

Anxiety, Desperation, Coping Strategies and Self-Efficacy as Predictors of Superstitious Behavior

*A thesis submitted in partial fulfillment of the requirements for the award of
degree of*

Master Of Arts in Psychology



THAPAR INSTITUTE
OF ENGINEERING & TECHNOLOGY
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CERTIFICATE

This is to certify that the thesis entitled “**Anxiety, Desperation, Coping strategies and Self-efficacy as predictors of Superstitious behavior**” is being submitted in partial fulfilment of requirements for the award of degree of **Master of Arts in Psychology**, submitted in the **School of Humanities and Social Sciences, Thapar Institute of Engineering and Technology, Patiala** is a bona fide work carried out under the supervision of Dr. Surinder Kaur, Professor, School of Humanities and Social Sciences, Thapar Institute of Engineering and Technology, Patiala and that no part of this project has been submitted for the award of any other degree.



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CANDIDATE'S DECLARATION

I, hereby, declare that the work presented in this thesis entitled, “**Anxiety, Desperation, Coping strategies and Self-efficacy as predictors of Superstitious behavior**” in partial fulfilment of the requirement for the award of Degree of **Master of Arts in Psychology**, submitted in the **School of Humanities and Social Sciences, Thapar Institute of Engineering and Technology, Patiala**, is an authentic record of my own work carried out under the supervision and guidance of Dr. Surinder Kaur, Professor, School of Humanities and Social Sciences, Thapar Institute of Engineering and Technology, Patiala and refers other researcher's work which are duly listed in the reference section.

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ABSTRACT

Every country, region, religion, and even an individual household has its own set of superstitions. Superstitions can even vary from person to person. Sometimes superstitions can have a comforting consequence, which can relieve anxiety about the unknown and provide people the feeling of control over their lives. This may be the ground as to why superstitions are into existence for so long — as they have been passed on from generation to generation. The same goes for desperation. Desperation makes people weak, and it leads to rash decisions. Everyone copes in their own way with the stressors, and the coping strategies also differ from person to person. So, through this research, efforts were made to find if anxiety and desperation encourage superstitious behavior in people and if there is any relation between coping strategies, self-efficacy, and superstition. For the study, eight hypotheses were formed. A total of 194 adults were used for the research through the purposive sampling. We found that anxiety and desperation are positively related to the superstitious behavior and emotion-focused and avoidant coping was also positively associated with superstition.

Keywords: superstitious beliefs, coping style, anxiety, desperation, self-efficacy...

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Chapter-1

Introduction

Superstition is the irrational belief that upcoming events can be influenced or predicted by specific, unrelated behavior or circumstances. Thus, superstition can be described as an irrational belief that is believed to affect particular outcomes (Damisch, Stoberock, & Mussweiler, 2010). According to Toneatto (1999), Superstition is inclined to accompany false beliefs about random events that they can be managed or influenced. Joukhador, Blaszczynski & Maccallum (2004); also stated that such beliefs then are usually followed by superstitious behavior, which is defined as deeds which are supposed to have a relationship with unrelated events. Womack, (1992) reported most accurate definition of superstitious behavior. They described superstitious behavior as an uncommon, inflexible, recurring actions of a person which is recognised by the performer as favourable thing when in actuality, there is no underlying relationship between the superstitious behavior and the outcome of an event. The most primary superstitions that can be traced were developed to dispense the ignorance and to deal with fear of the unknown. So, Superstition as consequences is an effort to regain control over the episodes of an individual's life.

Superstitions can be more likely to be common in certain classifications of people than others and can differ from culture to culture: for example, the numeral thirteen is considered inherently unlucky by many in Western society; while in Japan, the number four is often considered unlucky. However, some superstitions, particularly the connection between mirrors and the soul, are almost universal, suggesting a more profound connection than mere coincidence or at least a universal experience and interest in such cases. Whilst, most superstitions do not cause any harm and are unexpectedly beneficial in reassuring people to accomplish their dream, impute results to an independent source can be somewhat dubious if it causes the need for commitment from the person. Understanding the actual cause of

phenomena is people's deepest desire, and people should not give up this pursuit in favor of superstition.

Origin: The term superstition is believed to derive from the Latin *superstitio*, meaning to be in awe of it. The term is also associated with the Latin word *superstes* (to survive or survive) and in this sense it refers to the remnants of ideas and beliefs that persist long after their original meaning has been forgotten. For this reason, superstitions are often viewed as a relic of outdated ways of thinking. Many believe that superstitions originated in the earliest days of mankind. In the face of natural phenomena such as thunderstorms and earthquakes, as well as the unpredictability of diseases and food supplies, the man tried to develop an understandable, actionable world of forces. The most primary superstitions that can be traced were developed to dispense the ignorance and to deal with fear of the unknown. Accidental misfortunes could be assigned a cause and the potential to avoid or control them. Superstition is thus an attempt to regain control over events, especially when one feels helpless. Some groups are more prone to superstition than others. Actors, miners, fishermen and gamblers all are inclined to be more superstitious than average; the success of all these professions is somewhat beyond the control of the individual.

Superstitions often arise out of random coincidences. For example, suppose one day an athlete wears a particular pair of socks on the day when they are performing exceptionally well. In that case, they may keep up with putting on the same pair of socks or any other piece of clothing or an object/jewellery, presuming that the piece of cloth or the object were significantly important in their success. Future successes will further reinforce this belief. In some cases, it's entirely possible that simply believing in success or failure can affect the outcome. The athlete who cannot find his lucky socks may perform poorly due to a lack of confidence, further reinforcing his belief in the power of the socks. Superstitions can also be learned behavior. Children observing those around them performing superstitious acts, e.g., For example, knocking on

wood or not walking under ladders can adopt these behaviors. The true origins of some of the superstitions are considered to be centuries old, which are being passed down from ancestors to new generations through the experience or vicarious learning.

Study with Pigeons: In 1947, behavioral psychologist B. F. Skinner, known for his experiments with the famous Skinner Box, published research on the behavior of pigeons in which he observed what he called superstitious behavior. A group of pigeons was kept hungry for the purpose of the experiment and were fed small amounts of food at regular intervals, regardless of the behavior of the pigeons. By the end of the study, three-quarters of the group of hungry pigeons had developed what he called superstitious behaviors. A pigeon practiced turning clockwise several times, apparently in the anticipation of food; other birds developed specific head movements. Skinner surmised that the doves believed that their rituals were affecting the automatic mechanism and that the experiment would shed light on human behavior: the experiment could be said to demonstrate a kind of superstition. The bird acts as if there is a causal relationship between its behavior and the presentation of the food, even though there is no such relationship. There are many analogies in human behavior. Good examples are rituals for changing fortunes in card games. Despite many unreinforced instances, a few random connections between practice and favorable consequences are enough to set up and sustain the behavior. Another case in point is the bowler who has thrown a ball into the alley but continues to act as if she is controlling it by twisting and turning her arm and shoulder. Of course, these behaviors have no real impact on one's happiness or on a ball in the middle of an alley. Just as in this case, the food would appear so often if the pigeon were doing nothing, or more specifically, something else. Subsequent studies by other psychologists failed to replicate Skinner's findings and disputed Skinner's superstitious explanation for the behaviors he recorded. Instead, the behavior of his pigeons seemed to be explained by the natural foraging behavior of the species he used as subjects.

Superstition VS Religion: Religious beliefs have often been viewed as nothing more than superstition by people outside of a particular religion. Religious practices are most likely to be identified by outsiders as superstitious when they involve belief in bizarre events, supernatural interventions, apparitions, or the potency of prayer, spells, amulets, incantations, the importance of omens, and prophecies. While superstitions appear to have parallels with religious practices, and some seem to overlap more than others, there are significant differences. Prayers, rituals, and other religious acts are usually performed to worship the Deity. By offering prayers, sacrifices, etc., one can hope that the Deity will view them favorably, but the power resides in the Deity, not in the performance of the ritual or prayer. The power of objects like amulets similarly comes through the object, but that power comes from the Deity, not the object itself. On the other hand, Superstition places all emphasis on the action or the object itself or the person carrying out the activity. For instance, a religious person may sacrifice an animal to make sure a good harvest. The success of the harvest is thus placed in the hands of the Deity. A superstitious person may perform a specific ritual for the same purpose, but the success of the harvest, therefore, depends on the power of the ritual itself. The Roman Catholic Church regards superstition as a sin in the sense that it indicates the lack of trust in the divine judgment of God and God, as such, is a violation of the first of the Ten Commandments: Thou shalt have no other gods before me. The Catechism of the Catholic Church states that superstition is the departure from religious sentiment and can interfere with the worship we offer to the true God. To ascribe the efficacy of prayers or sacramental signs to their mere outward performance, apart from the inward ordinances they require, leads to superstition.

Some interesting examples:

Superstitions are generally passed down through generations; often, the origin of the superstition is lost in history. Additionally, while some superstitions seem to be more common

(such as the connection of mirrors to the soul), others are particular to certain cultures or professions.

Items are often seen as good luck charms. Types of charms include bunny feet, four-leaf clovers, and horseshoes. Horseshoes are often hung-over doors; When placed ends up (similar to the letter U), the horseshoe is said to gather good luck. If they are placed end-down, luck is said to be gone.

Numbers are often given power. In western cultures, fear of the unlucky number 13 is known as triskaidekaphobia. Some cities omit 13th Avenue, and some buildings go straight from the 12th floor to the 14th floor. The thirteenth floor/apartment/room is sometimes referred to as 12a to reduce confusion (it's on the fifteenth floor of a fourteenth floor). Buildings, for example.) Interestingly, the same number 13 was once considered a lucky number in ancient Egypt and China, as well as modern Japan. Instead, tetraphobia (fear of the number four) is widespread in eastern countries such as China, Japan and Korea, possibly because of the similar pronunciation of the word four and the word death. Numbers containing 4 are often skipped in floor and apartment numbers and table numbers at weddings. 4, 14, 24, and so on are often replaced with 3a, 13a, 23a, and so on.

A large amount of superstitions are of the kind that if you do x, then bad luck will follow. Walking under a ladder, opening an umbrella indoors, splattering salt, and putting new shoes on the table are all examples of acts that bring bad luck. In some instances, it is possible to undo the action or save yourself from bad luck. Crossing your thumbs while walking under a ladder and throwing salt over your left shoulder after it has been spilled is often done to avoid negative consequences.

Mirrors have often been the subject of superstitions. Many cultures have believed that mirrors could capture the soul. The primordial Romans believed that breaking a mirror would also shatter a person's reflected soul. The belief that life is renewed every seven years gave rise to

the most common superstition about mirrors: a broken mirror brings seven years of bad luck. The Romans believed that such a result could be avoided by grinding the mirror shards into dust where no broken reflections remained. Early Americans who were enslaved dipped the broken mirror in a stream of south-flowing water, believing that the tragedy would be washed away in seven hours. Other superstitions involving mirrors also illustrate the belief that the soul can be trapped in them: mirrors are sometimes covered during illness or after death to prevent a soul from accidentally wandering through a mirror and becoming trapped. In North India, it was believed that looking into the mirrors of a house you were visiting could result in a part of your soul being trapped upon exiting the house, exposing you to manipulation by the mirror's owner.

Animals are it is also often the subject of superstition. If you come across a black cat, it's a sign of bad luck. Birds flying into the house are considered a sign of imminent death.

There are also a number of job-specific superstitions. Sailors believe that killing an albatross is bad luck, as albatrosses are believed to be the ghosts of dead sailors. Some superstitions, such as that actors don't whistle in the theatre, have their roots in practice. Backstage workers in theatres used to whistle to communicate with each other while setting up and taking down sets and lights; An actor's whistle could inadvertently cause a scene change or injury.

Desperation has been illustrated as not a positive emotion that goes hand in hand with the situations of anxiety, shock, stress, anger, fear, or loss of authority and eventually influence one's behavior by different studies by Rosenthal (1992); de Haes, van Knippenberg, & Neijt (1990); Baker (2002); Garlow et al., (2008); Zuckerman (1960); Shapiro & Lie, (2004); and Hendin et al., (2004). Desperation has been studied in a very small scale and very little has been known about it itself. As per de Garlow et al. (2008); Sperling (1985); Haes et al. (1990); and Hendin et al. (2004); it is normally brought upon as part of a greater psychological construct (e.g., depression, psychological distress, suicidal thoughts, romantic relationships).

Up until now, the best working definition of desperation has been given by Garlow and colleagues in 2008. They explained desperation as negative sentiment, a core feeling of profound agony with an pressing need for relief. Desperation can be a potential connection between unpredictable situations (e.g., wars or betting) and superstitious behavior. Nevertheless, in the conditions of unpredictability individuals tend to experience distress, which as the result influence reactions and implement a way to regain control and alleviate that distress, namely superstitious behavior.

Anxiety is defined as an organic response characterized by apprehension and increased surveillance in situations of uncertain danger or potential threat to the integrity of the organism. In the study of anxiety, there are two complementary concepts: a psychophysiological state (state anxiety) and a personality trait (trait anxiety). State anxiety reflects the psychological and physiological transient responses that are directly related to unfavorable situations at a given moment. In contrast, the term trait anxiety refers to a personality trait that describes individual differences related to a tendency towards present-time anxiety. Trait anxiety is therefore relatively stable over time⁵ and is considered an important characteristic of patients with anxiety disorders, as they have higher levels of trait anxiety compared to healthy individuals. especially during the minutes of uncertainty as mentioned by Dudley (1999); Wright & Erdal, (2008); Buhrmann & Zaugg (1981); Gallagher & Lewis (2001); Neil et al. (1981); Schippers & van Lange (2006); and Fischer (1997). Like the society of sports people hold particulars of the performance, the theatre and military also accommodate the components of the physical performance. Over and above that, both the military and the performing arts can involve moments of uncertainty and fear. Different populations notwithstanding, the reasons for its use and the genesis of an individual's superstitious behaviors in various performance sector are undetermined. An in depth comprehension of the relationship between an individual's Superstitious Beliefs and his faith in the behavior itself can take us to a better

understanding of why superstitions are used in this way (Damisch et al., 2010; Wright & Erdal, 2008).

Coping usually means adjusting to or tolerating adverse events or realities while trying to maintain your positive self-image and emotional balance. Coping takes place in the context of life changes that are perceived as stressful. Mental stress is usually associated with negative life changes, such as B. the loss of a job or a loved one. However, all changes require some customization. Positive changes such as getting married or having children can also be stressful. Change is stressful because change requires us to adapt and adopt. When we experience too many changes in a short period of time, it often feels like we are not in control of events. This perception contributes to low self-esteem and can even contribute to the development of anxiety or depression. In some cases, physical illnesses can develop or worsen when a person's ability to adapt to change is overwhelmed by too many changes. Coping involves adjusting to unusual demands or stressors. This requires more significant effort and the use of more energy is needed in the daily routine of life. Sustained exertion mobilization can contribute to elevated levels of stress-related hormones and eventual physical breakdown and illness. Some of the coping strategies include Problem-Focused Coping, strategies that generally requires an awareness of the stressor accompanied by attempts to reduce the negative outcome. These responses are intended to either change the nature of the stressful situation or event to make that situation or event less distressing or to change the way one thinks and feels about it to change one's responses to it. Examples include solving problems and restating the meaning of the problem. Emotion-focused coping focuses on regulating negative emotional reactions to stress, such as anxiety, fear, sadness, and anger. This type of coping can be helpful when a stressor is something a person cannot change. Emotion-focused coping techniques help you respond less emotionally to the stressors you face. They change the way one experiences these situations so that they can affect individuals differently. Examples include meditating,

praying, and letting out frustration/negative emotions. Denial: When an individual is in denial, they are trying to protect themselves by refusing to accept the truth about something that is happening in their life. In some instances, initial short-term denial can be a good thing, as it gives one some time to assimilate to a painful or stressful issue. It could also be a precursor to some kind of change in her life. But denial also has its dark side. Suppose denial persists and prevents one from taking appropriate action, such as B. Seeing a doctor/any kind of help, this is a harmful reaction. The captivating attribute regarding superstitions is that one usually believe in them even though we know on some level that they are not TRUE.

Self-efficacy refers to a person's belief in their ability to perform behaviors necessary to achieve specific achievement outcomes (Bandura, 1977, 1986, 1997). Self-efficacy reflects confidence in the ability to exercise control over one's motivation, behavior, and social environment. These cognitive self-assessments affect all types of human experience, including the goals people strive for, the amount of energy expended to achieve them, and the likelihood of achieving certain levels of behavior. Contrary to traditional psychological constructs, self-efficacy beliefs are believed to vary according to the functional domain and circumstances surrounding the behavior's occurrence.

So, through this study, we're trying to find the answer to why we believe in the incredible by finding a relationship between superstitious beliefs and fear, desperation, and coping strategies, self-efficacy.

Theoretical Background

The theory focuses primarily on dual process models that suggest that System 1 renders quick, intuitive judgments and that System 2 is responsible for overriding System 1, if there is an error detected in the original, automatic assessment (Kahneman, 2011). This type of model has been described as a “corrective” model or a “default interventionist” model because the System 1 intuition serves as a default, which may or may not be corrected by System 2. The idea of using dual process model for understanding superstitious thinking also known as decoupled dual-process model was proposed by Jane Risen in 2016.

According to the corrective dual process model, magical intuitions that are activated will guide judgment and behavior if they fly under the radar of System 2. In other words, if a magical intuition comes to mind—for example, “this is my lucky seat for watching football”—and System 2 does not become engaged, then even a fan who is not explicitly superstitious will sit in the lucky seat and feel more optimistic about winning. If System 2 processes are engaged, however—if, say another person is already sitting in the fan’s lucky seat— he may be forced to confront his magical intuition. Furthermore, if he recognizes that it is irrational, he will override the intuition and sit somewhere else.

A dual process account helps explain how magical beliefs can develop for ordinary people in ordinary circumstances while also integrating the insights from previous accounts that focus on special populations and special circumstances.

A dual systems account of magical thinking requires us to consider the role of each system. Because a corrective model posits that errors are jointly determined by System 1 processing and a lack of System 2 processing, it has been suggested that when people commit errors of intuitive judgment, two questions should be asked. First, what features of System 1 produced the error? And, second, what factors explain why System 2 did not fix the error? With those two questions in mind, the theory outline features of System 1 that play a role in generating

magical intuitions, and features of the person or situation that prompt System 2 to correct those intuitions.

Features of System 1 That Prompt Magical Intuitions

This section will identify three key features of System 1 that give rise to magical intuitions.

- Heuristics and attribute substitution - People are remarkably adept at providing quick, intuitive answers even for extremely complex problems. One way that people do this is by substituting an easy question for a hard question and answering the easy one instead, often with no awareness that they have answered a different question (Kahneman & Tversky, 1982; Morewedge & Kahneman, 2010; Tversky & Kahneman, 1974, 1983). In other words, instead of engaging System 2 processes to answer a difficult question (e.g., what is the probability that this person is a librarian?), System 1 finds an associated question that is easier to answer (does this person look like a librarian?). Since the introduction of the heuristics and biases research program, researchers have demonstrated that people automatically substitute similarity and availability when making complex judgments:

1. The law of similarity (representativeness). Almost a century before Kahneman and Tversky defined representativeness as a cognitive heuristic, anthropologists studying magic and superstition suggested that people rely on similarity when making causal attributions.
2. The belief in tempting fate (availability). People believe negative outcomes are especially likely to occur following actions that “tempt fate” (Risen & Gilovich, 2008).

- Causal intuitions. It has been suggested that an appealing feature of magic and superstition is its ability to offer an explanation for any and all phenomena (Agassi & Jarvie, 1973).
- Confirmation bias. Researchers who study judgment and decision making note that one of the most common and devastating biases that people must manage is the confirmation bias—the tendency to search for and favor evidence that supports current beliefs and ignore or dismiss evidence that does not (Klayman & Ha, 1987; Wason, 1966).

Features of System 2 That Prompt Correction

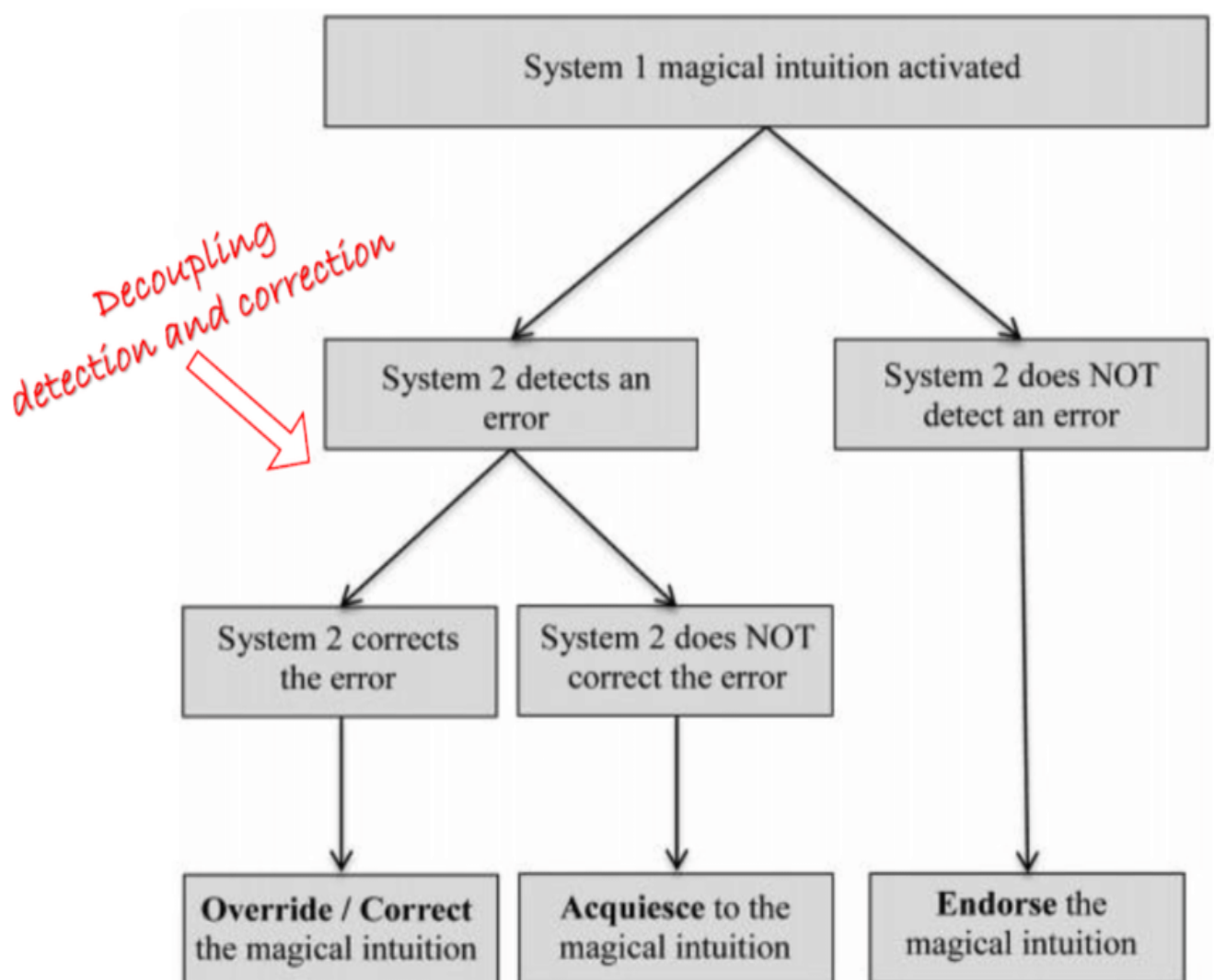
- Ability to be rational.
- Motivation to be rational
 1. Individual differences.
 2. Instructions and incentives to be rational.
 3. Mood and cognitive difficulty.
- Contextual cues to the error.
 1. Within versus between-subjects design
 2. Features of the task.

In the original model Kahneman only proposed only one action of system 2 when it detects error which as correction. But Jane Risen in 2016 added that even when system 2 identifies an error, it chooses to ignore the error and acquiesce the magical intuitions.

She then states that it can be due to Quasi-magical thinking and half-beliefs in which people act as if they hold a superstitious belief, even though they do not really believe it. She called this Decoupling Detection and Correction.

Identifying factors that influence acquiescence

- (a) an intuition provides a compelling default,
- (b) the costs of ignoring rationality are low relative to the costs of ignoring intuition, and
if people have the opportunity to rationalize their intuition.



Chapter-2

Review of Literature

Using 200 participants, *C.E. Hannan* found in 2019 that individuals who were desperate due to the unpredictable nature of events or life engaged more in the superstitious behaviors, and desperation was a more significant predictor of superstition beliefs than even the desire for control. The mentioned study endeavours to scrutinize the possibility of the connection between desperation and the use of superstitious behaviors in the situations that leaves the human beings with little to no power. This was carried out by producing a totally unpredictable environment with the help of a computerized card game involving chance (i.e., war).

The study on “Roles of Team Identification and Game Outcome in Sport Fan Superstitious Behaviors” by *Wilson et al., (2013)* examined how a fan’s desire to exhibit superstitious behaviors depends on team identification and game outcome. The study was a 2 x 2 between subjects factorial design (team identification: high vs. low) x (match score: close play vs. blowout). Participants involved were 176 students, who were enrolled from undergraduate psychology classes at a mid-sized university in Kentucky. Subjects were asked to complete the Sport Spectator Identification Scale, read an assigned vignette differing in game outcome which was provided to them arbitrarily, and were also asked fill out the Superstition Questionnaire to measure their compulsion to complete superstitious behaviors based on the vignette. Results indicated that highly identified fans appeared to be wanting to perform more superstitious behaviors than low identified fans. The main effect for game type was closely significant ($p = .07$); fans were more likely to be indulge in performing superstitious behaviors during close games than blowouts. There was no interrelatedness between identification and game outcome. These results restated the importance of team

identification and its very own effect on the sport fan. There were also evidences supporting that the outcome of the event itself plays a minor role in determining sport fan behaviors.

According to Leal et al., 2017, Anxiety has been discussed as a uni or multidimensional construct. The one-dimensional approach assumes that there is a general trait of anxiety that increases the risk of the individuals of having state anxiety in various threat situations. In such case, there should be a relationship between state and trait anxiety in any threat situation. So, the objective of the study was to examine the correlation between trait and state anxiety in participants exhibited to two different anxiogenic situations: interpersonal threat (video-monitored Stroop test VMST) and physical threat (Third Molar Extraction TME). For the study, the team used participants with different levels of anxiety (general feature: State-Trait Anxiety Inventory STAI, Hospital Anxiety and Depression Scale; specific feature: Social Phobia Inventory, Dental Anxiety Scale) and assessed the anxiety levels of the participants (STAI, self-assessment of stress levels, heart rate, electromyogram activity) before, through and after the VMST or the TME. The study found that trait anxiety was correlated with state anxiety across all test phases. Whereas, in TME, the only trait measure that correlated with state anxiety (psychological parameters) was the Dental Anxiety Scale. So, via the results we can conclude that trait anxiety is positively correlated with state anxiety in situations of interpersonal threat, but not in the situation of physical threat.

The study on Behavior and illusions: A model for investigating superstition in a participant replacement experiment by Benvenuti et al., (2018) examined the social mechanism of transmission of superstitious behaviors in an experiment using the participant exchange. The sample consisted of a total of 38 participants. The participants performed a task on a computer: they could click on a colored rectangle with the mouse. If the rectangle was a specific color, participants received points regardless of their behavior (variable schedule). When the color of the rectangle was switched, no points were plotted (absorbance). Under a single-load condition,

ten subjects worked alone on the task. Rest of the participants were exposed to the same experimental task under a social exposure condition, where each participant first learned through observation and then worked on the task in a participant-surrogate (chain) procedure. The first participant in each chain in the Social Exposure condition was a Confederate who worked superstitiously on the task and clicked on the rectangle when points were presented. Superstitious reactions were transmitted due to the Confederate's behavior. This also influenced personal control estimates. These results suggest that social learning may facilitate the acquisition and maintenance of superstitious behavior and the illusion of control. The data collected by the team also suggest that superstitious behavior and the illusion of control may involve similar learning principles.

The study of “coping with stress and core beliefs of students depending on their superstitions” by Akbirova et al., (2020) talks about some particulars of coping behavior. It demonstrates the empirical findings on connection between superstitions and paranormal beliefs together with students' coping strategies. It has been noticed that students who scored a high Superstition Index demonstrate greater belief in paranormal phenomena (spiritism, psi abilities, traditional religious beliefs, belief in witchcraft and extraordinary life forms). They are also more expected to make use of the coping strategy - positive reappraisal. They also attempt to find affirmative characteristics in difficult situations and can be more likely to change their point of view towards them. The study also discovered that students who scored low on Superstition Indexes had higher conviction about happiness and control. They understand that they can control episodes and simultaneously they also had a firm belief in luck. It was speculated that the students who had higher manifestations of superstition use superstition as a balancing mechanism for their lowly developed belief in their own capability to manage their own lives and inadequate trust in their personal Faith. Statistically significant correlations were detected

through the study between the superstitions and paranormal beliefs, on the one side and with behavior in the stressful situations i.e. coping strategies on the other side.

The superstitious actions that athletes engage in before competition are well documented, but the role of such behaviors has received little qualitative attention. The aim of the study (Georgia Allen, Thornton, and Riby; 2020) was to examine the role of superstitious routines in men's professional boxing. A descriptive phenomenological approach was adopted and individual semi-structured interviews were conducted with 5 professional male athletes in the UK. The results show that superstitions are regularly used by boxers in the run-up to fights to aid in mental preparation, to satisfy a need for control, and to increase the likelihood of success. Common themes emerged, such as praying and engaging in actions believed to bring good luck and/or avoiding behaviors that might bring bad luck. The results also indicate that boxers, despite a rational connection, use superstition as a coping mechanism (e.g., as a scapegoat/excuse for losing) and to gain a sense of control.

For a study of Superstition and Self-Efficacy in Chinese Postgraduate Students by John Sachs (2004), Forty-three Chinese postgraduate students (16 males and 27 females), whose average age was 33.5 years, completed a questionnaire measuring superstitious beliefs (superstitious belief scale) and self-efficacy (generally perceived self-efficacy scale). Higher scores for belief in superstitions were associated with lower scores for self-efficacy. Although not significant, the observed correlation of 0.28 between superstition and self-efficacy was of similar magnitude and in the same direction as that previously reported for Western students. Such cross-cultural validation is consistent with the generality of this relationship.

A study named “Keep Your Fingers Crossed!: How Superstition Improves Performance” by Lysann Damisch, Barbara Stoberock, Thomas Mussweiler (2010) suggests that Superstitions are typically viewed as trivial creations of irrational thoughts. Many people now also depend on superstitious conceptions and exercise them in their daily regimen to

accomplish/attain happiness. Up until now, very little has been known about the significance and prospective benefits of these superstitions. The above mentioned research tries to fill this gap by illustrating the performance benefits of superstition and identifying the underlying psychological mechanisms. Specifically, Experiments 1 through 4 exhibit that activating luck-related superstitions through a common saying or action (e.g., break a leg, cross your fingers) or a lucky charm improves subsequent golf performance, motor skill, memory, and the anagram improves games. Furthermore, Experiments 3 and 4 show that these performance advantages are generated via the changes in perceived self-efficacy. Initializing a superstition elevates the participants' confidence in achieving goals that are set by them, which in results enhances the performance. Finally, Experiment 4 shows that increased task persistence is a means by which self-efficacy, reinforced by superstition, improves performance.

To understand the relevance of superstition in people's life a research article was published by Eric W. K. Tsang. This article presented the findings of an exploratory study about the role of superstition in Chinese business decision-making. The study confirmed the general perception that superstition constitutes a crucial part of business life. Superstition helped Chinese businessmen cope with uncertainty by providing a sense of certainty and alleviating the anxiety associated with uncertainty. Although superstition is often regarded as irrational and unfounded, practitioners try to justify it on the grounds of superstition's substantive validity or instrumental value. Interestingly, half-believers of superstition admit that they experience cognitive dissonance: they should not base their decisions on superstition but they do. Another important finding is that *feng shui* experts play their roles as expert, provocateur, legitimizer, and comforter in strategic decision-making when providing advice to their business clients.

Jie Zhang and Huilan Xu, (2007); published a study named "The effects of religion, superstition, and perceived gender inequality on the degree of suicide intent: a study of serious

attempters in China". The mentioned research tries to find the consequences of superstition, religion (religiosity), and perceived gender inequality among Chinese women on the degree of their suicidal intentions. A four-page structured interviews were conducted with the progressively sampled critical attempters of suicide who were in emergency rooms, hospitalized straight away after the suicide attempt in Dalian areas, China. Univariate analyses and the multiple regression model both established that the higher the degree of religiosity and superstition on metempsychosis, the powerful is the suicide intent a Chinese woman had. The considered gender inequality was found to have a positive relation with suicide intent, particularly for the Chinese women. The socio-psychological traits and traditional cultural values and norms have a crucial influence on suicide patterns in Chinese societies.

Another study, *Locus of Control and Beliefs about Superstition and Luck in Adolescents: What's their relationship?* by Elisabetta Sagone and Maria Elvira DeCaroli (2014) examined the association of locus of control with personal beliefs about superstition and luck represented by Sicilian middle and late adolescents registered from two Public Senior High Schools in East Sicily (Italy). A self-report questionnaire formed by two Semantic Differentials referred to the concepts of "luck" and "superstition," the Locus of Control of Behavior Scale, the Personal Beliefs in Superstition Scale, and the Personal Beliefs in Good Luck Scale were used. Results indicated that late adolescents were more internally LoC-believers than middle ones, while mid adolescents were more externally LoC-believers than late ones. Middle adolescents were more superstitious and intensely believed in good luck than late ones. The more the adolescents were internally LoC believers, the less they believed in superstition; on the contrary, the more they were externally LoC believers, the more they put their faith in superstition and good luck. Future research could address the influence of personality factors and resilience on beliefs about superstition and luck.

Chapter-3

Research Gap, Objectives, Hypotheses

Research Gap

From the review of the literature it was found that overall, very less research has been done on this topic. The Studies emphasizing on the relationship of coping strategies and superstitious behavior was also found very few in number. After reviewing the literature, it was also noticed that the subject desperation has not been studied a lot. Superstition is a subject not studied or linked very much with other different variables.

Motivation For the Study

The research work done by C.E. Hannan (2019) “ Very Superstitious: The Relationship Between Desperation and Superstitious Behavior” was genesis for this study. C.E. Hannan, in the study, explained that those who felt desperate due to uncertainty of future events engaged in superstitious behaviors, and desperation was a more significant predictor for the use of superstitions than even a desire for control.

Rationale of the study

The research “Prevalence of Superstitions in Indian Society in the 21St Century” by Gurleen Kaur Sethi and Navreet Kaur Saini (2019) explains the situation of superstition in India very well. Superstition is more than just unnecessary and illogical beliefs. It is a form of coping strategy for some, emotional support for some, can provide a sense of control and reliefs anxiety for others. It’s an interesting and quite fascinating topic in the field of human behavior.

Objectives of the Study

1. To study anxiety in relation to superstitious beliefs.
2. To study desperation in relation to superstitious beliefs.
3. To study coping strategies preferred by superstitious people.

4. To study self-efficacy in relation to Superstitious beliefs.
5. To study gender difference in superstitious beliefs.

Hypotheses

- H₁** Anxiety will be positively related to Superstitious beliefs.
- H₂** Desperation will be positively related to Superstitious beliefs.
- H₃** Problem-focused Coping will be negatively related to Superstitious beliefs.
- H₄** Emotion-focused Coping will be positively related to Superstitious beliefs.
- H₅** Avoidant Coping will be positively related to Superstitious beliefs.
- H₆** Self-efficacy will be negatively related to Superstitious beliefs.
- H₇** Age will be positively related to Superstitious beliefs.
- H₈** Females will be more superstitious as compared to males.

Chapter-4

Methodology

Sample

The study included 194 adults participants in the age range of 18 to 70 years, including both 99 females and 95 males as the sample. The participants were recruited via the purposive sampling method.

Design

The correlational design was used for the study. The independent variables in the study were the Desperation, Anxiety, Coping Strategies and self-efficacy and the dependent variable of the study is Superstitious Beliefs of people.

Data Collection Tools

1. Superstitious Beliefs Scale:- The Superstitious Beliefs Scale was designed by Surekha Chukkali & Anjali M Dey in 2020. As the name suggests, it was proposed to measure the superstitious beliefs of an individual. The scale The scale was developed as a self-report measure with 24 items. The scale was developed according to the beliefs and practices of Indian societies. The responses are collected on the five point Likert scale ranging from strongly agree to strongly disagree. The higher score indicates higher belief in the superstition.
2. Brief COPE Inventory:- The Brief-COPE is a 28 item self-report questionnaire invented to measure productive and unproductive ways to cope with a stressful life event. The scale is usually used in health-care settings to ascertain how patients are emotionally responding to a serious circumstance. It can be used to measure how an individual is coping with a large range of adversity, including choronic disease like cancer, heart

failure or the injuries, assaults, natural disasters, financial loss or mental illness. The scale is very capable in counselling settings for formulating the different ways one responds to stressors. The scale can find out someone's primary coping styles with scores on the following three subscales: Problem-Focussed Coping, Emotion-Focussed Coping and Avoidant Coping. The Brief-Cope was invented as a short version of the original 60-item COPE scale (Carver et al., 1989), which was theoretically derived based on various models of coping.

3. State-Trait Anxiety Inventory:- The State-Trait Anxiety Inventory (STAI) is a psychological inventory based on a 4-point Likert scale and consists of 40 questions on a self-report basis. The STAI measures two types of anxiety – state anxiety, or anxiety about an event, and trait anxiety, or anxiety level as a personal characteristic. Form Y, its most accepted version, has 20 items for measuring trait anxiety and 20 for state anxiety. All items are calculated on a 4-point scale. 1 being “Almost Never” and 4 being “Almost Always”. Higher scores indicate greater anxiety. It is stated that STAI is appropriate for those who have at least a sixth-grade reading level.
4. Global Desperation Scale:- The Global Desperation Scale (GDS) beseeches participant to evaluate how accurately nine statements represent their overall level of desperation. The 9 items mentioned in the scales are divided into two subscales: Desperation Emotion (“I often feel hopeless.”) and Desperation Motivation (“I often feel as though it is urgent to act/do something.”). Items range from 0-9 where 0 indicates Does Not Describe at All and 9 implies Describes Very Well. The last and concluding item, plainly asks participants “I often feel desperate?” The scores from all items marked by the participants are summed to create a total score, where the higher the scores higher the desperation will be assumed.

5. State Desperation Scale:- The State Desperation Scale (SDS) invites the participants to rate how accurately the nine statements symbolizes their current level of desperation. The 9 items are further divided into two subscales: Desperation Emotion (“At this moment, I feel hopeless.”) and Desperation Motivation (“At this moment, I feel as though it is urgent to act/do something.”). Items range from 0-9 where 0 indicates Does Not Describe at All and 9 implies Describes Very Well. The last and concluding item, directly asks participants “How desperate do you feel at this moment?” This statement is provided as a reliability check for the rest of the statements provided before, and guides in assessing whether the participant has understood the emotion of desperation as defined by the scale. The scores from all items are summed to create one total score, where the higher scores indicate higher level of desperation.
6. General Self-efficacy Scale:- The GSE scale is a self-report measure of self-efficacy and it includes 10 Items in total. Cronbach’s alphas for this scale is calculated to be 0.80. The total score of the scale is calculated by finding the sum of the all items. The total score extends from 10 to 40, where the higher score indicates more self-efficacy. The scale was developed by Matthias Jerusalem and Ralf Schwarzer in German language in 1979 and was later revised and translated to other languages in 1995.

Procedure

The participants were approached for the study and the informed consent was collected from all. All the scales mentioned before were presented to the participants. The data collection was done through the Google forms. All the instructions were mentioned before the scales and verbally told to the participants. The subjects were also instructed to read all the instructions and questions properly before answering them. The participants were asked to select the

response that immediately comes to their mind. Finally, the data was collected and put through the statistical analysis.

Statistical Analysis

Descriptive, Stepwise regression and t-test were performed to confirm the suggested hypotheses. The results will be discussed next.

Chapter-5

Results

Table. 1 – Descriptive Statistics

	N	Mean	Std. Deviation
Age	194	36.64	13.97
Superstitious Beliefs	194	67.75	20.77
State Anxiety	194	45.18	8.96
Trait Anxiety	194	46.41	7.91
Global Desperation	194	39.39	18.13
State Desperation	194	33.44	22.25
Problem-focused	194	21.74	4.43
Emotion-focused	194	29.52	6.68
Avoidant	194	16.51	5.27
Self-Efficacy	194	28.82	5.14

In the present study, relation between superstition and desperation, anxiety, Coping styles and Self-efficacy is being studied. Various hypotheses were formed. Data was collected on all the variables mentioned before and was analysed using appropriate statistical tools. Proposed hypotheses are discussed below with the results being shown in a table. Descriptive statistics are presented above as Table No. 1.

Table. 2 – Correlation

Variable	Age	State Anxiety	Trait Anxiety	Problem-focused	Emotion-focused	Avoidant Coping	GDS	SDS	Self-Efficacy	SBS
Age	1									
State Anxiety	.036	1								
Trait Anxiety	-.092	.757**	1							
Problem-focused	-.029	-.184*	-.125	1						
Emotion-focused	.063	.099	.190**	.546**	1					
Avoidant Coping	-.075	.263**	.390**	.231**	.684**	1				
GDS	-.193**	.500**	.616**	.142*	.362**	.545**	1			
SDS	-.281**	.360**	.506**	.085	.382**	.613**	.793**	1		
Self-Efficacy	.100	-.374**	-.275**	.301**	.043	-.096	-.091	-.112	1	
SBS	.151*	.156*	.198**	.211**	.443**	.413**	.306**	.274**	.025	1

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

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

The above table shows correlation of different variables with each other. So, the table indicates that State anxiety and superstition are positively correlated, $r=.156$, at $p<0.05$. Trait anxiety is also positively related with superstition $r=.198$, $p<0.01$. All three coping styles i.e. Problem-focused $r=.211$, Emotion-focused $r=.443$, and Avoidant coping $r=.413$, had positive correlation with superstition which was found to be significant at p-value 0.01. Then, desperation i.e. global desperation ($r=.306$) and State desperation ($r=.274$), $p<0.01$ also was found to be positively related to superstition. Self-efficacy was found not to have any significant

relationship with superstition. Although, Age ($r=.151$) also had positively relation with superstition significant at 0.05 level.

Table. 3–Regression Analysis

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Adjusted R square
		B	Std. Error	Beta			
1	(Constant)	27.117	6.089		4.454	.000	.192
	Emotion-focused	1.376	.201	.443	6.841	.000	
2	(Constant)	25.112	6.066		4.140	.000	.212
	Emotion-focused	1.187	.213	.382	5.572	.000	
	Global Desperation	.193	.079	.168	2.453	.015	

a. Dependent Variable: Superstitious beliefs

Next, the regression was calculated to study impact of the variables on superstition. So, the stepwise regression was calculated for desired results. It can be summarized that emotion-focused coping had major impact on superstition as compared to other variables as when 1 unit in emotion-focused coping increased, it gives 19.20% of variance in superstitious belief. Whereas, 21.20% of variation was noted in superstition when Emotion-focused coping together with Global desperation was involved.

Table. 4 - Mean, SD, and t values between females and males on Superstitious Beliefs

Variable	N	Mean	Std. deviation	t	d.f.	Sig. (2-tailed)
Female	99	66.09	20.56	-1.135	192	.258
Male	95	69.47	20.952			

In order to test the hypothesis “Females will be more superstitious as compared to males” scores were obtained from both females and males on Superstitious beliefs Scale which was subjected to ‘t’ test. It was found that Males are more superstitious (Mean=69.47, Sd=20.95) than females (Mean=66.09, Sd=20.56). The t value found was -1.135. The difference was not found to be significant. Hence, the hypothesis was rejected. Results are shown above in table No. 4.

Chapter-6

Discussion

The present Study was undertaken with the objective to determine factors that promote the superstitious behaviour in an individual. Keeping the objective of the study in mind, eight hypotheses were established. The results derived from the data collected is discussed below which will lead to conclusion of the study.

The first hypothesis of the research is “Superstitious beliefs will be positively related to anxiety.” Studies done on this subject provided mixed results some found no significant relation, some found superstition to be predictor of various kind of anxiety like trait, death etc. This particular hypothesis was **accepted** as state anxiety and trait anxiety both were found to be positively related to Superstitious beliefs.

The second hypothesis of the research states that “Superstitious beliefs will be positively related to desperation.” A study named Very Superstitious: The Relationship Between Desperation and Superstitious Behavior by C.E. Hannan (2019) bespeaks that those who feel desperate due to unpredictability of the events engaged in superstitious behaviors, and desperation was a prominent predictor for the use of superstitions than even the aspiration of the control. Through results we found that superstition is positively related to desperation. Hence, **the hypothesis was accepted.**

The next hypothesis of the study was “Problem-focused Coping will be negatively related to Superstitious beliefs.” This **hypothesis was rejected.** Usually, it is believed that people who believe in stuff like superstition will not use problem solving oriented coping. But the results of the study implies totally opposite of this. There was positive correlation found between Problem-focused Coping and Superstitious beliefs.

Next, hypothesis was “Emotion-focused Coping will be positively related to Superstitious beliefs.” This **hypothesis was accepted**.

Then, the next hypothesis implies “Avoidance Coping will be positively related to Superstitious beliefs.” This **hypothesis was also accepted**. A study by Nikola Goljovic conducted in 2019 states that inclination to superstition is higher for those who are prone to seeking support in others and avoiding coping with problems.

The another hypothesis was “Self-efficacy will be negatively related to Superstitious beliefs”. But results did not supported this theory. So, this hypothesis was rejected. The study “Social and Psychological factors for Superstition: A Brief Literature Review” by Afreen Faiza (2018) concludes by the findings which indicated that people engage in superstitious acts to minimize anxiety, boost self-esteem and to gain other positive psychological gains.

The seventh hypothesis implies that “Superstitious beliefs will be positively related to age.” A study done by UG student of Amity University, Noida, states that Old age people have their own beliefs and happiness as they believe that if they do some Superstitious thing it will make them satisfied and on the other side Today’s youth think just opposite of Old age people. This signifies that the study found old people more superstitious than youngers ones. This study does agree with the findings of the present study. As we found that age is positively correlated to superstitious beliefs which states that this **hypothesis was accepted**.

The final hypothesis was “Females will be more superstitious as compared to males.” This hypothesis was rejected as the males scored higher in superstition when compared to females but this was not found to be significant. The results of the study “Thinking styles and belief in superstitions: Moderating role of gender in young adults” by A. Maqsood, Farhat Jamil & Roshni Khalid, (2018) demonstrates that gender significantly anticipates belief in superstitions disclosing that women were found to be significantly more superstitious than men. Higher

inclination of experiential thinking speculated more belief in superstitions; whereas, higher propensity of rational thinking anticipate lesser belief in superstitions. The findings of above mentioned study does not match with the findings of the present study.

Chapter-7

Conclusion

The main aim of the study was to observe if desperation and anxiety played a role in encouraging superstition behavior and relation of coping styles and self-efficacy with superstition. Total eight hypotheses were raised for the study. Out of which, three hypotheses were rejected and rest were totally accepted. Anxiety and Desperation were found to have a significant positive correlation with superstitious beliefs. Avoidant coping and Emotion-focused coping were also found to be related to superstition but so was Problem-focused coping. Hence, it can be concluded that although self-efficacy had no effect on superstitious beliefs, desperation and anxiety does encourage superstitious beliefs. Finally, emotion-focused coping and global desperation were found to be the best predictors of the superstitious behaviour.

Implications

The present study will help us in understanding more about superstitious beliefs and why one believes in them when on some level people are aware that they can't be true. This study could also help in creating social awareness and promoting psychological well-being. In the light of behavioral, cognitive, and emotional structural elements of superstition are empirically irreplaceable and makes it feasible to study superstitious beliefs within the conditions of psychology of personal relationships as an exceptional kind of relations in regards to the environment that produces illusion of understanding in the case there is absence of information and illusion of control in the circumstances of unpredictability when there is an unmanageable phenomena or phenomena with restricted possibility of regulation.

Limitations

The findings of the present study may not be generalisable to a larger scale as the sample size of the study was collected from relatively small areas from Punjab and Uttarakhand. Multiple number of scales were used for the study which usually leads to response sets due to exhaustion and weariness. The study relied on the self-report of the participants.

Future scope

The present study has greater scope for future research by increasing the sample size and involving participant from all over the India. Researching superstition by associating it with more different variables can also help in exploring this subject more.

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APPENDIX A

Superstitious Belief Scale

1. If someone sneezes just before you are about to travel or do an important task, it is bad luck.
 - A. Strongly Disagree
 - B. Disagree
 - C. Nor disagree nor agree
 - D. Agree
 - E. Strongly Agree

2. A black cat crossing your path brings bad luck.
 - A. Strongly Disagree
 - B. Disagree
 - C. Nor disagree nor agree
 - D. Agree
 - E. Strongly Agree

3. It is bad luck to cut one's nails on particular days.
 - A. Strongly Disagree
 - B. Disagree
 - C. Nor disagree nor agree
 - D. Agree
 - E. Strongly Agree

4. Looking in a broken mirror may bring bad luck.
 - A. Strongly Disagree
 - B. Disagree
 - C. Nor disagree nor agree
 - D. Agree
 - E. Strongly Agree

5. Misfortunes tend to come in threes.
 - A. Strongly Disagree
 - B. Disagree
 - C. Nor disagree nor agree
 - D. Agree
 - E. Strongly Agree

6. Elders should put a small black mark on the forehead of children to ward off bad luck.
 - A. Strongly Disagree
 - B. Disagree
 - C. Nor disagree nor agree
 - D. Agree
 - E. Strongly Agree

7. It brings good luck to add a Rupee to the sum total while gifting money.

- A. Strongly Disagree
 - B. Disagree
 - C. Nor disagree nor agree
 - D. Agree
 - E. Strongly Agree
8. Belief in Good Luck Good luck charm/s helps bring good luck.
- A. Strongly Disagree
 - B. Disagree
 - C. Nor disagree nor agree
 - D. Agree
 - E. Strongly Agree
9. When given an option to choose a number, I tend to go with the lucky one.
- A. Strongly Disagree
 - B. Disagree
 - C. Nor disagree nor agree
 - D. Agree
 - E. Strongly Agree
10. A good luck charm can change the outcome of chance events.
- A. Strongly Disagree
 - B. Disagree
 - C. Nor disagree nor agree
 - D. Agree
 - E. Strongly Agree
11. I actively seek out good luck
- A. Strongly Disagree
 - B. Disagree
 - C. Nor disagree nor agree
 - D. Agree
 - E. Strongly Agree
12. I believe touching wood would bring good luck
- A. Strongly Disagree
 - B. Disagree
 - C. Nor disagree nor agree
 - D. Agree
 - E. Strongly Agree
13. It is important to avoid unlucky actions
- A. Strongly Disagree
 - B. Disagree
 - C. Nor disagree nor agree
 - D. Agree
 - E. Strongly Agree
14. I avoid unlucky situations

- A. Strongly Disagree
 - B. Disagree
 - C. Nor disagree nor agree
 - D. Agree
 - E. Strongly Agree
15. Number 13 is considered inauspicious
- A. Strongly Disagree
 - B. Disagree
 - C. Nor disagree nor agree
 - D. Agree
 - E. Strongly Agree
16. When I come across a bad omen, I would rather delay my actions.
- A. Strongly Disagree
 - B. Disagree
 - C. Nor disagree nor agree
 - D. Agree
 - E. Strongly Agree
17. Trying to change your luck is a waste of time
- A. Strongly Disagree
 - B. Disagree
 - C. Nor disagree nor agree
 - D. Agree
 - E. Strongly Agree
18. I often attempt to change my luck
- A. Strongly Disagree
 - B. Disagree
 - C. Nor disagree nor agree
 - D. Agree
 - E. Strongly Agree
19. Doing things a certain way can change your luck, for good or bad.
- A. Strongly Disagree
 - B. Disagree
 - C. Nor disagree nor agree
 - D. Agree
 - E. Strongly Agree
20. I follow certain rituals unrelated to the task that had been followed by positive outcomes on previous occasions
- A. Strongly Disagree
 - B. Disagree
 - C. Nor disagree nor agree
 - D. Agree
 - E. Strongly Agree
21. I believe that I can change the outcome of events if I do certain rituals

- A. Strongly Disagree
 - B. Disagree
 - C. Nor disagree nor agree
 - D. Agree
 - E. Strongly Agree
22. If a certain action/ behaviour though unrelated to the task, had helped me through a situation, I would repeat it as I believe that it would lead to positive outcomes
- A. Strongly Disagree
 - B. Disagree
 - C. Nor disagree nor agree
 - D. Agree
 - E. Strongly Agree
23. I follow certain good luck/bad luck rituals just because my family expects me to follow them
- A. Strongly Disagree
 - B. Disagree
 - C. Nor disagree nor agree
 - D. Agree
 - E. Strongly Agree
24. I practice certain good luck/bad luck rituals because they are prevalent in my community
- A. Strongly Disagree
 - B. Disagree
 - C. Nor disagree nor agree
 - D. Agree
 - E. Strongly Agree

APPENDIX B
State-Trait Anxiety Inventory

STAI Form Y-1

Items	Not at all	Somewh at	Moderate ly so	Very much so
1. I feel calm	1	2	3	4
2. I feel secure	1	2	3	4
3. I feel tense	1	2	3	4
4. I feel strained	1	2	3	4
5. I feel at ease	1	2	3	4
6. I feel upset	1	2	3	4
7. I am presently worrying over possible misfortunes	1	2	3	4
8. I feel satisfied	1	2	3	4
9. I feel frightened	1	2	3	4
10. I feel uncomfortable	1	2	3	4
11. I feel self-confident	1	2	3	4
12. I feel nervous	1	2	3	4
13. I feel jittery	1	2	3	4
14. I feel indecisive	1	2	3	4
15. I am relaxed	1	2	3	4
16. I feel content	1	2	3	4
17. I am worried	1	2	3	4
18. I feel confused	1	2	3	4
19. I feel steady	1	2	3	4
20. I feel pleasant	1	2	3	4

STAI Form Y-2

Items	Not at all	Somewh at	Moderat ely so	Very much so
21. I feel fine	1	2	3	4
22. I tire quickly	1	2	3	4
23. I feel like crying	1	2	3	4
24. I wish I could be as happy as others seem to be	1	2	3	4
25. I am losing opportunities because I cannot make decisions fast	1	2	3	4
26. I feel rested	1	2	3	4
27. I am calm	1	2	3	4
28. I feel that difficulties are piling up in such a way that I cannot overcome them	1	2	3	4
29. I worry too much about things that do not really matter	1	2	3	4
30. I am happy	1	2	3	4
31. I am inclined to take things hard	1	2	3	4
32. I lack self-confidence	1	2	3	4
33. I feel secure	1	2	3	4
34. I try to avoid facing a crisis or difficulty	1	2	3	4
35. I feel blue	1	2	3	4
36. I am content	1	2	3	4
37. Some unimportant thoughts run through my mind and bother me	1	2	3	4
38. I take disappointments so keenly that I cannot get them out of my mind	1	2	3	4
39. I am a steady person	1	2	3	4
40. I become tense and upset when I think about my current concerns	1	2	3	4

APPENDIX E

Coping Orientation to Problems Experienced Inventory (Brief COPE)

Items	I haven't been doing this at all	A little bit	A medium amount	I've been doing this a lot
1. I've been turning to work or other activities to take my mind off things.				
2. I've been concentrating my efforts on doing something about the situation I'm in.				
3. I've been saying to myself "this isn't real."				
4. I've been using alcohol or other drugs to make myself feel better.				
5. I've been getting emotional support from others.				
6. I've been giving up trying to deal with it.				
7. I've been taking action to try to make the situation better.				
8. I've been refusing to believe that it has happened.				
9. I've been saying things to let my unpleasant feelings escape.				
10. I've been getting help and advice from other people.				
11. I've been using alcohol or other drugs to help me get through it.				
12. I've been trying to see it in a different light, to make it seem more positive.				
13. I've been criticising myself.				
14. I've been trying to come up with a strategy about what to do.				
15. I've been getting comfort and understanding from someone.				

16. I've been giving up the attempt to cope.				
17. I've been looking for something good in what is happening.				
18. I've been making jokes about it.				
19. I've been doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.				
20. I've been accepting the reality of the fact that it has happened.				
21. I've been expressing my negative feelings.				
22. I've been trying to find comfort in my religion or spiritual beliefs.				
23. I've been trying to get advice or help from other people about what to do.				
24. I've been learning to live with it.				
25. I've been thinking hard about what steps to take.				
26. I've been blaming myself for things that happened.				
27. I've been praying or meditating.				
28. I've been making fun of the situation.				

APPENDIX F

General Self-efficacy scale

Items	Not at all true	Hardl y true	Moder ately true	Exact ly true
1. I can always manage to solve difficult problems if I try hard enough.				
2. If someone opposes me, I can find the means and ways to get what I want.				
3. It is easy for me to stick to my aims and accomplish my goals.				
4. I am confident that I could deal efficiently with unexpected events.				
5. Thanks to my resourcefulness, I know how to handle unforeseen situations.				
6. I can solve most problems if I invest the necessary effort.				
7. I can remain calm when facing difficulties because I can rely on my coping abilities.				
8. When I am confronted with a problem, I can usually find several solutions.				
9. If I am in trouble, I can usually think of a solution.				
10. I can usually handle whatever comes my way.				