

MODERATING ROLE OF SELF-EFFICACY ON THE RELATIONSHIP BETWEEN FEAR OF NEGATIVE EVALUATION AND EYEWITNESS TESTIMONY AMONG PARAMILITARY PERSONNEL IN ENUGU METROPOLIS.

**OZOCHI CHIKAOSOLU CHRISTABEL
DEPARTMENT OF SOCIOLOGY/PSYCHOLOGY
FACULTY OF MANAGEMENT & SOCIAL SCIENCES.
GODFREY OKOYE UNIVERSITY, ENUGU.**

ABSTRACT

This study investigated the moderating role of self efficacy on the relationship between fear of negative evaluation and eyewitness testimony among Paramilitary Personnel in Enugu Metropolis. Data for the study were obtained and analyzed from two hundred and sixty-two (262) Paramilitary Personnel in Enugu Metropolis. The participants comprised one hundred and forty-two (142) females and one hundred and twenty (120) males. Multistage sampling technique (cluster sampling, purposive) was used in selecting the participants for the study. Participant's ages ranged from 25 to 60 years with mean age as 36.27 (SD = 4.36). A questionnaire with demographic variables and three scales were used for data collection. The scales are self-efficacy scale (Gilad, et al 2001), Eyewitness metamemory scale (Saraiva, Boeijen, Hope, Horselenberg, Saverland & Koppen, 2019) and Brief fear of negative evaluation scale (Leary, 1983; 2013). Hayes process macro was used to test the predictive role of the independent variable (fear of negative evaluation) on the dependent variable, and the moderating role of the moderator (self-efficacy). The researcher employed a correlational design with a moderated regression analysis to investigate the moderating role of self-efficacy on the relationship between fear of negative evaluation (FNE) and eyewitness testimony accuracy among paramilitary personnel. Findings indicates that both fear of negative evaluation and self-efficacy played significant roles in eyewitness testimony. And self-efficacy moderated the relationships between fear of negative evaluation and eyewitness testimony. The researcher suggests that future researchers that are interested in eyewitness testimony should examine additional aspects that may link people's eyewitness testimony, such as personality type, memory conformity, environment, and social class.

INTRODUCTION

Background to the Study

Eyewitness testimony is a cornerstone of legal and security proceedings, holding the potential to determine the outcomes of criminal cases and security operations. The accuracy and reliability of such testimony are paramount, as they can profoundly impact the criminal justice system and the safety of communities. However, eyewitness accounts are susceptible to various psychological factors that can influence the quality of testimony.

Eyewitness testimony entails individuals providing firsthand observations and recollections of events they have witnessed. In legal proceedings, it serves as a primary source of information for identifying suspects, reconstructing timelines of events, and establishing the credibility of witnesses. As such, the accuracy of eyewitness testimony can significantly impact the criminal justice system's ability to administer justice fairly and effectively (Wells et al., 2018). Self-efficacy. In the context of eyewitness testimony, pertains to a witness's confidence in their memory and their ability to provide an accurate and comprehensive account of events. Witness self-efficacy, defined as one's belief in their ability to accurately encode, store, and retrieve information from a witnessed event, has been shown to be a positive predictor of eyewitness memory accuracy (Melnyk et al., 2018).

Paramilitary personnel, operating in Enugu Metropolis and similar contexts, often find themselves in high-stress environments where the accuracy of eyewitness testimony is of paramount importance. These professionals are tasked with maintaining security and law enforcement in situations that can be emotionally charged, potentially dangerous, and subject to close public scrutiny. As a result, they are frequently called upon to provide eyewitness accounts in conditions characterized by fear, stress, and significant consequences

for their actions. In such a demanding context, understanding how psychological factors like Fear of Negative Evaluation (FNE) and self-efficacy interact becomes imperative.

The motivation behind this research is grounded in the recognition of the unique challenges faced by paramilitary personnel in Enugu Metropolis as individuals who operate within the realm of law enforcement and security. These personnel often bear witness to critical events that demand accurate and reliable testimony. However, the psychological factors of FNE and self-efficacy may play a substantial role in shaping how they provide eyewitness accounts.

In the area of how our brains work and how we remember things, studying eyewitness testimony is very important (McLeod, 2018). Because of this, juries often give a lot of attention to and usually trust eyewitness testimony as a reliable source of information. According to research, eyewitness testimony can be influenced by different psychological factors such as how confident the witness feels and their fear of being judged negatively (McLeod, 2018). According to McLeod, it means when someone gives a description of something they saw happen and it is allowed in court. For example, people who saw a crime or a car accident may be asked to explain what they saw in court. This means it has details about the place where the crime happened, who committed the crime, etc. Understanding the validity of eyewitness evidence requires knowledge of Bartlett's theory of reconstructive memory (McLeod, 2018). The way we understand and remember things can vary based on what we have learned and our cultural beliefs, and also how we see and experience the world around us (Wagoner, 2013). Research on eyewitness testimony E.g (Stabley et al 2012) has shown that many people believe memory works like a video recording. They think that remembering is like playing back what was recorded, and retrieving information is like encoding it. Surprisingly, our memory doesn't work like that. Instead, it's a natural part of our memory that we don't always remember things exactly as they happened. Instead, individuals extract the hidden significance from data (McLeod, 2018). In simpler terms, people usually arrange their information in a way that makes the most sense to them. People try to put information into groups or categories to understand it better. (Yuille & Cutshall, 2016).

Eyewitness testimony, according to Laney and Loftus (2022), is when someone who saw a crime or an accident goes to court and tells the whole story of what happened. As a result, it is believed to involve a more complicated process than it may seem at first. This is why it is believed to include everything that happens from when the crime is committed until the court appearance, as well as things that happen during the crime to help or make it hard for witnesses. The police and many lawyers may ask the person who saw the crime different questions about what the criminal looked like and who they were. They might also help the police figure out who committed the crime, among other things. (Laney & Loftus, 2022). However, instead of remembering events correctly, eyewitnesses' memories can be influenced by many biases and mistakes. (Laney & Loftus, 2022). Sometimes, a person who saw something happen might remember the details wrong or remember things that didn't really happen at all. A person who saw something happen during a specific incident that is being investigated tells the court what they saw as an eyewitness.

Witnesses who saw a crime happening and tell about it in court are often seen as very believable evidence. However, some previous studies done over many years have shown that their accuracy is sometimes doubtful. (Laney & Loftus, 2022). There is evidence that when eyewitnesses give the wrong testimony, innocent people can be wrongly convicted and sent to prison for many years or even sentenced to death for crimes they did not commit. Erroneous eyewitness evidence is the biggest reason for at least 75% of cases where Deoxyribonucleic acid (DNA) proves someone is innocent (Garrett, 2011). It is possible to prevent many errors if we take enough steps during investigations and court proceedings. Some of such measures, according to psychologists, involve the prevention of disinformation from entering a witness's memory between the time they witness an event and the time they report it. To support this, thousands of following research have shown that false information that people are exposed to after seeing an incident can taint their memories (Frenda et Al; 2011; Loftus, 2005). This research has led people to remember things that didn't actually happen, like small details about how a person looked or even big things like a barn that didn't exist. Additional studies have shown that when false information is shared in social situations, it can harm memory even more easily (Gabbert, Memon, Allan, & Wright, 2004). People who see crimes often have to remember what the criminals looked like and other things that make them easy to recognize. They also have to remember a lot of details about the crimes themselves. Similarly, lots of research has proven

that eyewitnesses can make big mistakes that we can often understand and predict (Caputo & Dunning, 2007).

Eyewitness accounts of events should often be in-depth, although this isn't always the case (Wells et al.; 2006). Eyewitness is mostly a memory used as proof to show what occurred from a witness' perspective. It's important to note that while memory recall was once thought to be a reliable source, it has recently come under fire because forensics now backs psychologists' claims that memories and personal perceptions can be skewed and manipulated (Memon, Mastroberardino & Fraser, 2008). This has led to efforts by several nations and psychologists to alter the way eyewitness testimony is presented in court (Greenwood, & John, 2009).

Eyewitness testimony has been the subject of research on systematic variables (variables that the criminal justice system controls or has the potential to influence) and estimator variables (characteristics of the witness, event, testimony, or testimony evaluators) (Wells, Memon, & Penrod, 2006). For example, an eye witness who sees something happen might agree with someone else even if they think the other person is wrong because they want to fit in with the group (Gabbert, Wright, Memon, & Skagerberg, 2012).

Neurocognitive theories suggest that these biases in processing information may happen because of unusual techniques for controlling emotions caused by problems with the prefrontal brain regions' ability to regulate negative feelings (Etkin & Wager, 2007; Etkin, 2010; Brühl et al., 2011; Brühl et al., 2013). However, we do not yet know much about how the brain processes information related to FNE. In this research, the researcher wants to see how eyewitness being scared of getting a negative review can influence what an eyewitness says. The purpose of the study is to look into how individual variations in FNE significantly affect eyewitness testimony. The social judgement paradigm, which Somerville et al. (2006) introduced, is an interesting model for studying social evaluation. This paradigm leads participants to believe that unfamiliar peers had previously formed opinions about them after seeing them portrait images of these peers. The participant is asked to determine whether peers had a favourable or unfavourable impression of them. Participants get peer feedback following each judgement, which is either consistent with or inconsistent with their prior expectations (Somerville et al., 2010).

Similar to other personality traits as trait of anxiety, submissiveness, and social avoidance, fear of unfavourable appraisal has been hypothesised to have some genetic component. The hereditary component of Brief Fear of Negative Evaluation (BFNE) scores has been revealed in twin research, according to Tavoli (2009). Additionally, it has been discovered that there is a genetic correlation between BFNE scores and the Dimensional Assessment of Personality Pathology-Basic Questionnaire (Stein, Jang, & Livesley, 2002). This means that the genes that control our fears of being judged negatively can affect different anxiety personality behaviors. Studies suggest a positive correlation between Facial Emotion Recognition (FER) abilities and individuals with heightened sensitivity to negative social evaluation (Van Bezooijen et al, 2018). According to research by Riggins and Fry (2017), Individuals with high Fear of Negative Evaluation (FNE) tend to exhibit a bias in self-perception during public speaking. They overestimate negative social traits (awkwardness, silence) and underestimate positive traits (confidence) they display. Conversely, research suggests low-FNE speakers may overestimate their positive performance rather than exhibiting a completely accurate perception (Stinson & Torres, 2009). High-FNE presenters, on the other hand, communicated more effectively and in a way that was compatible with the listener's actual knowledge (Fas, Page, Serfaty, Tai, & Winkler, 2008).

Researchers Moor et al. (2010) discovered that participants aged 19 to 25 had an optimistic self-assessment bias; as a result, older participants produced noticeably more positive social evaluation judgements than younger ones. The need for social connection (Matthew Lieberman, 2013) emphasizes that humans have a fundamental drive to form and maintain close relationships with others. This deep-seated need stems from an evolutionary perspective, where social bonds enhanced survival and procreation. Social connection fosters feelings of safety, security, and well-being, which in turn contribute to physical and mental health, as well as overall life success.

This idea was used to understand why people tend to see themselves in a positive light. In light of this, it has been suggested that social-evaluative threat may indicate that an eyewitnesses desire for social connection is not being met. The drive to develop relationships with other individuals may then be heightened by this "need to belong" (Maner et al., 2007) All the information mentioned suggests that people

might be hopeful about how their peers evaluate them. This hopeful thinking is influenced by a part of the brain called the ventral medial prefrontal neural network, which is involved in thinking about oneself and understanding others (Amodio & Frith, 2006). Weeks et al. (2005), Weeks and Howell (2012), and Levinson et al. (2013) suggests that the social judgement way of studying things could be a good way to look at biomarkers of fear about what others think about us, which is closely related to feeling anxious in social situations. Negative feedback can vary depending on individual differences. Negative feedback appears to vary depending on the individual, such as their self-esteem levels.

Do people believe they can overcome the problem of providing eyewitness testimony challenge or do they give up and permit false eyewitness to occur when presented with it? Do people typically believe they can overcome the challenges presented by eyewitness testimony, or do they frequently have doubts about their own capacity to do so? People's beliefs often referred to as self-efficacy determine how they think, act, and feel in front of others. There is a dearth of study on self-efficacy in the capacity to testify in court, despite the applicability of the self-efficacy Theory (Bandura, 2000) to many fields of psychology. The goal of the current study is to close this gap by gradually assessing its moderating impact on the relationship between witness testimony and fear of unfavourable judgement.

Despite being one of the most common theoretical frameworks for psychological research (Bandura, 2000), there are not many instances of SET being used in forensic psychology. Bandura (2000) defined self-efficacy as a sophisticated personal belief system about one's capability to carry out a certain activity or as an individual's confidence in their ability to carry out behaviours essential to create specific performance attainments. Based on evidence, self-efficacy means believing that you have control over your own motivation, behavior, and the people around you. These thoughts we have about ourselves affect our goals, how hard we work to achieve them, and whether or not we think we can reach certain levels of success. Self-efficacy beliefs may change depending on the situation and environment in which a behavior happens, contrary to traditional psychological views. According to Bandura, self-efficacy can be a key factor in behavioural change and performance results. According to Bandura and colleagues (e.g., Bandura, 2000; Bandura, Barbaranelli, Caprara, & Pastorelli, 2001; Pastorelli, Caprara, Barbaranelli, Rolla, Rozsa, & Bandura, 2001), self-efficacy contains cognitive, affective, and behavioural components that are related to one another.

Witness preparation training is one area where SET has a lot of potential. The ability of a witness to effectively communicate when testifying is frequently bolstered by trial consultants and attorneys (Boccaccini, 2002; Posey & Wrightsman, 2005; Neal, 2009). While WSE and witness preparation training are intended to help witnesses with their testimony style, neither addresses other aspects of the testimony, such as the witness's knowledge or the quality of the trial evidence, which have been shown to have a significant impact on juror decisions (e.g., Bank & Packer, 2007; Cramer, Brodsky, & DeCoster, 2009). According to certain studies (e.g. Boccaccini, Brodsky, & Gordon, 2005; Boccaccini, Gordigna Brodsky, 2003), witness preparation can help eyewitnesses perceive witnesses' behaviour, credibility, and anxiousness-perceived capacity to testify, as well as data demonstrating how these perceptions are connected to performance, are still absent. The current investigations aimed to close this gap by exploring the crucial functions that self-efficacy performs.

Self-efficacy can influence how people feel about themselves as well as whether or not they succeed in reaching their life goals. Albert Bandura's theory is all about how our experiences with others and how we behave are connected and can shape who we are. Bandura focuses on the idea that if we believe in ourselves and our abilities, we can achieve things. According to Bandura, self-efficacy is a part of how we see ourselves, along with how we think and what we can do. This system greatly affects how people respond to different events, like eyewitness accounts, and how they understand those situations. A very important part of this self-system is self-confidence. Self-efficacy can have an impact on various things, including how we feel, what we do, and how motivated we are. Self-efficacy affects the goals we choose, how we try to reach them, and how we judge our own progress. Bandura and other researchers have found that self-efficacy is connected to the way a person approaches goals, tasks, and challenges. Stronger dedication to their interests and activities; quicker recovery from setbacks and disappointments; and a perception that difficulties are tasks to be mastered are all traits of people who have a high sense of self-efficacy. People with low self-efficacy avoid tough jobs, think they are incapable of handling demanding situations,

concentrate on their own shortcomings and poor consequences, and quickly lose faith in their own talents. Because they view challenges rather than threats, people with high self-efficacy have a tendency to be more intrinsically motivated to complete their goals (Bandura, 2000). These people don't view difficulty and failure as a sign of defeat; instead, they intensify their efforts and search for brand-new strategies to prevail (Bandura, 2000) who have low confidence in their abilities often see difficult tasks as something to stay away from. Because of this, they often choose not to set goals and don't show much commitment to the ones they do set. When people face challenges, they often give up without even trying to overcome them. Individuals with low self-compassion tend to experience negative self-evaluation and feelings of inadequacy when faced with challenges (Neff, 2016). This lack of self-kindness can hinder their ability to cope with setbacks and stressful situations. Consequently, they may struggle to bounce back from adversity and experience difficulties building resilience.

When people are asked to give eyewitness testimony, having a high sense of self-efficacy might help them deliver accurate testimony without viewing themselves adversely. There are many obstacles in life that make people feel fearful and unsatisfied, yet interestingly, having high levels of self-efficacy can help people handle these issues more successfully. According to study by Gomez-Jorge (2002), people can forecast their motivation, self-esteem, and amount of work put into accomplishing their goals when they believe in their skills.

Statement of the Problem:

Eyewitness testimony remains a critical element in legal proceedings, but its reliability can be undermined by various factors (Cutshall, 2016). Fear of negative evaluation (FNE), the apprehension of being judged poorly by others, is one such concern (Stebly & Wells, 1994). When individuals worry about negative perceptions, they might unconsciously alter their testimonies to project confidence or helpfulness, even if it sacrifices accuracy (Wixted et al., 2018).

Paramilitary personnel, including security guards and civil defense officers, are frequently called upon to witness crimes and provide eyewitness accounts in court. Their training emphasizes observation and reporting skills, but FNE can still influence their testimonies. Fear of being perceived as incompetent or losing their jobs might lead them to unintentionally fabricate or embellish details (Kassin et al., 2013).

This potential influence of FNE on eyewitness testimony among paramilitary personnel presents a significant problem. Inaccurate testimonies can have severe consequences, such as wrongful convictions or the release of dangerous criminals (Wells & Olson, 2003).

Research has shown that adolescents with high self-efficacy are more likely to resist negative peer pressure and engage in prosocial behaviors, even in challenging social situations (Urdan & Pajares, 2011). This highlights self-efficacy's role as a protective factor against risky or unhealthy choices. Self-efficacy in the context of eyewitness testimony refers to a paramilitary officer's faith in their capacity to genuinely recount events under duress and observe them accurately. Thus, among the paramilitary personnel in Enugu Metropolis, Nigeria, The research examined how self-efficacy moderates the link between FNE and eyewitness testimony. Through comprehension of this, we can devise tactics to alleviate the adverse consequences of FNE and enhance the precision of eyewitness statements within legal contexts.

Research Questions

The study specifically aims to address the following research questions:

- 1) Will the relationship between fear of negative evaluation and eyewitness testimony among Paramilitary Personnel in Enugu Metropolis?
- 2) Will the relationship between self-efficacy and eyewitness testimony among Paramilitary Personnel in Enugu Metropolis?
- 3) Will self-efficacy moderate the relationship between fear of negative evaluation and eyewitness testimony among Paramilitary Personnel in Enugu Metropolis?

Purpose of Study:

The aim of the study was to investigate the moderating role of self-efficacy on the relationship between fear of negative evaluation and eyewitness testimony among paramilitary personnel in Enugu Metropolis. The study specifically aimed to;

- 1) Examine the relationship between fear of negative evaluation and eyewitness testimony among Paramilitary Personnel in Enugu Metropolis.
- 2) Investigate the relationship between self-efficacy and eyewitness testimony among Paramilitary Personnel in Enugu Metropolis.
- 3) Determine if self-efficacy will moderate the relationship between fear of negative evaluation and eyewitness testimony among Paramilitary Personnel in Enugu Metropolis.

Operational Definition of Terms

Fear of Negative Evaluation(FNE): refers to the level of anxiety paramilitary personnel may feel about being negatively evaluated as measured by scores on Watson and Friend(1969) 12-item shorter form of Fear of Negative Evaluation Scale.

Eyewitness Testimony: refers to the description of an event or crime provided by someone who observed it firsthand as measured by scores on Saraira, Boeijen, Hope, Horselenberg, Saverland and Koppen (2019) 23 item Eyewitness Metamemory Scale.

Self Efficacy: refers to an individual confidence and belief that paramilitary personnel have in their ability to provide accurate and reliable eyewitness testimony as measured by scores on Bandura (2006) 8 - item New General Self-efficacy Scale.

Moderating Role: Refers to the influence or impact of self-efficacy on the relationship between fear of negative evaluation and eyewitness testimony among paramilitary personnel (Smith, 2019). It examines how self-efficacy can either strengthen or weaken the association between fear of negative evaluation and eyewitness testimony.

Review of Related Literature

The review of related literature was done in two sections namely; theoretical and empirical reviews.

Theoretical Review

The following theories were reviewed.

Theories of Eyewitness Testimony

Fuzzy-trace Theory (Reyna, & Brainerd, 1995)

Signal Detection Theory (Swet 2001)

Bartlett 's Theory of Reconstructive Memory (Frederick 1932)

Theories of Fear of Negative Evaluation

Cognitive Evaluation Theory (Deci, 1975)

Gray's Reinforcement Sensitivity Theory (Gray, 1990)

Theories of Self-efficacy

Social Cognitive Theory (Bandura, 1986)

Self-concept Theory (Rogers, 1947)

Fuzzy-Trace Theory of Eyewitness (Reyna, & Brainerd, 1995)

Reyna and Brainerd (1995) presented the fuzzy-trace theory (FTT), a theory of cognition that builds on dual-trace notions to anticipate and explain cognitive processes, notably in memory and reasoning. The theory has been used to explain phenomena like false memory including cognitive psychology, human development, and social psychology (Gomes & Brainerd, 2012). and its evolution, judgements of probability, medical decision-making (Reyna, 2020), the perception and appraisal of risk, as well as biases and logical errors in decision-making. Earlier theories of cognition and its evolution, such as constructivism and information processing, could not predict or account for certain discoveries in the memory and reasoning domains. This led to the original formulation of fuzzy-trace theory (FTT) in the 1990s. One of these difficulties was the statistical independence between memory and reasoning, which states that accuracy in reasoning tasks is frequently unconnected to memory for background information in problem situations

(Reyna, & Brainerd, 2011). The memory-reasoning relationship needed to be rethought in light of these discoveries, and FTT responded by developing a dual-process theory that connected memory and reasoning with fundamental ideas from psycholinguistics and Gestalt theory. FTT proposes, more particularly, that people create verbatim and gist traces, two different kinds of mental representations of a prior experience. Fuzzy-trace theory got its name because gist traces, as opposed to verbatim traces, are vague representations of previous events (such as their gist or overall meaning). Although both verbatim and gist information can be processed by humans, gist traces are preferred for use in reasoning.

For occurrence, this recommends that indeed in case individuals are competent of comprehending proportion concepts like probabilities and predominance rates, which are the standard for the introduction of well being- and risk-related information, their choice in choice circumstances will ordinarily be administered by the bottom-line meaning of it (e.g., "the chance is high" or "the chance is poor"; "the result is terrible" or "the result is fine") instead of the genuine numbers (Gomes, & Brainerd, 2012). More essentially, in FTT, memory-reasoning autonomy can be clarified in terms of preferred modes of handling when performing a memory assignment (for case, recovery of verbatim follows) in comparison to when performing a thinking assignment (for illustration, inclination for thinking with significance follows) (Brainerd, & Reyna, 2004). A comparable method was used to study human eyesight in 1999 (Brainerd & Reyna, 2004). It was proposed that there are two distinct processing modalities for local spatial receptive fields in human vision: aggregation and parsing. To determine which mechanism predominates a perceptual choice, people used prior experience. The paper made an effort to connect psychophysics (i.e., independent linear filters) and Gestalt theory. This theory was expanded upon to create fuzzy image processing (Brainerd, Reyna, Wright, & Mojardin, 2003), which is utilised in edge detection and information processing technology.

The FTT is regularly alluded to as a double handle hypothesis of memory since it proposes two diverse sorts of memory forms (verbatim and significance). Concurring to FTT, recovery of verbatim follows (recollective recovery) is recognized from recuperation of essence follows (non-recollective recovery) by the mental rebuilding of the relevant characteristics of a previous occasion. In fact, not at all like verbatim forms, significance forms build representations of an event's semantic perspectives instead of its surface components. According to Brainerd, Reyna, Wright, and Mojardin (2003), five principles have been used to predict and explain true and false memory phenomena: (1) The five principles that have been used to predict and explain true and false memory phenomena are:

- 1. Verbatim and gist memory:** This principle suggests that memory is composed of both verbatim (exact details) and gist (general meaning) representations. False memories can occur when the gist of an event is remembered but specific details are incorrect or fabricated.
- 2. Fuzzy trace theory:** This principle proposes that memory is based on the encoding of both precise verbatim traces and fuzzy gist traces. False memories can arise when the gist traces are more accessible or influential than the verbatim traces.
- 3. Activation-monitoring theory:** This principle suggests that false memories can occur when individuals have difficulty distinguishing between memories that are internally generated (imagination) and memories that are externally derived (actual experiences).
- 4. Source monitoring:** This principle focuses on the ability to accurately attribute the source of a memory. False memories can arise when individuals incorrectly attribute the source of information, leading to the belief that a false event actually occurred.
- 5. Misinformation effect:** This principle highlights how exposure to misleading information can distort memory. False memories can be generated when individuals are exposed to misinformation that alters their recollection of an event.

According to the notion of parallel storage, verbatim and gist data are encoded and stored in parallel rather than serially. Consider the case where the word "apple" is displayed to a person in red. On the one hand, verbatim and significance highlights of the target thing would be at the same time encoded and put away by means of distinctive pathways in understanding with the guideline of parallel capacity of verbatim and significance follows (e.g., the word was apple, it was displayed in ruddy, printed in boldface and italic, and all but the primary letter were displayed in lowercase). The generation of significance follows would be subordinate on the encoding and capacity of verbatim follows, on the other hand, in the event that verbatim and essence follows are put away in a serial mold. In this case, the significance highlights of the target

question (the word was a sort of natural product) would be determined from its verbatim highlights. Early memory models habitually presupposed the last mentioned idea (Brainerd, Reyna, & Howe, 2009). Despite the intuitive attraction of the serial processing strategy, research indicates that gist traces can be encoded and stored independently of verbatim ones. According to a number of studies, the meaning of target items is encoded separately from and sometimes even before their surface shape is encoded (Brainerd, Reyna, & Howe, 2009).

Verbatim and gist traces are retrieved using dissociated routes, which is a similar idea to parallel storage. Recollective and non-recollective recollection processes are independent of one another, according to the idea of dissociated retrieval. Because of this, the availability of each type of representation and the type of retrieval cues might have a varied impact on verbatim and gist processes. Items that were truly presented in the past are stronger cues for verbatim traces than items that weren't, according to Tulving's encoding specificity principle. Similar to the previous example, elements that were not previously offered yet maintain the meaning of previously presented items are typically superior triggers for gist traces. Consider a scenario where test participants are given a word list that includes numerous different dog breeds, including poodle, bulldog, greyhound, doberman, beagle, collie, boxer, mastif, husky, and terrier. The words poodle, spaniel, and chair are displayed during a recognition exam. The retrieval of verbatim and gist traces can be done independently of one another, in accordance with the dissociated retrieval principle. As a result, certain test probe types may be more effective cues for one form of trace than another.

Individuals habitually make blunders of exclusion and commission when they attempt to review past occasions (such as a birthday celebration or the final supper). The primary is alluded to as absent mindedness, while the moment is more commonly alluded to as untrue recollections. Untrue recollections can be encourage separated into embedded and unconstrained untrue recollections. Whereas embedded wrong recollections are the item of exogenous (external) processes such as the recommendation of incorrect data by an exterior source (e.g., an questioner inquiring misleading questions), unconstrained untrue recollections are the result of endogenous (internal) processes, such as meaning preparing. Younger children are more likely than adults to be exposed to erroneous information, according to research (Lilienfeld, 2007). In contrast to older kids and adults, younger kids are significantly less likely to create false memories, according to study (Lilienfeld, 2007). Furthermore, contrary to popular belief, accurate memories are not more reliable than inaccurate ones. According to studies, fake memories are more resilient than genuine ones (Brainerd & Reyna, 2002). According to FTT, this pattern develops because gist traces, which are less vulnerable to interference and forgetting than verbatim traces, which suppress them and also support true memories, sustain false memories.

FTT is a model that describes how memory interacts with a higher level of reasoning, not a model for false memories. Essentially, information that the patient erroneously remembers is greatly influenced by the gist and verbatim traces of whatever they are experiencing. Due to the performance's ability to draw on traces, relying on variables of various retrieval cues, on the accessibility of these kinds of memories, and forgetting, verbatim and gist traces help with memory performance. FTT can predict true and false memories linked to narratives and sentences, albeit it is not a model for false memories. Eye witness testimony makes this particularly clear (Reyna, Nelson, Han, & Dieckmann, 2009).

FTT's account of false memory, which outlines the disparities between experiences dealing with gist and verbatim traces, is explained by five explanatory principles.

- Verbatim and gist traces are stored in lateral fashion. Both the topic and the meaning are lateral in their experiences. Verbatim traces are represented in the very surface forms of directly encountered events; gist traces are maintained at various levels of familiarity.
- The ideal times for retrieval cues to be effective with verbatim are when the subject encounters several events. Retrieval cues in gist traces function best for events that are not directly experienced. In verbatim traces, surface memories often deteriorate more quickly than meaning-related memories.
- False Memory and the operations of two opponents: Verbatim and significance follows have diverse impacts on untrue memory, ordinarily. Verbatim forms will stifle the wrong memory by killing the recognition of the meaning to the subject, though significance follows will energize wrong memory since the meaning an thing must the subject will appear to be commonplace. The exemption to this

run the show is when the person is displayed with a wrong memory as a recommendation. In this occurrence, the untrue memory will be upheld by both verbatim follows and recovery prompts of significance, but the verbatim follow will smother the untrue memory by permitting for the review of first-hand recollections.

- Variability in development: There's some variety within the improvement of verbatim and significance memory recovery; both of these will get way better as individuals gets older. Particularly in the case of gist traces, it gets easier as people age to attach meaning to various things/events.

Gist and verbatim processes help people recall events clearly. Both gist and verbatim support can be retrieved to aid in remembering; however, when verbatim support is retrieved, the recollected thoughts are more likely to be conscious experiences than gist support.

The Fuzzy-Trace Theory also describes the distinctions between authentic and erroneous memories. The FTT predicts the associations and dissociations between true and false memories, i.e., that specific associations and dissociations are observed in various contexts. In circumstances where verbatim traces are relied upon, dissociation occurs. Therefore, memories whether accurate or inaccurate are dependent on many types of representations (Reyna, Nelson, Han, & Dieckmann, 2009). The impact of false memories, misleading information, and false recognition in children, as well as how they could evolve during developmental changes, may also be explained by FTT. In spite of the fact that many false memories may be thought of as "dumb," new research on the FTT has revealed that the theory may have an impact on the formation of "smart" false memories, which are formed as a result of being aware of the significance of particular experiences (Reyna, Nelson, Han, & Dieckmann, 2009). Although false memory research is still in its infancy, FTT has proven successful in describing a variety of false memory events and has been applied to real-world situations. FTT rejects the notion that gist and verbatim traces embed false memories and the notion that offhand false memories are taken to be real in its explanation of false memories. FTT is based on dual process models of human cognition as it relates to reasoning. It differs from the conventional dual process model in that it distinguishes between impulsivity and intuition, which, in accordance with conventional dual process theories, are integrated in System 1, and then asserts that intuition is crucial for expertise and advanced cognition (Anton & Carmen 2010). Depending on the type of representation employed to analyse information, the difference between intuition and analysis can be seen.

Despite processing both gist and verbatim representations in tandem, most people typically exhibit what is known as a "fuzzy processing preference," which means they choose the least exact gist representations when making decisions. Although the verbatim process matures earlier than the gist and is therefore more largely depended upon in adolescence, both processes get better with age.

Fuzzy trace theory suggests that memory is composed of both verbatim (exact details) and gist (general meaning) representations. According to this theory, false memories can occur when the gist of an event is remembered but specific details are incorrect or fabricated.

In the context of studying paramilitary organizations, fuzzy trace theory could potentially be applied to understand how individuals' memories of specific events or actions within these organizations may be influenced by the gist or general meaning associated with their involvement. For example, individuals may remember the overall purpose or mission of the paramilitary organization accurately but have fuzzy or inaccurate recollections of specific details or events.

Fuzzy trace theory has several strengths that contribute to our understanding of memory processes. It emphasizes the distinction between verbatim and gist representations, allowing for a more nuanced understanding of memory accuracy and errors (Brainerd & Reyna, 2005). It also provides insights into how memory can be influenced by factors such as context, emotion, and individual differences (Friedman & Castel, 2011). Fuzzy trace theory has been successful in explaining various memory phenomena, including false memories and memory development in children (Brainerd & Reyna, 2005; Reyna & Brainerd, 2011).

One of the main strengths of fuzzy trace theory is its ability to explain false memories. By highlighting the role of gist representations, the theory explains how individuals can recall the general meaning or essence of an event, even if the specific details are incorrect or fabricated (Brainerd & Reyna, 2005). This has important implications for understanding memory accuracy in legal contexts, where the reliability of eyewitness testimony is crucial.

Despite its strengths, fuzzy trace theory also has some limitations. It does not provide a comprehensive account of all memory processes, and there is ongoing debate about the precise nature of gist representations (Friedman & Castel, 2011). Furthermore, the theory's applicability to real-world memory situations needs further research to better understand its generalizability.

In conclusion, it is important to note that the application of fuzzy trace theory to the study of paramilitary organizations would require specific research and empirical evidence to establish its relevance and applicability in this context.

Signal Detection Theory (Swets, 2001)

In the early 1950s, researchers eg. Douglas (1980) and Michael (1990) studying radar technology developed a theory called Signal Detection Theory (SDT). This theory is based on probabilities. This text explains the most effective ways to find electronic signals among noise or random interference. SDT is a way of understanding how beings create small differences in their thinking and behavior. It provides methods for collecting and studying information based on models. It separates and analyzes sensory and decision aspects independently using a technique called receiver operating characteristic (ROC). Signal detection theory is a framework for understanding decisions under uncertainty.

Signal detection theory (SDT) offers a powerful framework for analyzing how we make decisions in situations with uncertainty. It assumes that decisions about the presence or absence of a signal (information) are based on the interplay between the incoming signal itself and internal noise (Green & Swets, 1966).

Here are some key assumptions of SDT:

Noisy sensory systems: Our sensory systems are not perfect. Even in the absence of an external signal, internal neural activity creates a baseline level of background noise. This noise can fluctuate, making it difficult to distinguish a weak signal from the noise alone.

Strength distributions: The strength of both the signal and noise can be represented by probability distributions. The signal distribution reflects the variability in the strength of the signal when it is present. Similarly, the noise distribution captures the variability in the background activity when no signal is present (Macmillan & Macmillan, 1991).

Decision criteria: Based on the perceived strength of the evidence, individuals set a decision criterion, a threshold level that separates "signal present" from "signal absent" decisions. If the perceived evidence exceeds the criterion, the decision is a "hit" (correctly identifying the presence of a signal). Conversely, if the evidence falls below the criterion, the decision can be a "miss" (failing to detect a present signal) or a "correct rejection" (correctly identifying the absence of a signal).

Response bias: Individuals can have a tendency to favor one response option over another, even when the evidence is ambiguous. This bias can be influenced by factors like instructions, task demands, or a desire to avoid certain types of errors (Stanislaw & Todorov, 1999).

These assumptions allow SDT to model the relationship between the true state of the world (signal present or absent) and an individual's decision (hit, miss, correct rejection, false alarm). By analyzing these relationships, researchers can assess an individual's sensitivity (ability to discriminate signal from noise) and response bias.

It's important to note that SDT assumes a relatively simple decision scenario with only two options (signal present or absent). However, the core principles of SDT can be extended to more complex situations with multiple signals and response options (Green & Swets, 1966).

In order to test how humans make decisions under ambiguous circumstances, such as how we would perceive distances in foggy conditions or during eyewitness identification, psychologists employ the signal detection theory (Michelle, 2005). SDT assumes that the person making decisions is actively involved in the decision-making process and must make difficult choices when the situation is unclear, rather than just receiving information without doing anything. In foggy weather, we have to guess how far away an object is by only using what we can see, which is not clear because of the fog. The brain judges how far away something is by how bright it looks. So when fog makes things look less bright, we think they are farther away than they really are. SDT claims that when witnesses try to identify a suspect, they decide if the suspect is the criminal or not based on how familiar they look to the witness. The trials are split into groups to use

signal detection theory on a set of data. The data includes trials where there was either a stimulus or not, and the observer had to say if the stimulus was present or not:

Numerical estimates of sensitivity can be produced using statistics such as the sensitivity index d' and A' (Needell, & Tropp, 2009), and response bias can be assessed using statistics such as c and (Needell, & Tropp, 2009), both of which are based on the proportions of these sorts of trials. When things are presented on a study list for later testing in memory trials, signal detection theory can also be used. These 'old' items are combined with brand-new, 'new' things that did not exist on the study list to form a test list. The subject will say "yes, this was on the study list" or "no, this was not on the study list" in response to each test session. Targets are the items that are already on the study list, while distractors are the additional items. Responding "Yes" to a distractor results in a False Alarm, whereas responding "Yes" to a target results in a hit.

The signal detection theory is a commonly used method in humans. We talk about memory, the way things feel, schedules for rewards, and other topics. Sensitivity is how easy or hard it is to tell the difference between the main thing you want to focus on and other things happening around it. For example, in a memory test, if you have more time to study words that you need to remember, it's easier to recognize words that you have seen or heard before. On the other hand, it is harder to tell the difference between things when you have to remember 30 of them instead of just 5. Bias refers to how one response is more likely than another. In simpler terms, the receiver can show more frequent reactions to confirm if there is something present or more frequent reactions to confirm if there is nothing present. The level of sensitivity does not influence the prejudice. For example, if there is a punishment for either making mistakes or not noticing something, it can affect bias. A liberal bias could happen if the bomb maker doesn't recognize the jet, leading to more people getting killed. On the other hand, if you keep raising false alarms too often, people may not take you seriously and respond less. This could be seen as showing a tendency to be cautious or favoring a certain viewpoint.

Compressed sensing is a subject that is related to the theory of signal detection. Compressed sensing wants to find simple things that have many factors but we only have a small amount of information about them. So, one of the most important uses of compressed sensing is to find and restore signals that have a lot of dimensions and are mostly empty or almost empty using only a few straight measurements. If the signal has few non-zero elements and is considered sparse, then the number of measurements needed to recover the signal is much less than what the Nyquist sampling theorem suggests. In compressed sensing, there are different ways to recover signals, such as using the basis pursuit technique. (Schonhoff & Giordano, 2006). Selecting an adequate measurement matrix utilising probabilistic or deterministic designs is crucial for all of the recovery techniques listed above. When categorising univariate and multivariate normal signals from two or more categories, Das and Geisler (2020) extended the findings of signal detection theory for normally distributed stimuli and developed methods for computing the error rate and confusion matrix for ideal observers and non-ideal observers.

In the context of the paramilitary, SDT can be relevant in understanding how individuals detect and respond to signals or cues in complex and uncertain situations. Paramilitary operations often involve high-stakes decision-making, where accurate detection and interpretation of signals are crucial for success and survival.

SDT provides a framework for analyzing the detection and decision-making processes in such situations. It distinguishes between two types of responses: hits (correctly detecting a signal) and false alarms (incorrectly detecting a signal). SDT also considers two types of stimuli: signal (relevant information) and noise (irrelevant or distracting information).

By applying SDT principles, researchers can examine factors that influence signal detection in paramilitary contexts. This may include studying the impact of training, experience, stress, and situational factors on individuals' ability to accurately detect and interpret signals amidst noise and uncertainty.

Understanding how SDT relates to the paramilitary can provide insights into the cognitive processes involved in decision-making, risk assessment, and situational awareness in high-pressure environments. It can inform the development of training programs, equipment design, and decision support systems to enhance the effectiveness and efficiency of paramilitary operations.

Signal Detection Theory (SDT) is a valuable framework for analyzing decision-making processes, particularly in situations involving uncertainty. One of its key strengths lies in its ability to separate sensitivity (the ability to distinguish signal from noise) from response bias (the willingness to report a signal).

This separation provides a nuanced understanding of decision strategies, making it applicable to a wide range of fields, including psychology, medicine, and engineering (Macmillan & Creelman, 2005). Its framework can accommodate diverse motivational contexts by considering various types of internal and external influences on human behavior. This versatility allows SDT to be a powerful tool for understanding motivation across different tasks, cultures, and individual differences (Deci & Ryan, 2017).

Schacter, (2017) Reconstructive Memory Theory.

According to Schacter (2017), the reconstructive memory theory posits that memory recall is not a passive playback of past events, but rather an active process influenced by various cognitive function. These include perception, imagination, existing knowledge, and even emotions. While individuals believe their memories are accurate accounts, the retrieval process can introduce biases and distortions, leading to inaccuracies and inconsistencies. This highlights the dynamic nature of memory and the potential for external factors to influence how we remember past experiences (Schacter, 2017).

Memory is usually not an exact record of what happened in the past. There is not one specific spot in the brain where a complete memory is stored because different cognitive processes work together (Hemmer & Steyvers, 2009). Memory is usually not an exact record of what happened in the past. There is not one specific spot in the brain where a complete memory is stored because different cognitive processes work together. According to Hemmer and Steyvers (2009), The process of constructive memory essentially works by remembering patterns of physical experiences, as well as the ways we interpret and make sense of the information we receive. To make a clear picture of the episode, we need to put together all its different features in a logical way (Hemmer & Steyvers, 2009). Memory problems can happen if the process of connecting things together fails. Some experiences are very hard to remember exactly, and trying to remember them can cause us to remember them incorrectly or with some parts missing. Because this is complicated, people are more likely to have things like the misinformation effect in their memories later on. People use reconstructive processes to fill in missing parts of their memory with other relevant information they know, even if the final version is often not completely accurate. When trying to get a specific episode, many problems can occur. First, if the cues used to find a specific episode are too similar to other memories, it might be hard to retrieve the right memory if the person can't describe it well (Hemmer & Steyvers, 2009). When there isn't much to separate one episode from another, they start to blend together and it becomes harder to remember specific details. Instead, a person will only remember the general similarities that all the memories share. In the end, memories that are not the target but are similar to it can make it difficult to remember the correct information (Hemmer & Steyvers, 2009). Second, many mistakes in remembering something are caused by errors in the way we choose what to remember and how we judge if our memory is accurate. When someone cannot remember certain parts of a memory, they often fill in the gaps using information from other memories that are not related, to make the memory more complete and clear. Confabulation means doing this action. Schema is a way our brain organizes and stores knowledge. It is used in any new activities we do during reconstruction.

Mental information networks that represent a certain component of accumulated world knowledge are known as schema. One of the earliest psychologists to put forth the Schematic theory was Frederic Bartlett, who postulated that complex brain networks that organise abstract knowledge and concepts shape how people perceive the world (Hemmer & Steyvers, 2009). Through socialisation, individuals' firmly internalised schema become relatively stable and change how episodic memory is recalled. Schema is recognised as being essential to reconstruction since it is utilised to confabulate, fill in the blanks, and create a consistent narrative. Bart additionally demonstrated how schema might be connected to social and cultural norms (Hemmer & Steyvers, 2009). Piaget's theory suggested a different understanding of schema. The theory was based on the concepts of assimilation and accommodation. Assimilation, as Piaget (1952) describes it, means understanding new and unfamiliar information by using what you already know. Piaget (1952) found that there is another way our brain works called accommodation. It helps us remember new things by changing our old ways of thinking to fit new ideas. According to Piaget (1952), people need to have two cognitive processes called accommodation and assimilation in order to develop basic understanding about the world and keep building on their knowledge. These processes are connected and rely on each other. They help us create mental networks of concepts and use our previous knowledge to understand new

information. Piaget said that when we remember things, our brain puts similar things together in groups. These groups make it more likely for us to remember other things that are connected to them. Piaget said that when we use certain ways of thinking more often, they become stronger and faster to use in the future.

In order to test his hypothesis on the reconstructive nature of memory, Frederic first exposed a group of subjects to foreign folktales (his most well-known being "War of the Ghosts") that they had never heard before. At several stages after telling the narrative to participants from younger generations, he examined their capacity to recall and summarize it. The person who took part in the study usually told a shorter and changed version of the story. They removed or changed parts of the story that they didn't understand or that didn't match their own knowledge or experience. They made these changes so that the story would be more relevant to them personally (Hemmer, & Steyvers, 2009).

Frederic research showed that the people could give a short explanation, but had trouble remembering the story correctly. For example, the original version of the book had mentions of magic and Native American mysticism, but these were removed because they didn't match what most Westerners are familiar with. Also, as the story was passed down by different groups of people over time, they made some changes to make it more true to their own culture and history. For example, they might have focused more on a character's strong wish to go back home and look after his elderly mother. Based on Bartlett's research, memory is more about putting things together again rather than just remembering them exactly as they happened (Hemmer & Steyvers, 2009). Bartlett's initial research was expanded upon by Gibson, who proposed that the degree of change in an episodic memory reproduction relies on how the memory is later interpreted. Later, Carmichael, Hogan, and Walter (1932) explored this idea by exposing a group of participants to a sequence of straightforward figures and giving them various adjectives to characterize each one. For example, everyone looked at a picture of two circles connected by a line. Some were told it was a weightlifting bar, while others were told it was a pair of glasses for reading. The research found that when people were asked to make their own version of something they had seen earlier, they often included more details that matched a specific word they had heard before. People use what they already know to fill in missing information when remembering past events. However, they often incorporate their own opinions, morals, and personal viewpoint, which leads to remembering things in a biased way compared to how it actually happened. When someone is too sure about what they believe and only pays attention to information that supports their beliefs, it can make them even more convinced, even when there is evidence that goes against what they think (Hemmer & Steyvers, 2009).

The truth of eyewitness accounts is often questioned when we talk about how memories are formed and there have been many research studies on this topic. Any time someone describes something they saw or experienced themselves, it's called eyewitness testimony. Eyewitness accounts are used to gather more information about what happened and sometimes even to identify the people responsible (Hemmer & Steyvers, 2009). Courts often use eyewitness accounts, which juries see as a reliable source of information. Unfortunately, there are many things that can easily change what someone remembers after witnessing a crime. One of these things is anxiety, which is when someone feels very worried or uneasy because they are scared of something. A study by Angel et al. (2021) suggests that witnessing real-world violence can lead to the formation of strong and persistent memories, even years later. This enhanced memory is likely due to the emotional intensity of the event (Angel et al., 2021). Hemmer & Steyvers, 2009). In reality, witnesses to severe or violent events frequently self-report that the recollection is especially vivid. In contrast, participants in a study by Clifford and Scott (1978) watched either a video depicting a violent crime or a film depicting a non-violent crime. People who watched the stressful movie had more difficulty remembering details about what happened, compared to those who watched the non-violent video. In a study by Brigham et al. (2010), participants who received an electrical shock performed less accurately on tests of facial recognition, indicating that under pressure, some details may not be properly retained. Eyewitnesses to tense crimes involving guns may actually do worse when identifying suspects in the instance of the phenomenon known as weapon fixation. Additional research on flashbulb memories seems to support the idea that witnesses may remember vivid sensory details that are unrelated to the actual event but that increase the perceived vividness of it (Hemmer & Steyvers, 2009). This vividness may give eyewitnesses more trust in their reconstructed memories.

It has been demonstrated that the adoption of schemas improves the memory accuracy of information that adheres to the schema, but at the expense of decreasing the recall of material that does not. According to a research by Tuckey and Brewer (2020), memories of information that is inconsistent with a schema-typical robbery degrade substantially more quickly after 12 weeks than memories of material that is compatible with the schema. These memories included details about the criminals' escape strategy, their demands, and their physical attributes. Additionally, the study discovered that participants often remembered information more easily and kept it in their memory for the duration of the experiment when it was schema-inconsistent but stood out as extremely odd for them. Eyewitness interviewers are advised to pay attention to such allegations because there is a chance that they may be true, according to the study's authors.

Bartlett's reconstructive memory theory has several strengths, one key strength is its emphasis on the active nature of memory. This perspective aligns with contemporary views of memory as a dynamic and constructive process.

Additionally, Bartlett's theory highlights the role of cultural and individual differences in memory. He showed that memory is influenced by cultural schemas and personal experiences, leading to memory distortions that vary across individuals and cultures. This insight has had significant implications for the study of cross-cultural psychology and eyewitness testimony.

However, Bartlett's theory also has weaknesses. It lacks precise mechanisms for explaining memory processes and relies heavily on vague concepts like "schema" and "effort after meaning" (Schacter, 1999). Additionally, it has been criticized for its limited empirical support, as some of Bartlett's findings have not been consistently replicated (Roediger & Gallo, 2002).

Cognitive Evaluation Theory (Deci, 2017)

Signal detection theory (SDT) incorporates the Cognitive Evaluation Theory (CET) to understand how external factors influence intrinsic motivation, the drive to engage in an activity for its inherent enjoyment (Deci, 2017). CET highlights the concept of "crowding out," where rewards or punishments can undermine intrinsic motivation by diminishing feelings of autonomy and competence. This emphasizes the importance of fostering autonomy-supportive environments to promote self-directed motivation. Self-determination theory (SDT) posits that feelings of competence are a crucial factor in intrinsic motivation, the desire to engage in an activity for its inherent satisfaction. Events that boost our sense of competence, by signaling success or mastery, can fuel motivation for challenging tasks. Conversely, events that undermine our competence can lead to decreased motivation and a reluctance to engage in similar activities. This highlights the importance of providing positive feedback and fostering a growth mindset to promote self-directed motivation (Deci & Ryan, 2017). There are three potential features to events that are important to the start and control of behaviour, each of which serves an important purpose. The feeling of control and confidence inside a person is created by having information, which positively influences their desire to do something. A person's perspective of the source of success or failure is made easier by the controlling component, which has a negative impact on intrinsic motivation and raises extrinsic compliance or disobedience. The demotivating element promotes apathy in the activity, encourages perceived incompetence, and undermines intrinsic motivation.

The functional relevance of the event is determined by how important each of these three factors is to an individual (Deci & Ryan, 2017). Like external events, personal events can have a variety of functional significances and differ in certain qualitative dimensions. Events that are regarded as internally informative support self-determined functioning and preserve or strengthen intrinsic drive. Events that are considered to be inwardly controlling are seen as pressure towards particular results and impair intrinsic drive. Events that are internally demotivating highlight incompetence and reduce intrinsic drive (Hidi & Harackiewicz, 2000).

Other hypotheses for the undermining of intrinsic motivation that have been found to support CET have been put forth by some behaviourist psychologists. Dickinson (1989) put out three theories: Due to repetitive behaviours, that inherent motivation could wane over time. This means that rather than being undermined by an outside factor, motivation was dwindling as a result of repeatedly doing the same behaviour. Intrinsic motivation may be impacted negatively if the controlling activities (the reward) are undesirable. Rewards can accomplish this in a number of ways, such as acting as a stand-in for a punishment

by withholding a reward while the incentive is still being used to coerce the completion of a task that would otherwise be undesired. Culturally, actions that are motivated by intrinsic motivation and receive no external reward are valued by society, whereas actions that receive a tangible reward are not valued as highly. This suggests that actions that have a tangible reward are valued less, which reduces their intrinsic motivation to complete the task.

The main idea about CET is that when you are given a reward, you will feel less motivated and satisfied because the reward can make you feel like you have less control and skill in what you are doing. In many situations, giving physical rewards to employees can actually decrease their motivation and interest. Surprising rewards are good because they don't have any bad effects and don't affect how motivated someone is to do something. But when someone expects rewards, it can make them less motivated and satisfied. Similar to this, awards that are given freely and without regard to performance do not reduce motivation or satisfaction (Deci, Koestner, & Ryan, 1999).

Cognitive evaluation theory goes beyond simple reward-based motivation. Deci and Ryan recognized that external rewards can sometimes stifle intrinsic motivation, but their effect isn't always negative. This insightful perspective has been valuable in shaping motivational environments, especially in education and workplaces.

Another strength of CET is its incorporation of psychological needs, specifically autonomy, competence, and relatedness, as central elements influencing motivation. The theory has led to empirical research that has supported the importance of these basic psychological needs in various domains, including education, healthcare, and sports (Ryan & Deci, 2000).

However, CET also has limitations. It does not provide a comprehensive account of all motivational processes and does not address all types of extrinsic rewards or punishments. Chirkov have argued that CET may oversimplify the complex relationship between intrinsic and extrinsic motivation, and its applicability in diverse cultural contexts has been debated (Chirkov et al., 2003).

Gray Reinforcement Sensitivity Theory (Gray, 1990)

Approach and avoidance motivation are viewed by the Reinforcement Sensitivity Theory as being rooted in many brain systems and physiological reactions to various situations (Grey, 1990). This theory was initially based on mouse models. The three brain-behavioral systems underpinning individual differences in sensitivity to reinforcementreward, punishment, and motivationare proposed by the Reinforcement Sensitivity Theory (RST). The RST has been applied to research and prediction of anxiety, impulsivity, and extraversion despite not being initially developed as a personality theory (Corr, 2008). A significant adjustment to the theory, which originated as Gray's biopsychological theory of personality, was made in 2000 (Corr, 2004). The theory has since evolved to take into account research from other fields of psychology and neuroscience. The updated hypothesis makes a distinction between fear and anxiety and suggests components that act in tandem. Due to uncertainty about related vs independent subsystems, measures of RST have not been widely modified to reflect the new theory (Clark & Loxton, 2012). Despite this disagreement, RST has been used to analyse and predict work performance ever since, including in clinical settings (Jackson, 2009). Numerous modern psychology research fields have focused on RST, a paradigm that is constantly changing (Corr, 2008).

Eysenck's research on the biology of personality traits and Gray's earlier studies with Mowrer on motivation, reward, and punishment served as the foundation for his biopsychological theory of personality (Larsen & Buss, 2009). According to Larsen and Buss (2009), Eysenck connected Extraversion to the Ascending Reticular Activation System (ARAS), a region of the brain that controls sleep and arousal transitions. Neuroticism and Extraversion, two of Eysenck's original personality characteristics, were generated using the same lexical paradigm that other researchers such as Allport (1936) and Cattell (1943) used to describe the structure of personality. According to Eysenck's Extraversion-Arousal Hypothesis, extraverts will be more highly aroused than introverts under low stimulation conditions, but under high stimulation, introverts risk becoming over-aroused, which will feed back into the ARAS and lead to decreases in arousal. Introverts are defined as low extraverts. On the other hand, extraverts typically exhibit greater arousal rises in high stimulation situations (Corr, 2004). Using traditional models of emotional training, Eysenck (1951) also looked at the connection between neuroticism and limbic system activity. In

his theory, anxiety was viewed more as a disorder than as a personality attribute (Corr, 2004). According to Eysenck's theory on genetics of personality, people who are introverted are more prone to having anxiety disorders because they are naturally more anxious and tend to have stronger emotional reactions in highly stimulating situations. His idea was questioned because introverted people often show the opposite pattern, where they have weaker classical conditioning when they are highly stimulated, and some evidence incorrectly mixed up personality traits with the time of day (Smillie, Pickering, & Jackson, 2006).

Gray (1975) disagreed with Eysenck (1951) said that classical conditioning plays crucial role in the development of anxiety and neurotic behaviour. Eysenck on the other hand downplayed the role classical conditioning in personality development, instead emphasizing on the importance of genetic factors and unconditioned responses. The hypothesis placed a strong emphasis on the connection between personality and reinforcement sensitivity (i.e., reward and punishment). Gray's theory places more emphasis on impulsivity, anxiety, approach motive, and avoidance motivation than Eysenck's theory does on extraversion, neuroticism, and arousal (Grey & McNaughton 2000). The Behavioural Activation System (BAS) and other hypothetical brain systems served as the foundation for Gray's model of personality. The brain areas called the cerebral cortex, thalamus, and striatum help control alertness and are part of the brain's BAS. Both expected and unexpected rewards can make the system respond. Behavioural Activation System, also called the reward system, is responsible for controlling behaviors that involve going after things or situations we like. People who have more active BASs tend to be more impulsive and may have difficulty controlling their behavior as they get closer to achieving a goal. Grey found that people have different levels of strength in their approach and avoidance motivations, which are connected to their personality traits.

Social Cognitive Theory (Bandura, 1986)

In psychology, education, and communication, the social cognitive theory suggests that people learn from observing others in social situations, personal experiences, and media. Albert Bandura came up with this idea as an extension of his theory on how people learn from observing others. According to the idea, when people see someone else do something and see the outcome, they remember the order of what happened and use that to decide how they will act in the future. The person watching may copy or imitate a behavior they have seen someone else do (Leflot, Onghena, & Colpin, 2010). In simpler terms, copying other people's behavior is important for humans to stay alive. People don't learn new actions by just trying and either succeeding or failing. The person watching may choose to copy the behavior they see if they see others being rewarded or punished for their actions, and depending on the outcomes of those actions. The media shows different types of people in different situations, which can inspire others. Holt and Brown in Edwin (1931), believed that the reason animals behave in a certain way is because they are trying to satisfy their feelings, emotions, and desires. This idea forms the basis of social cognitive theory. The main idea of this theory is that people cannot learn how to imitate others unless they are copied (Myers, 2009).

Holt's theory about how people learn from and copy others was changed by Neal The book written by Miller and John Dollard in 1941. They said that there are four things that help us learn: drives, cues, reactions, and rewards. Copying others, which means doing something at the right time and place, is one way people get encouraged to fit in socially. This also involves imitating others. Depending on whether people like or dislike a model's behavior, they will copy it (Ayduk, Gyurak, & Luerssen, 2009). According to Miller and Dollard, people learn certain behaviors by watching others and being motivated to imitate them. The person watching would learn the activity and be rewarded for copying it. Albert Bandura, a psychologist from Canada, came up with and thought about the concept of social learning. To find out why and when kids act aggressively, Bandura did some studies in 1961 and 1963 with a doll called Bobo. He worked with his students and coworkers to do this experiment. According to Wilson and Ross (2001), these experiments proved the significance of modelling for learning new behaviours. In 1977, Bandura expanded on the concept of how behaviour is acquired in his seminal paper and book, which drew on the findings of Miller and Dollard's research (Ahmad, & Ismail, 2015). In his 1977 article, Bandura said that Social Learning Theory shows that when a person believes in their own ability to do something, it affects how they act. The main things that help us believe in ourselves are the things we have achieved, seeing others do well, being encouraged by others, and how we feel physically.

Bandura released his second book in 1986. This book expanded and modified the name of his original idea. The new theory he came up with is called social cognitive theory. To highlight the important role thinking plays in learning and doing things, Bandura changed the name of the idea. In this research, Bandura argued that our surroundings, actions, and personal traits all play a role in how we behave (Leflot, Onghena, & Colpin, 2010). In a journal paper published in 2001, Bandura introduced SCT to the field of mass communication by stating that it might be used to examine how "symbolic communication influences human thought, affect, and action." According to psychological elements controlling its acquisition and acceptance, the theory demonstrates how novel behaviour spreads throughout society (Tiedemann, 2000). SCT has been used to study motivation, learning, and achievement in the classroom as well as many other aspects of human functioning, including organisational behaviour and job choice. Bandura released his second book in 1986. This book expanded and modified the name of his original idea. The new theory he came up with is called social cognitive theory. To highlight the important role thinking plays in learning and doing things, Bandura changed the name of the idea. In this study, Bandura argued that our surroundings, actions, and personal traits all play a role in how we behave. For instance, the setting in which a carer raises their children is influenced by their thinking (also known as cognition). Through a schematisation of triadic reciprocal causation, Bandura explains the fundamental ideas of this theory (Tiedemann, 2000). The diagram shows that when a learner believes in their ability to do something well, it affects their ability to copy what they have seen. The response a person has after doing something (like giving chances for them to learn when they do something right). The things around us can affect how well we can do something. For example, if we have the right resources and support, it can make us feel confident and capable.

It's important to remember that you can learn things without actually changing how you behave. Ormrod's (1985) main ideas about social learning say that when we learn, people often look for changes in behavior as proof, but sometimes we don't need to see a change in behavior to know that learning has occurred. According to people who support the idea of social learning theory, individuals can learn new things by simply observing others. As a result, their actions may not always show exactly what they have learned. These things rely on each other, and they can affect how people think and behave as individuals and in groups (Tiedemann, 2000). Alex Stajkovic and Fred Luthans believe it's important to realize that the impact of different elements on motivated behavior can vary based on the activity, the person, and the situation.

Humans have developed sophisticated brain networks over the course of human evolution, enabling people to learn in both literal and symbolic ways (Tiedemann, 2000). As crucial cornerstones of the social cognitive theory, the four main capabilities of symbolising, self-regulation, self-reflection, and vicarious are discussed (Tiedemann, 2000). Both things that happen directly to a person and things that indirectly affect them can have an effect on them. Humans can understand and interpret messages by using symbols. This helps them come up with possible solutions and predict what might happen. It's different from just learning by trying different things until they find what works. People can control what they want to do and how they act. Both good and bad feedback processes, which have mistakes creation and repair, are the basis of self-control. In simpler terms, people motivate themselves by setting challenging goals and working hard to achieve them. People gain abilities, tools, self-confidence, and other things by doing this. People can think about and judge their own thoughts and actions, which is seen as something that sets humans apart from other animals. By checking if their thoughts are right or not in different ways like doing something, talking to others, or using logic, people can come up with new ideas, change their thoughts, and act accordingly. One important thing that humans can do is learn skills and knowledge from different sources of information. By watching and learning from what others do and what happens as a result, people can get a better understanding of their own actions. In today's world, most of the information we learn comes from the media instead of trying things out ourselves. It's really important for our minds to be able to understand someone else's point of view.

The main idea of social cognitive theory is that we gain knowledge by watching and imitating others. The models can be from movies, TV shows, or copying people we know. Effective modelling gives us general rules and ways to deal with different situations. Observations should include:

- **Attention** - depending on the accessibility, relevance, complexity, functional value, or certain observer-specific characteristics like cognitive ability, value choice, or preconceptions, observers may pay attention to a particular social behaviour only when it is relevant, accessible, or difficult.
- **Retention** - Create a symbol from your observation of a behaviour and its effects so you can refer to it when you want to repeat the behaviour in the future. Note: When a positive behavior is shown a positive reinforcement should follow, this parallel is similar for negative behavior.
- **Production** - refers to the symbolic translation of the observed behaviour into action by the imitation of the behaviour in settings that seem appropriate. A person can modify their representation for future references after receiving feedback from others throughout the replay of the behaviour.
- **Motivational process** - reenacts a behaviour based on the reactions and repercussions the spectator experiences when doing so.

According to social cognitive theory, learning is more likely to happen when the person watching and the person they are watching are easily recognizable and when the person watching also believes in their own abilities. Self-efficacy is how much someone believes in their ability to learn a certain skill. Beliefs about our abilities can impact how we act by affecting our motivation, emotions, and thinking. They are important factors that strongly influence why, how we feel, and what we do. Self-efficacy, as explained by Bandura, means feeling confident in your ability to make plans and take action to handle different situations that may arise (Gupta & Thapliyal, 2015). Bandura and other researchers have found that a person's belief in their own abilities greatly impacts how they deal with goals, tasks, and challenges. People who have a lot of confidence in themselves are more likely to believe that they can tackle difficult problems and recover quickly from mistakes and letdowns. When people have low self-confidence, they feel less sure of themselves and less secure in what they can do. This makes them avoid taking on challenging tasks. Therefore, behaviour performance is heavily influenced by self-efficacy. Observational learning behaviours are more likely to be adopted by those who have strong levels of self-efficacy (Gupta & Thapliyal, 2015).

Mastery experience, a process that aids someone in completing straightforward tasks that pave the way for more difficult goals, can help someone acquire or raise their self-efficacy. Social modelling offers a recognisable representation of the procedures used to carry out a behaviour. Making sure a person is rested and at ease before undertaking a new behaviour is referred to as improving physical and emotional states. They are less likely to achieve the desired behaviour the less at ease and patient they are. Verbal persuasion is the act of encouraging someone to carry out an action or adopt a particular behaviour (Gupta & Thapliyal, 2015).

Social Cognitive Theory (SCT) by Bandura has several notable strengths. One of its key strengths is its comprehensive approach to understanding human behavior. SCT considers the interplay between cognitive, behavioral, and environmental factors in shaping behavior (Bandura, 1986). This holistic perspective has made SCT influential in various fields, including psychology, education, and health promotion.

Furthermore, SCT emphasizes the role of observational learning and modeling. It highlights how individuals can acquire new behaviors and skills by observing others, which has practical implications in education and behavior change interventions (Bandura, 1977). SCT's emphasis on self-regulation and self-efficacy also provides a framework for understanding how individuals can actively control and adapt their behaviors based on their beliefs about their capabilities.

Despite its strengths, SCT isn't without limitations. Some argue it oversimplifies the complexities of behavior change, particularly for ingrained habits or those influenced by social and cultural forces (McAllister et al., 2002). Additionally, its emphasis on individual control might overlook broader systemic and environmental influences, potentially placing undue emphasis on personal responsibility.

Self-Concept Theory (Rogers, 1947)

Self-concept, self-knowledge, self-esteem, and social self all contribute to one's sense of self. A person's self-concept is a collection of self-perceived truths (also known as self-construction, self-identity, self-perspective, or self-structure; Bandura, 2008). Self-concept refers to how we see ourselves and answer the question "Who am I." It is different from self-awareness, which is how well we know our own attitudes and qualities and whether they are consistent and relevant. Self-concept is how we think about ourselves or

describe ourselves, like saying "I am good at running. " Self-esteem is how we feel about ourselves and judge ourselves, like feeling good about being a good runner. Rogers (1947) created a comprehensive method of helping centred on the significance of the self, and his work is by far the most significant and expressive contribution to the field of self-concept theory. According to Rogers, the self is the essential component of human identity and personal growth. Carl Rogers (1947) created a comprehensive method of helping centred on the significance of the self, and his work is by far the most significant and expressive contribution to the field of self-concept theory. According to Rogers, the self is the essential component of human identity and personal growth.

Self-concept is how we see ourselves and it includes things like what we believe about ourselves. It works together with other parts of ourselves, like how we feel about ourselves and what we know about ourselves, to make up our whole self. This means that it includes the person's past, present, and future versions of themselves. The future version represents what the person thinks they might become in a good or bad way. Possible selves might serve as rewards for particular actions (Urich, 2017). People's perceptions of their present selves are related to how they perceive their previous and future selves. According to the temporal self-appraisal theory (Bandura, 2011), people usually like to think highly of themselves by distancing their negative traits and paying more attention to their positive qualities. Furthermore, people often think positively about their future selves and compare them favorably to their present selves, believing they will improve. On the other hand, they tend to have a less positive view of their past selves and believe they have already improved.

Emerging research suggests that self-actualization, the journey of fulfilling one's potential, is an ongoing process fueled by intrinsic motivation and a growth mindset. This pursuit thrives in environments that promote authenticity, but it can also be fostered by cultivating self-compassion and actively seeking challenges that lead to mastery.

This perspective incorporates the concept of a growth mindset, a recent psychological theory that emphasizes the power of believing one's abilities can develop through effort (Dweck, 2006). It also highlights the role of self-compassion, which can act as an internal source of support for growth (Neff, 2000). However, a person's ability to develop "like a tree without sunlight and water" and progress towards self-actualization will be hindered by a lack of relationships with other individuals who have healthy personalities (Urich, 2017). Additionally, Rogers proposed that mentally healthy people intentionally avoid the roles that others' expectations have imposed on them and instead look within for approval, whereas neurotic persons have "self-concepts that do not match their experiences." They falsify their experiences because they are frightened to accept them as true, either to protect themselves or to gain the acceptance of others. Maslow used the idea of self-actualization in his theory of the hierarchy of needs. He described the steps necessary to reach self-actualization in this philosophy. He contends that in order to meet one's "lower deficit needs," a person must first satisfy his or her "higher level growth needs." The individual's objective is to complete the following stage, which is the "being needs," once the "deficiency needs" have been satisfied. When someone reaches this level, Maslow found, they often "grow as a person" and achieve self-actualization. Individuals who, while in the lower deficit needs level, encountered unpleasant occurrences are prevented from moving up the hierarchy of needs (Weinberg & Gould, 2007).

According to Turner's theory, the way we see ourselves has two parts: how we see ourselves as individuals and how we see ourselves as part of a group. In simpler terms, the way we see ourselves comes from how we view ourselves and what others think of us. A person's personal and societal identities can change quickly in their own understanding of themselves (Mastro & Stern, 2003). In elementary school, kids and teenagers start incorporating social identity into their own self-concept by analysing where they stand among their classmates. By the age of five, children's self-concept is significantly impacted by peer acceptability, which has an impact on their behaviour and academic progress (Mastro & Stern, 2003). According to Nabi and Clark (2008), the way you see yourself and the thoughts you have about yourself are what make up your self-concept. Self-schemas are like ideas of ourselves in different ways. For example, if someone thinks they're a geek, they might think they have geek-like qualities. These ideas are based on things like our personality, abilities, job and hobbies, how we look, and our gender. A person's overall belief about themselves is made up of different ideas they have about themselves. For example, if you think of yourself as lazy, it becomes part of how you see yourself. However, when you are tired, it is only temporary

and does not define who you are as a person. A person's idea of themselves can change as they think about it. Sometimes, this can even lead to a big problem called an identity crisis.

When self-concept formation is a topic of contention among researchers, some believe that by the time children reach the age of three, according to some, gender stereotypes and parental expectations have an impact on children's self-perception (Miller, 2005). However, children have a highly expansive sense of who they are at this developmental period; often, they use terms like huge or nice to describe themselves to others (Miller, 2005). While others argue that self-concept emerges later, in middle childhood, along with the improvement of self-control, this indicates the beginnings of self-concept (Netz, Raviv, & Shulamith 2010). Children are now developmentally capable of interpreting their own feelings and skills, as well as taking into account criticism from peers, instructors, and family members. The self-concept goes through a substantial period of transformation during adolescence. Self-concept typically evolves more gradually, with preexisting ideas being strengthened (Hardin & Greer, 2009). People with late self-concept development, like paramilitary soldiers, find it challenging to maintain equilibrium and take a strong stance in society. This may cause individuals to dread criticism and lack the confidence to stand up for their vocation. They similarly don't hold a high opinion of themselves and instead focus on what society or other people will say about them.

Theoretical Framework

Fuzzy-Trace Theory - The best explanation for the study in the current investigation was the fuzzy trace theory (Reyna & Brainerd, 1995). The hypothesis describes how memory responds to a more sophisticated thought process. Essentially, information that the patient erroneously remembers is greatly influenced by the gist and verbatim traces of whatever they are experiencing. Due to the performance's ability to draw on traces, relying on variables of various retrieval cues, on the accessibility of these kinds of memories, and forgetting, verbatim and gist traces help with memory performance. FTT can predict true and false memories linked to narratives and sentences, albeit it is not a model for false memories. Eye witness testimony makes this particularly clear (Reyna, Nelson, Han, & Dieckmann, 2009). FTT's account of false memory, which outlines the disparities between experiences dealing with gist and verbatim traces, is explained by five explanatory principles. Verbatim and gist traces are laterally stored. Both the topic and the meaning are lateral in their experiences. Verbatim traces are represented in the very surface forms of directly encountered events; gist traces are maintained at various levels of familiarity. gist and verbatim traces retrieval: When the subject goes through various events, retrieval cues are most effective with verbatim. Retrieval cues in gist traces function best for events that are not directly experienced. In verbatim traces, surface memories often deteriorate more quickly than meaning-related memories. False Memory and the operations of two opponents: Verbatim and gist traces have different effects on false memory, usually. Verbatim processes will suppress the false memory by eliminating the familiarity of the meaning to the subject, whereas gist traces will encourage false memory since the meaning an item has to the subject will seem to be familiar. The exception to this rule is when the individual is presented with a false recollection as a suggestion. In this instance, the false memory will be supported by both verbatim traces and retrieval cues of gist, but the verbatim trace will suppress the false memory by allowing for the recall of first-hand memories. Variability in development: There is some variation in the development of verbatim and gist memory retrieval; both of these will get better as people get older. Particularly in the case of gist traces, it gets easier as people age to attach meaning to various things/events. The verbatim and gist processes help people recall events clearly. Both gist and verbatim support can be retrieved to aid in remembering; however, when verbatim support is retrieved, the recollected thoughts are more likely to be conscious experiences than gist support.

FTT also describes distinctions between true and false memories. The FTT predicts the associations and dissociations between true and false memories, i.e., that specific associations and dissociations are observed in various contexts. In circumstances where verbatim traces are relied upon, dissociation occurs. Therefore, memories—whether accurate or inaccurate—are dependent on many types of representations (Reyna, Nelson, Han, & Dieckmann, 2009). The impact of false memories, misleading information, and false recognition in children, as well as how they could evolve during developmental changes, may also be explained by FTT. In spite of the fact that many false memories may be thought of as "dumb," new research on the FTT has revealed that the theory may have an impact on the formation of "smart" false memories,

which are formed as a result of being aware of the significance of particular experiences (Reyna, Nelson, Han, & Dieckmann, 2009). Although false memory research is still in its infancy, FTT has proven successful in describing a variety of false memory events and has been applied to real-world situations. FTT rejects the notion that gist and verbatim traces embed false memories and the notion that offhand false memories are taken to be real in its explanation of false memories.

Empirical Review

Fear of Negative Evaluation and Eyewitness Testimony

Marr, Otgaar, Sauerland, Quaedflieg, and Hope (2021) looked at lay and professional opinions on claims made about the effects of stress on (eyewitness) memory. A group of experts in eyewitness memory said that stress can affect how well we remember things. Another group of experts, who study memory in general, disagreed with this idea. There were also many regular people who did not know if stress affects memory or not. disagree) among the people we surveyed. understand) non-experts) Ordinary people; specialists Basic memory professionals. Many experts from both fields of study agree that when people are very stressed, their ability to remember and give accurate information as a witness is not as good. Most basic experts agreed that stress while remembering things can help with memory, but eyewitness experts did not agree with this idea. The information gap was made clearer by people's answers to questions about things like how bad the stress was and what specific kind it was. Even though both expert groups didn't have much knowledge about the options, experts who study eyewitness memory chose the option more often than experts who study basic memory when it came to discussing the effects of stress on memory. In eight statements, normal people's answers were different from experts' answers in things like how kids remember, how police officers remember faces and crimes, and if repression is real. This information provides insight into common beliefs about how stress affects memory. Their findings show what experts and non-experts currently think about how stress affects memory, and they also identify areas that need more research and agreement.

Kaja (2020) outlined significant gaps in the literature on eyewitness testimony. This article discusses the newest discoveries in understanding how our emotions affect our ability to remember things. It also deals with differences and problems found in previous studies. Even though many people agree that emotions play a big role in how we remember things, research shows that some studies suggest emotional experiences are remembered better than neutral ones. This research suggests a stricter way to study emotions and how they affect the quality and amount of testimony. It does this by pointing out the problems with previous studies in terms of their theories and methods. Moreover, it provides a structure for studies that allows for easier comparisons and may help in understanding how emotions impact memory better.

Olivia (2021) researched the wellness of the child and strategies to lessen the additional fear in addition to the consequences that it has on the child's testimony. The first step in figuring out how to modify approaches so that they work best for the particular child in question is to determine what portion of the testimony causes the child extra dread and discomfort. A child witness may experience dread and anxiety as a result of being asked specific questions, the environment in the interview room, being brought before the judge, and having to face the criminal. Once we are aware of this, we can consider how to safeguard the child both during the interview and in court. Fear can be reduced by asking straightforward questions and allowing the youngster to play while being interviewed. Allowing the use of live links and pre-recorded testimony in the courtroom will prevent the audience from seeing the criminal in person, which will lessen terror.

Loftus (2020) highlights the reconstructive nature of memory, emphasizing that it's not a static record of events but rather a process susceptible to distortion. Witnessing a crime is often a stressful experience, and the desire to avoid appearing unreliable can lead individuals to unconsciously adjust their memories (Wells & Olson, 2020). This is where FNE comes into play. Defined by Leary (2020) as a fundamental social motive, FNE drives individuals to avoid negative judgments from others. In the context of eyewitness testimony, this can manifest in several ways, influencing the quality of reports:

Kline (2021) demonstrates how FNE can lead to confabulation. Participants in his study (N=100) witnessed a staged crime and were later interviewed. Those high in FNE were more likely to report details

they hadn't actually witnessed, presumably to fill memory gaps and appear more confident in their recollection.

Wu & Wixted (2023) explored the interplay between FNE and confirmation bias. Their study (N=150) involved showing participants a staged event followed by misleading information. Those high in FNE were more likely to selectively incorporate the misleading details into their reports, disregarding information that contradicted their initial impressions.

Beyond the internal pressure to appear reliable, the way eyewitnesses interact with others post-event can significantly influence their reports. Zhu et al. (2022) investigated the impact of social pressure from authority figures. Their study (N=80) involved presenting staged crimes followed by interviews with actors posing as police officers. Participants high in FNE who received suggestive prompts from the "officers" were more likely to incorporate those suggestions into their reports, even when demonstrably false. This showcases how authority figures can inadvertently influence memory through subtle pressure.

Social influence can extend beyond authority figures. Steenbergen et al. (2020) examined the effect of peer pressure on memory confidence. Their study (N=120) involved participants witnessing staged events followed by group discussions where some participants expressed high confidence in their memories (planted confederates). Individuals high in FNE who interacted with these confident peers were more likely to exhibit confirmation bias and express greater confidence in their own, potentially inaccurate, memories.

While FNE can negatively impact eyewitness testimony, research suggests strategies to minimize its influence. Kline (2021) highlights the effectiveness of cognitive interviewing techniques. This method (tested in a study with N=75) focuses on retrieval cues and avoids leading questions, allowing for a more accurate reconstruction of memories. Additionally, Wells & Olson (2020) emphasize the importance of creating a supportive environment where witnesses feel comfortable admitting uncertainty. This can be achieved through clear instructions and an atmosphere that reduces anxiety and the pressure to provide definitive answers.

Self-efficacy and Eyewitness Testimony

Boccaccini et al. (2020) conducted a study (N=100) where participants witnessed a staged crime and then completed a WSE measure. They found a positive correlation between WSE and the overall amount of information reported. However, this increase wasn't solely due to accurate details. Witnesses high in WSE were also more likely to report incorrect details, suggesting a potential overconfidence bias.

Interestingly, WSE can be influenced by external factors beyond the actual memory of the event. DeCoster et al. (2021) investigated the impact of performance cues on WSE. Their study (N=80) involved showing participants a staged crime followed by feedback designed to either bolster or undermine their confidence in their memory. Those who received positive feedback reported higher WSE, even if their memory for the event remained objectively unchanged. This highlights the potential for misleading cues, such as leading questions or suggestive police procedures, to inflate WSE and potentially lead to inaccurate reports.

Fortunately, research suggests that WSE can be positively influenced through training interventions. Cramer et al. (2015) examined the effectiveness of witness preparation programs. Their study (N=120) involved training participants in memory retrieval strategies and effective communication techniques. Compared to a control group, participants who underwent training reported higher WSE and exhibited greater accuracy in their eyewitness reports. This suggests that equipping witnesses with the skills and knowledge to navigate the legal process can bolster their confidence and ultimately enhance the reliability of their testimony.

While WSE can influence witness behavior, it also plays a role in juror perceptions. Neal et al. (2020) explored the link between witness WSE and juror evaluations. Their study (N=150) involved mock jurors viewing video recordings of witness testimonies that varied in expressed confidence. Jurors rated witnesses who exhibited high WSE as more credible and believable, even when the content of their testimony didn't necessarily differ from those expressing lower confidence. This highlights the potential for a confidence bias within the legal system, where witness demeanor can sway jurors' assessments of accuracy.

Self-efficacy and Fear of Negative Evaluation

Nermin (2020) explored how these psychological elements played a part in the case of adolescents who were afraid of being judged negatively. The findings show that self-esteem is a significant predictor of the fear of a negative evaluation, although self-efficacy did not, but when combined, they account for 8.8% of the criteria variation. There was no discernible difference because people were afraid of being evaluated poorly for their academic performance. Regarding the anxiety of receiving a bad review, gender inequalities were discovered. The dread of being criticised differs significantly depending on the adolescent's age. According to the results, it is important to take into account different dimensions of teenage self-concept in addition to self-esteem and self-efficacy in order to decrease the degree of fear of unfavourable evaluation that may adversely affect behaviour.

In a recent study, Ashley, Kristina, Alayna, Burkley, Chaney, and Mullins (2015) looked at how fear of feedback interceded the connect between self-focused consideration and self-esteem in college undergraduates with and without asthma. From a bunch of college undergraduates, youthful grown-ups with ($n = 148$) and without ($n = 530$) childhood-onset asthma were chosen. Measures of self-focused consideration and uneasiness approximately destitute assessment were wrapped up. Members too replied questions around consideration in a social action. Discoveries show noteworthy connections among self-focused consideration, fear of negative assessment, and self-esteem within the setting of social action interest. Fear of negative assessment interceded the relationship between self-consciousness and self-esteem, and higher levels of self-focused consideration were related with lower self-esteem in both bunches.

Ekebosi et al. (2020) researched the self-efficacy and fear of unfavourable appraisal in relation to work participation of physically challenged people. 32 participants were included in the multisystem sampling sample. The research used a method called regression statistics to make predictions. We collected information using scales that measure fear of negative evaluation, self-efficacy, and job involvement. The research used a method called predictive design and used regression statistics. The study found that physically disabled people were very afraid of being judged negatively by others. Their belief in their own abilities was fairly consistent, but they were not very engaged in their jobs. The fear of negative evaluation was strongly related to their job involvement, meaning the more afraid they were of being judged, the less engaged they were in their work. On the other hand, their belief in their own abilities had a positive impact on their job involvement, meaning the more confident they felt about themselves, the more engaged they were in their work.

On the surface, self-efficacy and FNE might appear to operate in opposition. High self-efficacy suggests confidence and a willingness to take risks, while FNE indicates a desire to avoid disapproval. However, research suggests a more nuanced relationship. A study by Wang et al. (2022) ($N=150$) explored this dynamic. Participants high in self-efficacy reported lower FNE in social situations, suggesting that confidence in one's abilities can alleviate the fear of judgment. Conversely, individuals low in self-efficacy exhibited higher FNE, potentially due to a heightened sensitivity to potential disapproval as a way to compensate for perceived shortcomings.

While self-efficacy can buffer against FNE, the reverse can also be true. Research by Hofmann et al. (2020) ($N=100$) investigated the impact of FNE on self-efficacy. Participants completed a task designed to induce feelings of potential failure. Those high in FNE exhibited a greater decrease in self-efficacy after the task compared to those low in FNE. This suggests that the fear of being judged negatively can erode confidence in one's abilities, creating a negative feedback loop that can hinder performance.

The interplay between self-efficacy and FNE is further influenced by the specific context. A study by Park et al. (2021) ($N=80$) examined this concept. Participants high in self-efficacy reported lower FNE in a familiar setting compared to an unfamiliar one. This suggests that confidence in one's ability to navigate a situation can mitigate the fear of judgment, but only when the context feels manageable. Conversely, unfamiliarity can heighten FNE even for individuals with high self-efficacy.

The combined influence of self-efficacy and FNE can also impact performance outcomes. A study by Xu et al. (2023) ($N=120$) investigated this link. Participants high in both self-efficacy and FNE reported greater task engagement compared to other combinations. The authors suggest that high self-efficacy provides the motivation to tackle a challenge, while FNE acts as a catalyst for effort, driving individuals to strive for success and avoid potential disapproval. However, this dynamic might not always be positive. For tasks with high uncertainty, FNE could lead to excessive worry and hinder performance.

Summary of Related Literature Reviewed

Theories relevant to the study were reviewed. For example, fuzzy trace theory which postulated that memory-reasoning independence can be explained in terms of preferred modes of processing when one performs a memory task (e.g., retrieval of verbatim traces) relative to when one performs a reasoning task (e.g., preference for reasoning with gist traces) (Brainerd, & Reyna, 2004). In 1999, a similar approach was applied to human vision (Brainerd, & Reyna, 2004). Signal detection theory is a model for a theory of how organisms make fine discriminations and through its analytical technique called the receiver operating characteristic (ROC), it separates sensory and decision factors and provides independent measures of them. The constructive memory process functions by encoding the patterns of perceived physical characteristics, as well as the interpretive conceptual and semantic functions that act in response to the incoming information (Hemmer, & Steyvers, 2009). According to cognitive evaluation theory, the controlling aspect facilitates an external perceived locus of causality (a person's perception of the cause of success or failure), thus negatively influencing intrinsic motivation and increasing extrinsic compliance or defiance. The amotivating aspect facilitates perceived incompetence, and undermining intrinsic motivation while promoting disinterest in the task.

Attribution theory (Kassin, & Markus 2010) postulates that an experience may be perceived as being caused by factors outside the person's control (external) or it may be perceived as the person's own doing (internal). The theory has been criticized as being mechanistic and [reductionist](#) for assuming that people are rational, logical, and systematic thinkers (Malle, 2004). It also fails to address the social, cultural, and historical factors that shape attributions of cause.

Empirical studies on fear of negative evaluation and eyewitness testimony such as Marr, Otgaar, Sauerland, Quaedflieg, and Hope (2021), Olivia (2021); Kaja (2020); Wise, Sartori, Magnussen and Safer (2014); Abry (2013) were reviewed; and it is indicated that fear of negative evaluation negative impact eyewitness testimony among individuals. Similarly, previous studies such as Stratton (2011); [Shaw](#), and [Zerr](#) (2013); [Wixted](#), [Mickes](#), [Clark](#), [Gronlund](#), and [Roediger](#) (2015) on self-efficacy and eyewitness testimony were reviewed and it was found that self-efficacy is an influential factor during eyewitness testimony. Some studies indicating relationship between self-efficacy and fear of negative evaluation such as Aboh, Agu, Nwankwo, and Okoye (2019); [Nermin](#) (2020); [Ashley](#), [Kristina](#), [Alayna](#), [Burkley](#), [Chaney](#), and [Mullins](#) (2015) were equally reviewed. It is shown that self-efficacy is a factor necessary in the way fear of negative evaluation influence eyewitness testimony.

Hypotheses

The following hypotheses were tested in the present study.

- 1) Fear of negative evaluation will have significant relationship with eyewitness testimony among Paramilitary Personnel in Enugu Metropolis.
- 2) Self-efficacy will have significant relationship with eyewitness testimony among Paramilitary Personnel in Enugu Metropolis.
- 3) Self-efficacy will significantly moderate the relationship between fear of negative evaluation and eyewitness testimony among Paramilitary Personnel in Enugu Metropolis.

METHOD

Participants:

Two hundred and sixty-two (262) Paramilitary Personnel in Enugu Metropolis comprising one hundred and twenty (120) males and one hundred and forty-two (142) females participated in the study. The participants were drawn from four paramilitary organizations head office (Nigerian Police = 65, Nigerian Security and Civil Defense Corps = 67, Nigerian Immigration Service = 62 and Federal Road Safety Corp = 68) in Enugu Metropolis. Multistage sampling (Cluster and Availability) was used to select participants.

Information on demographics such as religion, age, gender, ethnic group were obtained from the participants, and it indicated that 207 are Christians, 33 are Moslem, 15 are traditional worshipers, while only 7 belong to other religions. Participant's ages ranged from 25 to 60 years, their mean age is 36.27 (SD =4.36). The educational background of the participant were minimum O'level and maximum of B.Sc.

Instrument:

A questionnaire comprising three scales was used for data collection. The scales include; Brief Fear of Negative Evaluation (Leary, 1983; 2013), Witness Self-Efficacy Scale and Eyewitness Metamemory Scale.

Brief Fear of Negative Evaluation (Watson & Friend, 1969)

Brief Fear of Negative Evaluation is a shorter form of Fear of Negative Evaluation, which was a study conducted by Watson and Friend in 1969. BFNE, which was developed by Leary in 1983 and updated in 2013, is a questionnaire made up of only 12 questions. Every object is given a rating on a scale of 1 to 5, with 1 being not at all like me and 5 being very much like me. The scale is very reliable and measures what it's intended to measure. The Slovak version of the test shows that it is reliable and consistent. It is also related to other factors like anxiety and self-esteem, just like expected (Hajdúk et al., 2014). The instrument was subjected to a pilot study for the present study by selecting participant from different paramilitary groups, and a Cronbach's alpha score of .68 was found indicating that the instrument is reliable.

New General Self-Efficacy Scale

Chen and et al of organisational psychologists created the New General Self-Efficacy Scale in 2001. It is an 8-item survey that gauges how much respondents believe they can succeed in spite of obstacles. With low-income African-Americans (Roman et al., 2009), homeless European- Americans, African-Americans, and Latinx-Americans (Businelle et al., 2013), first-generation Latinx college students (Garza, Bain, & Kupczynski, 2014), college students, and professionals in the United States and abroad, this measure has been studied by researchers. Using a 5-point rating scale (1= strongly disagree; 3 = neither agree nor disagree; 5 = strongly agree), respondents must indicate their level of agreement with eight items, including "Even when things are tough, I can perform quite well." The average of the ratings is then used to determine a score for each responder. The scale elements show how individuals think they can overcome challenges and complete tasks. High levels of self-efficacy were proven to be a success predictor by Bandura and colleagues in 1996. Roman and associates discovered that self-efficacy also predicts increased physical activity and better health (Roman et al., 2009). The scale produced a reliability coefficient of .93 across cultures, showing that it is valid and reliable for use in gauging the general public's level of self-efficacy. Despite the fact that there are other self-efficacy measures, research indicates that Chen and colleagues' New General Measure is more trustworthy and valid than others (Scherbaum, Cohen-Charash, & Kern, 2006).

Eyewitness Metamemory Scale (Saraiva, Boeijen, Hope, Horselenberg, Sauerland, & Koppen, 2019)

Two qualitative approaches were adopted to develop an initial pool of items for the EMS. To start, the researcher carefully studied the items used in other metamemory measures and, whenever possible, based our own item construction on them. Then, in order to learn more about memory self-assessment in eyewitness circumstances, a semi-structured interview with a group of legal psychologists and graduate students working in this field of research (N = 14) was carried out. 35 items made up the initial pool of items, including questions about facial recognition and eyewitness-specific questions that were taken from several metamemory questionnaires. All items were rated on a 7-point Likert scale. The ratings for each question ranging from 1 (strongly disagree) to 7 (strongly agree). The instrument was subjected to a Pilot study for the present study and a Cronbach's alpha of .76 was found indicating that the instrument is reliable.

Procedure

The researcher obtained permission from the heads of the four paramilitary personnel selected for the study (Police, Civil Defense, Immigration and Road Safety Corpse). Afterwards, the permission of the participants was obtained through informed consent form that they filled and signed indicating their willingness to participate in the study. Anonymity and confidentiality of the data were emphasized in the instructions. Participants were informed that participation is voluntary, that they are free to withdraw at any time, and that the informed consent form they signed indicates their willingness to participate in the study. A research assistant from each of the paramilitary personnel was recruited and trained on the mode of

administering and collecting the questionnaire, in order to avoid having too many abnormalities in form of incomplete filling or arbitrary answers. Participants were approached in their various offices or place of work and were informed about the study and the impact the study will contribute to the society. Before administering the questionnaires, the researcher and researcher assistant introduced themselves to the participants which provides the researchers opportunity to create rapport with the participants. Participants were educated on the proper format of responding to the items to minimize the number of questionnaires to be discarded or abnormality. Participants were requested to complete the questionnaire and return them directly to the researcher or research assistants. A total of two hundred and eighty (280) questionnaires was administered to the participants with the help of the research assistant using simple random sampling technique (balloting). Seventy questionnaires were administered in each of the four paramilitary personnel. Seventy (70) questionnaires was distributed in each of the four selected paramilitary personnel. Out of the 280 questionnaires that was administered, 275 returned questionnaires were cross checked for abnormalities. After cross checking, 13 questionnaires were discarded due to errors of abnormality/improper filling. The remaining 262 questionnaires properly filled were used for data analysis. Participants were thanked for contributing to knowledge, and equally debriefed on the essence of the study. Questions or clarifications from the participants were answered by the researcher or research assistants.

Design of the study.

The design of the study is cross sectional design. Data obtained from participants were analyzed using Hayes PROCESS macro. The statistics enables the researcher to test the moderating relationships between the variables.

Results

Findings from the survey and analysis are presented in this chapter. The survey's information (data) was initially entered into the SPSS programme for analysis.

Table 1: Correlations of demographic variables, fear of negative evaluation, self-efficacy, and eyewitness testimony

Variable	Gender	Age	Ethnic Group	Religion	Negative Evaluation	Self-Efficacy	Eyewitness
Gender	-	.37***	-.10	-.11	.06	-.07	-.02
Age		-	.08	.01	.03	-.13*	.07
Ethnic Group			-	.42***	-.12	.05	-.07
Religion				-	-.15*	.06	.03
Negative Evaluation					-	-.09	.14*
Self-Efficacy						-	.31***
Eyewitness Testimony							-

Note: * $p < .05$; ** $p < .01$; *** $p < .001$; N=262

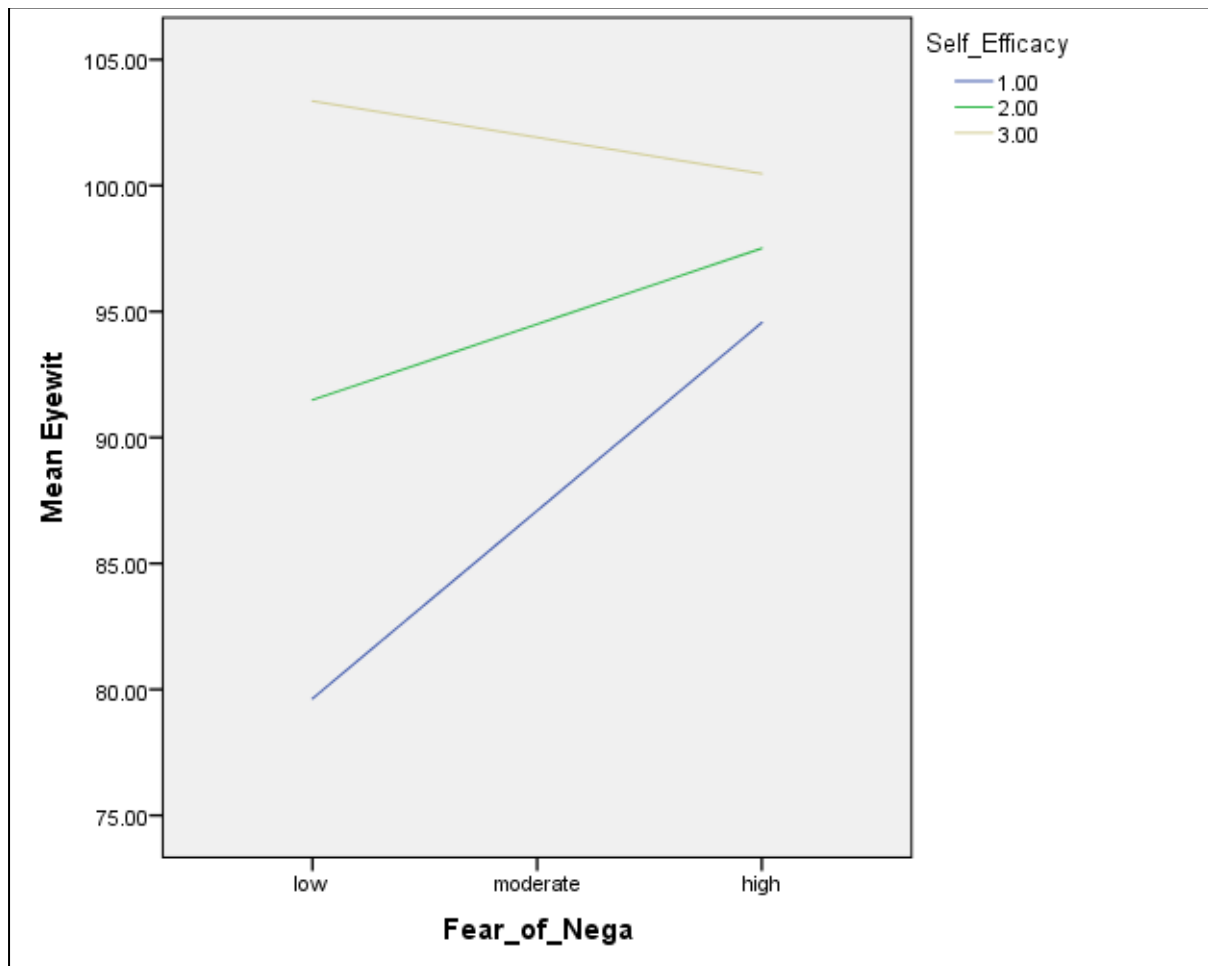
Results in Table 1 showed that eyewitness testimony was positively significantly related to fear of negative evaluation ($r = .14, p < .05$), and self-efficacy ($r = .31, p < .001$). Gender was negatively significantly related to age ($r = -.37, p < .001$). Age was negatively related to self-efficacy ($r = -.13, p < .05$). Ethnic group was positively significantly related to religion ($r = .42, p < .001$). Religion was negatively related to fear of negative evaluation ($r = -.15, p < .05$). **Table 2: Hayes PROCESS macro results for fear of negative evaluation predicting eyewitness testimony with self-efficacy as moderator**

Variable	<i>B</i>	<i>T</i>	<i>p</i> -level	95% <i>CI</i>
Self-Efficacy	4.14	3.2246	.0015	(1.61,6.67)

Fear of Negative Evaluation	-4.21	-3.1704	.0018	(1.59,6.83)
Self-Efficacy X Fear of Neg Eva	-.10	-2.7102	.0073	(-.17,-.03)

In Table 2, it was found that self-efficacy was significantly associated with eyewitness testimony ($B = 4.14, p = .001$). Fear of negative evaluation was negatively significantly associated with eyewitness testimony ($B = 4.21, p = .001$). The interaction of self-efficacy and fear of negative evaluation was significant ($B = -.10, p = .0073$), indicating that self-efficacy moderated the relationship between fear of negative evaluation and eyewitness testimony. Slope of the interaction (see figure 1 below) indicated that fear of negative evaluation was only significantly associated with eyewitness testimony at low level ($B = 1.51, p = .0002$) and moderate level of self-efficacy ($B = .61, p = .0210$) but was none significantly related to eyewitness testimony at high level of self-efficacy ($B = -.29, p = .5119$). The model explained about 3% of the variance in eyewitness testimony, $R^2 = .03, F(1, 196) = 7.35, p = .0073$.

Figure 2: Interaction slope showing the moderating effect of self-efficacy on fear of negative evaluation and eyewitness testimony.



Summary of Findings

- 1).Eyewitness testimony was positively significantly related to fear of negative evaluation, and self-efficacy.
- 2). Self-efficacy was significantly associated with eyewitness testimony.
- 3). Self-efficacy moderated the relationship between fear of negative evaluation and eyewitness testimony.

Discussion

The study aimed to explain whether fear of negative evaluation will significantly play a role in eyewitness testimony especially with self-efficacy as moderator among paramilitary personnel in Enugu Metropolis. It was hypothesised that eyewitness testimony would be affected by fear of negative evaluation in order to critically explore this goal. It was interesting to learn that the testimony of eyewitnesses was significantly impacted by their fear of evaluation. People's eyewitness testimony is more reliable when they experience low levels of fear of criticism. This is possible because they freely express their opinions about an eyewitness since they are not concerned with what others will think or believe about them. Giving accurate eyewitness testimony is typically very difficult in a country like Nigeria where the lives and rights of persons who could provide reliable eyewitness testimony are not safe or protected. Additionally, the cultural practise of branding an eyewitness who testifies as a "saint" or "only good person" who wants to demonstrate how nice he or she is, can discourage people from agreeing to provide reliable eyewitness testimony.

The result is consistent with the hypothesis put forth by earlier researchers like Marr, Otgaar, Sauerland, Quaedflieg, and Hope (2021), who discovered that variation in the accuracy of eyewitness testimony was related to fear of negative evaluation, thereby suggesting a connection between memory and fear of negative evaluation. Therefore, a potential element in eyewitness testimony is identified as a fear of negative evaluation. Eyewitness error was explored by Wise, Sartori, Magnussen, and Safer (2014), who came to the conclusion that it is one of the main reasons for erroneous convictions. They looked at the causes of eyewitness error as well as potential solutions. Given that so many low-class or innocent victims have fallen victim to this dilemma, Nigeria is a very strange place.

Self-efficacy reduced the association between fear of negative evaluation and eyewitness testimony, according to a significant interaction between self-efficacy and fear of negative evaluation. According to Schwartz (2015), arousal, which can be measured by a variable like fear of criticism, affects how memories are organised. By examining the idea that the presence of a weapon, such as people's evaluation of an eyewitness who gives testimony, is highly emotional and attention-grabbing, which then draws the attention away from the peripheral details, we can see how fear of negative evaluation can relate to eyewitness testimony, for example the weapons-focused effect. According to findings, people's concern of providing correct eyewitness testimony outweighs their low or moderate level of dread of negative evaluation. Since the weapon-focused effect reduces memory accuracy, it may be argued that people with fear-inducing personality traits may experience memory loss and shift their perspective on what is most important in particular circumstances. Morrison and Heimberg (2013) assert that fear of negative evaluation (FNE) is a defining characteristic of social anxiety that is essential in eyewitness testimony and that people with high FNE may display biased information processing when exposed to social evaluation during eyewitness testimony and for some personality traits. According to Morrison and Heimberg (2013), agreeableness and conscientiousness are two personality traits that are connected to FNE. As a result, those with high FNE scores are very preoccupied with getting other people's approval or avoiding their disapproval, and they may avoid circumstances that require them to endure evaluations (Morrison & Heimberg, 2013). High FNE subjects also respond to environmental influences more quickly. Fear of negative evaluation can lead to altered testimonies to avoid negative judgement and comprising accuracy. High self efficacy improves accuracy by boosting confidence in memory and observation skills. The frequently provide eyewitness account in high stress environment, making it crucial to understand factors affecting their testimonies.

However, the significant relationship between fear of negative evaluation, self-efficacy and testimony accuracy, with self-efficacy mitigating the negative effect of fear of negative evaluation.

Finally, implementing training programs to boost self-efficacy and address the negative evaluation among paramilitary personnel to improve testimony accuracy.

Implications of the Findings

The present study has both theoretical and practical implications. In the theoretical implication, the study promoted eyewitness testimony theories as well as contributed to the postulations of cognitive abilities, and personality attributes like self-efficacy and self-evaluation. Fear of negative evaluation was negatively associated with eyewitness testimony. This finding implies that people with high level of negative evaluation may hardly give accurate eyewitness testimony, this affects the society in many ways as paramilitary personnel is meant to help guard against crime.

The findings from the research is useful in helping government and member of the public to understand the potential role of fear of negative evaluation in forensic investigations and crime control. And how fear of negative evaluation has negatively impacted on paramilitary personnel in Enugu metropolis from been able to give accurate eyewitness testimony that can fight crimes like corruption and other social vices taking place every day in Nigeria at different regions and culture. It is also helpful for forensic experts to understand how they can utilize self-efficacy and fear of negative evaluation in getting accurate eyewitness. Forensic researchers can equally benefit by doing further investigations maybe experimental on fear of negative evaluation and the moderator – self-efficacy in order to gain more understanding of their usefulness.

Limitations of Study

The present study like other studies has some limitations. Larger sample size involving other paramilitary may be necessary to allow for more generalization and possible conclusions. Another limitation is the choice of involving only paramilitary personnel of only the four institution, as well as only those in Enugu Metropolis out of numerous others in Enugu, South East and Nigeria. Although the study targeted at paramilitary personnel as participants of interest for the study. The researcher also encountered difficulties accessing the participants as pattern of work has changed since covid-19, and because of the busy nature of the participants. Also, the study could not do a comparison of the selected paramilitary institutions to determine which among the personnel has higher negative fear of evaluation.

Conclusion:

The study investigated the moderating role of self-efficacy in the relationship between fear of negative evaluation and eyewitness testimony among paramilitary personnel in Enugu Metropolis. Participants were two hundred and sixty-two (262) Paramilitary Personnel in Enugu Metropolis. It was found that self-efficacy moderated the relationship between fear of negative evaluation and eyewitness testimony. The finding is helpful for forensic experts in order to understand how they can utilize self-efficacy and fear of negative evaluation in getting accurate eyewitness. The study has shown that fear of negative evaluation as well self-efficacy are potential factors that play significant role in eyewitness testimony. In spite of the limitations highlighted the findings provide valuable guidance for researchers and practitioners trying to identify ways through which accurate eyewitness can be achieved and how best the society can be improved by it. These findings can thus help individuals, forensic experts and institutions such as paramilitary, judiciary, researchers and society at large in pursuing good justice delivery and in fighting crimes. It is shown that presence of self-efficacy is needed as booster that helps to overcome fear of evaluation that poses as challenge to achieving accurate eyewitness. Hence, both fear of negative evaluation and self-efficacy are identified as potential factors in eyewitness testimony.

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