistency. Overall, the majority of the measures showed questionable to acceptable reliability.

ANOVA

The Shapiro-Wilk and Kolmogorov-Smirnov tests were performed to determine the assumption of normality. According to the results, all of the groups had non-significant values (p >.05), suggesting that the data were normally distributed. As a result, the normality assumption was fulfilled. Levene's Test of Homogeneity of Variance was used to verify the assumption that variances were equal across groups. The results showed that there was significant difference in the conspiracy mentality score among the four groups F (3,196) = 7.949, p <.001). The assumption of homogeneity of variance was not satisfied. As a result, parametric tests such as welch ANOVA was conducted for further analysis.

Table 3

Welch ANOVA for Conspiracy Mentality across Four Groups

Variables	Epistemic Mistrust Group		Threat Sensitivity Group		Combined Group		Control Group		F(3,196)	P	η^2
	M	SD	M	SD	M	SD	M	SD			
Conspiracy Mentality	63.66	11.7	57.10	14.49	66.80	7.83	57.38	10.97	10.93	.001	0.117

Table 3.3 showed the results of a welch ANOVA that examined conspiracy mentality differences among four groups i.e., Epistemic Mistrust, Threat Sensitivity, Combined and Control. A mean score of epistemic mistrust group had 63.66 (SD = 11.7), threat sensitivity 57.10 (SD = 14.49), combined group 66.8 (SD = 7.83) and control group 57.38 (SD = 10.97). These differences were statistically significant with F (3, 196) = 10.93 and p <.001. Effect size (η^2 = 0.117) showed that the group condition made up almost moderate to large proportion of variance in conspiracy mentality scores. A welch ANOVA revealed a significant difference in conspiracy mentality across groups. Post Hoc test was run for pairwise comparison. Pairwise comparisons demonstrated that conspiracy mentality was significantly higher in combined group (M = 36.36, *SD* = 9.22) compared to other groups. Epistemic group (M = 33.22, *SD* = 10.66*) also scored significantly higher

than control group (p = .035, d = 0.68*). These results indicate that belief in conspiracy theories is greatly increased by epistemic mistrust, particularly when combined with threat sensitivity. On the other hand, threat sensitivity by itself did not increase conspiracy theories. This suggests that conspiracy mentality may be more strongly influenced by how people view and trust information sources than by short threat-based scenarios.

Discussion

The present research examined the influence of two significant psychological traits, epistemic mistrust and threat sensitivity, on conspiracy mentality in young adults. According to the first hypothesis, individuals in the epistemic mistrust condition were predicted to have higher conspiracy mentality scores than those in the control group. However, since the difference was statistically significant, the results are supported. This result aligns with several studies that emphasise how mistrust contributes to the development of conspiracy mentality. Epistemic mistrust is a belief that information from those in positions of authority and official sources cannot be trusted. People who have these feelings frequently reject truth and instead turn to alternative narratives, which frequently take the shape of conspiracy theories (Fuchs et al., 2023). Our research showed that even a brief manipulation of mistrust can momentarily trigger this tendency. Joseph Pierre's (2020) socio-epistemic model, which explains that people who experience trauma, betrayal, or inconsistent caregiving are more likely to develop mistrust in others, also supports this finding. When they feel uncertain or confused, this mistrust causes them to doubt the sources of information and adopt different viewpoints. Epistemic mistrust is prevalent in Pakistan. According to a study by Rizwan et al. (2022), young adults in Pakistan frequently express a high degree of mistrust toward media outlets, political figures, and even medical experts. Conspiracy theories flourish in this psychological climate of mistrust, particularly on social media, where false information spreads swiftly and unchecked (Zafar et al., 2021). Another important aspect is that political instability and inadequate systems have already led to a high level of mistrust toward institutions in Pakistan (Tahir & Khan, 2021).

According to the second hypothesis, those exposed to a threat-sensitive scenario were more likely to have a conspiracy mentality than the control group. The results do not support the hypothesis, and the difference was not statistically significant. One explanation might be that countries like Pakistan are already exposed to routine dangers like terrorism, instability in politics, financial crises, and public safety issues. People may become emotionally numb or less reactive to repeated exposure to danger. (Funk et al., 2004). Therefore, a brief scenario-based manipulation to trigger threat sensitivity might not have much of an emotional effect.

Furthermore, psychological models suggest that a loss of control is frequently required for a threat to give rise to conspiracy theories (van Prooijen & Acker, 2015). The threat scenario in our study did not take away the participants' sense of safety or control. This might be the reason they didn't react with more conspiracy theories. The psychological defence mechanism known as cognitive dissonance or denial is another potential contributing factor. In order to preserve their mental balance, people may react to fear by ignoring or rationalising to overcome the situation (Haase, 2024; Festinger, 1957). Muslims are urged to have faith in Allah in times of adversity (tawakkul). These understandings might lessen the emotional impact.

According to the third hypothesis, those who are exposed to a combined condition that includes both epistemic mistrust and threat sensitivity are likely to exhibit the highest levels of conspiracy mentality as compared to other experimental groups. The results were significant, so the hypothesis was approved. This represents a profound psychological reality that conspiracy theories frequently offer explanations to individuals when they feel psychologically threatened and unable to trust the information around them. The "perfect storm" for conspiracy theories is created by this dual vulnerability. Joseph Pierre's (2020) two-component model,

which explains that conspiracy thinking frequently arises from a combination of emotional distress, such as fear, anxiety, or feeling threatened, and epistemic insecurity, or not knowing whom to trust, is supported by this finding. These two factors work together to produce a powerful emotional need to make sense of chaos, which conspiracy theories satisfy by providing straightforward, emotionally fulfilling explanations. A person's brain is more likely to believe that "something bigger is going on behind the scenes and we're not being told the truth".

In Pakistan, this pattern is very obvious. Similarly, during the COVID-19 pandemic, people were perceiving a threat to their health and future, and they were also unsure of whether to trust the government, the media, or medical professionals. This combination sparked crazy conspiracy theories, with some claiming that COVID was a fraud, the vaccine was a Western trap, or it was a biological weapon directed at Muslims (Rizwan et al., 2022). These ideas were based on mistrust and fear rather than science. The conspiracy mentality is more similar to a personality trait. It is a fact that some people are naturally more suspicious or doubtful, and over time, this way of thinking strengthens into a stable aspect of their personality (Imhoff & Bruder, 2014). Support for Hypothesis 3 demonstrates that emotional threat and cognitive mistrust work better together than they do separately.

Conspiracy theories have had a significant effect on cultures all over the world. After the attacks on September 11, 2001, many people thought that the U.S. administration had planned them as an excuse to go to war. The conflict between Ukraine and Russia has led to conspiracy theories that global leaders or secret societies are using the war to make money or to gain power. These incidents show a pattern that conspiracy theories grow when there is fear, crisis, or uncertainty. In places like Pakistan, where it's hard to get reliable information and politics aren't very open, the psychological and cultural space for conspiracies grows even larger.These psychological problems become worse due to cultural influences. Political instability, biased education in textbooks, and ethnic movements make people in Pakistan already doubt authority. This wide distrust makes it easier for conspiracy theories to spread (Ahmed & Mughal, 2020). One example is the challenges that the polio immunisation program in Pakistan has had. People start to question the motives of such campaigns because they are supported by foreign groups. People accept fake claims that the polio drops are meant to sterilise Muslim children or that they include haram (forbidden) substances like pig products. Even though these views are wrong and go against what Islam says about preserving lives, many families still won't let their kids get vaccinated. This highlights how cultural anxiety and false information are connected, and how hard it is to battle these rumours (First Draft News, 2021; Gavi, 2021). Because of these wrong ideas, significant harm has been done. Polio continues to exist in only a few nations, and Pakistan is one of them. People who work in health care have been targeted, and some places, especially Pashtun groups, still have high rejection rates even after multiple initiatives to raise awareness (The Nation, 2022).

Conclusion

The findings of the present research showed that there were significant differences between the groups. The findings supported Hypothesis 1 by demonstrating that the epistemic mistrust group exhibited noticeably greater conspiracy mentality than control group. Hypothesis 3 was supported by the combined group (epistemic mistrust + threat sensitivity), which also displayed the highest conspiracy mentality. Hypothesis 2 was not supported, because the threat sensitivity group by itself did not demonstrate a significant difference from the control group. These results imply that mistrust, particularly when combined with threat, contributes more to the rise in conspiracy theories than threat alone.

Strengths of the Present Research

- The study examined the relationship between conspiracy mentality and two psychological constructs that are studied independently, epistemic mistrust and threat sensitivity, in a novel way.

- This study had an experimental component, in contrast to the majority of earlier research conducted in Pakistan that only used correlation.
- The psychological basis of conspiracy theories have been the focus of few studies in Pakistan's sociopolitical context. This study offers localized perspectives, which makes it highly important to comprehending how cognitive elements influence conspiracy theories among young Pakistanis.
- The study used validated and standardized questionnaires, including the Conspiracy Mentality Questionnaire and the Epistemic Trust Scale.
- Study fulfilled the ethical standards, which include voluntary participation, informed consent, and debriefing to protect each participant's autonomy and psychological health.

Limitations and Suggestions

- Many participants were under academic stress during data collection, which reduced their willingness to participate. Data collection became difficult and delayed as a result.
- The analysis of gender differences in conspiracy beliefs may have been limited by the unequal number of male and female participants. Significant gender-based differences might have done with a more balanced sample.
- Some participants might have been less motivated because there was no academic credit or incentive provided.

Future Implications

- In order to investigate the deeper psychological basis of conspiracy mentality, this research could be expanded in the future by including variables such as personality traits (such as neuroticism,) and dark triads.
- This study establishes the basis for further experimental investigations into the ways in which further components can be added such as media exposure, cognitive styles and cultural factors.
- The findings can be used to develop educational campaigns to reduce conspiracy beliefs in schools, colleges and on social media.

References

Abadi, D., van Prooijen, J. W., Krouwel, A. P. M., & Fischer, A. H. (2024). Anti-establishment sentiments: Realistic and symbolic threat appraisals predict populist attitudes and conspiracy mentality. *Cognition and Emotion*, *38*(1), 1–15. https://doi.org/10.1080/02699931.2024.2351460

Ahmed, M., & Mughal, A. (2020). The role of education and politics in shaping conspiracy beliefs in Pakistan. *South Asian Studies, 35*(2), 153–167.

Akhtar, T., Khalid, R., & Naveed, S. (2022). Vaccine hesitancy and institutional mistrust: A study of young adults in Pakistan. *Pakistan Journal of Public Health, 12*(3), 145–151.

Arif, N., & Aslam, M. (2020). Conspiracy mentality and fake news acceptance in Pakistani youth. *Journal of Behavioural Sciences*, 30(1), 58–75.

Bincoletto, A. F., Nimbi, F. M., Protopapa, G., Lingiardi, V., & Giovanardi, G. (2024). Is Epistemic Trust relevant for Vaccine Hesitancy? A study during the Covid-19 pandemic. *PSICOLOGIA DELLA SALUTE*, *1*, 46–66. https://doi.org/10.3280/pds2024-001003

Brauner, F., Fonagy, P., Campbell, C., Griem, J., Storck, T., & Nolte, T. (2023). "Trust me, do not trust anyone": How epistemic mistrust and credulity are associated with conspiracy mentality. *Research in Psychotherapy: Psychopathology, Process and Outcome*, *26*(3). https://doi.org/10.4081/ripppo.2023.705

Brotherton, R., French, C. C., & Pickering, A. D. (2013). Measuring belief in conspiracy theories: The generic conspiracist beliefs scale. *Frontiers in Psychology*, *4*, 279. https://doi.org/10.3389/fpsyg.2013.00279

Bruder, M., Haffke, P., Neave, N., Nouripanah, N., & Imhoff, R. (2013). Measuring individual differences in generic beliefs in conspiracy theories across cultures: Conspiracy Mentality Questionnaire. *Frontiers in Psychology, 4*, 225. https://doi.org/10.3389/fpsyg.2013.00225

Campbell, C., Tanzer, M., Saunders, R., Booker, T., Allison, E., Li, E., O'Dowda, C., Luyten, P., & Fonagy, P. (2021). Development and validation of a self-report measure of epistemic trust. *PLOS ONE, 16*(4), e0250264. https://doi.org/10.1371/journal.pone.0250264

Cassidy, C., Jones, R., & Douglas, K. M. (2022). The role of distrust in science and authority in conspiracy belief. *Journal of Social Issues, 78*(2), 376–393.

De Coninck, D., Frissen, T., & Matthijs, K. (2023). Dark Triad personality traits and realistic and symbolic COVID-19 threat: The role of conspiracy mentality. Applied Psychology: Health and Well-Being, 15(4), 1021–1039. https://doi.org/10.1111/aphw.12433

Douglas, K. M., Sutton, R. M., & Cichocka, A. (2019). Belief in conspiracy theories: Basic principles. *Social and Personality Psychology Compass, 13*(11), e12505. https://doi.org/10.1111/spc3.12505

Ejaz, W., Ali, S., & Rauf, A. (2021). Media trust and conspiracy beliefs in Pakistan: The role of traditional vs. social media. *Pakistan Social Sciences Review*, 5(2), 341–356. https://doi.org/10.35484/pssr.2021(5-II)28

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics, 5*(1), 1–4. https://doi.org/10.11648/j.ajtas.20160501.11

Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford University Press.

First Draft News. (2021). *Combating misinformation in Pakistan: The polio vaccine struggle*. https://firstdraftnews.org

Fonagy, P., & Allison, E. (2014). The role of mentalizing and epistemic trust in the therapeutic relationship. *Psychotherapy, 51*(3), 372–380. https://doi.org/10.1037/a0036505

Franks, B., Bangerter, A., & Bauer, M. W. (2017). Conspiracy theories as quasi-religious mentality: An integrated account from cognitive science, social representations theory, and frame theory. *Frontiers in Psychology, 8*, 1428. https://doi.org/10.3389/fpsyg.2017.01428

Freeman, D., Waite, F., Rosebrock, L., Petit, A., Causier, C., East, A., ... & Lambe, S. (2020). Coronavirus conspiracy beliefs, mistrust, and compliance with government guidelines in

Frenken, M., & Imhoff, R. (2022). Don't trust anybody: Conspiracy mentality and the detection of facial trustworthiness cues. *Applied Cognitive Psychology, 37*(2), 256–265. https://doi.org/10.1002/acp.3955

Fuchs, A., Gärtner, T., & Hüttl-Maack, V. (2023). *Epistemic trust, mistrust, and credulity: Associations with conspiracy beliefs*. Journal of Social and Political Psychology, 11(1), 115–129. https://doi.org/10.5964/jspp.8389

Gavi. (2021). *Why misinformation is fueling vaccine hesitancy in Pakistan*. https://www.gavi.org

Gray, J. A., & McNaughton, N. (2000). *The neuropsychology of anxiety: An enquiry into the functions of the septo-hippocampal system* (2nd ed.). Oxford University Press.

Green, R., & Douglas, K. M. (2018). Anxious attachment and belief in conspiracy theories. *Personality and Individual Differences, 125*, 30–37. https://doi.org/10.1016/j.paid.2017.12.023

Grzesiak-Feldman, M. (2013). The effect of high-anxiety situations on conspiracy thinking. *Current Psychology, 32*(1), 100–118. https://doi.org/10.1007/s12144-013-9165-6

Haase, E. (2024). *Denial as a cognitive mechanism*. EBSCOhost Research Starters.

Hauschild, S., Kasper, L. A., Berning, A., & Taubner, S. (2023). The relationship between epistemic stance, mentalizing, paranoid distress and conspiracy mentality: An empirical investigation. *Research in Psychotherapy: Psychopathology, Process, and Outcome, 26*(3), 706. https://doi.org/10.4081/ripppo.2023.706

Hornsey, M. J., Harris, E. A., & Fielding, K. S. (2018). The psychological roots of anti-vaccination attitudes: A 24-nation investigation. *Health Psychology, 37*(4), 307–315. https://doi.org/10.1037/hea0000586

Imhoff, R., & Bruder, M. (2014). Speaking (un-)truth to power: Conspiracy mentality as a generalized political attitude. *European Journal of Personality, 28*(1), 25–43. https://doi.org/10.1002/per.1930

Imhoff, R., & Lamberty, P. (2017). How paranoid are conspiracy believers? Towards a more fine-grained understanding of the connect and disconnect between paranoia and belief in conspiracy theories. *European Journal of Social Psychology, 48*(7), 909–926. https://doi.org/10.1002/ejsp.2494

Imhoff, R., Lamberty, P., & Klein, O. (2018). Using power as a negative cue: How conspiracy mentality affects epistemic trust in sources of historical knowledge. *Personality and Social Psychology Bulletin, 44*(9), 1364–1379. https://doi.org/10.1177/0146167218768779

Imhoff, R., Zimmer, F., Klein, O., Antonio, R. J., & Lamberty, P. (2022). Conspiracy mentality, subclinical paranoia, and political conservatism are associated with perceived status threat. *Scientific Reports, 12*(1), Article 12398. https://doi.org/10.1038/s41598-022-16429-0

Jolley, D., Meleady, R., & Douglas, K. M. (2020). Exposure to intergroup conspiracy theories promotes prejudice which spreads across groups. *British Journal of Psychology, 111*(1), 17–35. https://doi.org/10.1111/bjop.12385

Kahneman, D. (2011). *Thinking, fast and slow*. Farrar, Straus and Giroux.

Korteling, J. E., Paradies, G. L., & Sassen-van Meer, J. P. (2023). *Cognitive bias and how to improve sustainable decision making*. Frontiers in Psychology, 14, Article 1129835. https://doi.org/10.3389/fpsyg.2023.1129835

Kunda, Z. (1990). The case for motivated reasoning. *Psychological Bulletin, 108*(3), 480–498. https://doi.org/10.1037/0033-2909.108.3.480

Lantian, A., Muller, D., Nurra, C., & Douglas, K. M. (2016). Measuring belief in conspiracy theories: Validation of a French and English version of the Generic Conspiracist Beliefs Scale. *European Journal of Psychological Assessment, 32*(3), 180–187. https://doi.org/10.1027/1015-5759/a000246

Leman, P. J., & Cinnirella, M. (2007). A major event has a major cause: Evidence for the role of heuristics in reasoning about conspiracy theories. *Social Psychological Review, 9*(2), 18–28.

Lewandowsky, S., Oberauer, K., & Gignac, G. E. (2013). NASA faked the moon landing—Therefore (climate) science is a hoax: An anatomy of the motivated rejection of science. *Psychological Science, 24*(5), 622–633. https://doi.org/10.1177/0956797612457686

Mancosu, M., Vassallo, S., & Vezzoni, C. (2017). Believing in conspiracy theories: Evidence from an exploratory analysis of Italian survey data. *South European Society and Politics, 22*(3), 327–344. https://doi.org/10.1080/13608746.2017.1359894

March, L., Hasty, M., & Olivett, D. (2024). Development and validation of the Threat Sensitivity Scale. *Journal of Experimental Psychology: General*.

Marchlewska, M., Cichocka, A., & Kossowska, M. (2021). Avoidant coping and conspiracy beliefs: A longitudinal study in the context of COVID-19. *Journal of Social Psychology, 161*(6), 686–697. https://doi.org/10.1080/00224545.2021.1939937

Neuberg, S. L., Kenrick, D. T., & Schaller, M. (2011). Human threat management systems: Self-protection and disease avoidance. *Neuroscience & Biobehavioral Reviews, 35*(4), 1042–1051. https://doi.org/10.1016/j.neubiorev.2010.08.011

Oliver, J. E., & Wood, T. J. (2014). Conspiracy theories and the paranoid style(s) of mass opinion. *American Journal of Political Science, 58*(4), 952–966. https://doi.org/10.1111/ajps.12084

Pennycook, G., & Rand, D. G. (2019). Lazy, not biased: Susceptibility to partisan fake news is better explained by lack of reasoning than by motivated reasoning. *Cognition, 188*, 39–50. https://doi.org/10.1016/j.cognition.2018.06.011

Pierre, J. M. (2020). Mistrust and misinformation: A two-component socio-epistemic model of belief in conspiracy theories. *Journal of Social and Political Psychology, 8*(2), 617–641. https://doi.org/10.5964/jspp.v8i2.1362

Pisl, V., Zlámal, Z., & Janovská, A. (2025). Threat and stress induction fail to alter conspiracy mentality: An experimental approach. *Psychological Reports*. (In press).

Rizwan, M., Arshad, S., & Shafiq, F. (2022). *Conspiracy beliefs, misinformation, and vaccine hesitancy: The role of mistrust in the Pakistani population*. Pakistan Journal of Psychological Research, 37(1), 45–67.

Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and Quasi-Experimental Designs for Generalized Causal Inference*.

Shahid, S., Habibullah Mangrio, R., Abbas, M., Ali, Z., & Ahmed, M. (2020). *Evaluation of knowledge and belief on false reports and misinformation from social media in COVID-19 pandemic: A web-based cross-sectional survey in Karachi, Pakistan*. *European Scientific Journal, 16*(36), 8. https://doi.org/10.19044/esj.2020.v16n36p8

Swami, V., Voracek, M., Stieger, S., Tran, U. S., & Furnham, A. (2014). Analytic thinking reduces belief in conspiracy theories. *Cognition, 133*(3), 572–585. https://doi.org/10.1016/j.cognition.2014.08.006

Tahir, A., & Khan, S. (2021). Personality correlates of conspiracy belief in Pakistani youth. Pakistan Journal of Psychology, 52(1), 29–42.

The Nation. (2022). *Polio struggle in Pakistan: Challenges continue*. https://www.nation.com.pk

Thielmann, I., & Hilbig, B. E. (2023). Generalized dispositional distrust as the common core of populism and conspiracy mentality. *Political Psychology, 44*(4), 789–805. https://doi.org/10.1111/pops.12886

Van Bavel, J. J., & Pereira, A. (2018). The partisan brain: An identity-based model of political belief. *Trends in Cognitive Sciences, 22*(3), 213–224. https://doi.org/10.1016/j.tics.2018.01.004

van Prooijen, J. W., & Acker, M. (2015). The influence of control on belief in conspiracy theories: Conceptual and applied extensions. Applied Cognitive Psychology, 29(5), 753–761. https://doi.org/10.1002/acp.3161

Zafar, A., Haider, M., & Tariq, M. (2021). *The impact of digital misinformation and epistemic mistrust on COVID-19 conspiracy beliefs in Pakistan*. Journal of Media Studies, 36(2), 33–50.

Zhao, S., Zhou, J., & Wang, T. (2023). Attentive immobility: Investigating the emotional-cognitive mechanism underlying conspiracy mentality and COVID-19 preventive behaviors. *PLOS ONE, 18*(11), e0294681. https://doi.org/10.1371/journal.pone.0294681