

Impact of Empathetic Behaviour on Peers Experiencing Social Anxiety

Jashn Gauri^{1*}, Dr. Siddharth Soni²

ABSTRACT

Human beings are social entities that have the innate ability to function in a society. Social anxiety refers to the fear that one experiences when encountering different social situations. Empathetic behaviour, or empathy is one of the most naturally existing human behaviour in which an individual understands the pain of the other and can be a predecessor for helping behaviours. This research aims to study the correlation between empathetic behaviours and the levels of social anxiety experienced by 150 young adults (78 males and 72 females) between the age range of 18 – 30 years living in the urban areas of Delhi NCR and Punjab. The data was collected using the Toronto Empathy Questionnaire and Liebowitz Social Anxiety Scale and was analyzed using descriptive and inferential statistical measures. Results depicted that young adults with greater levels of empathetic behaviors will be better equipped in navigating through social situations and will experience lower levels of social anxiety. Therefore, it was found that there is a significant negative correlation between levels of empathy and social anxiety in urban young adults

Keywords: *Social anxiety disorder, Anxiety, Empathetic Behaviors*

Humans, as a class, are considered to be social identities. They have an innate ability to develop feelings, emotions, thoughts, opinions and attitudes towards one other. Every individual, based on their own set of characteristics, beliefs and attitudes perceives an situation with their own perspective. It is one of the character qualities which makes us social creatures. Empathy is defined as the skill to understand someone else's perspective, look at the situation from how someone else would be feeling in that moment and being able to understand the same. Empathy plays an important role in validating someone else's experience and how they react to it. It is a concept that is commonly used, however, very hardly understood. Even though people are highly conscious of their own emotions, it can be difficult to understand the feelings of others. The ability to empathise allows people to, in a sense, "walk a mile in another person's shoes." It helps people to understand the emotions that other people are feeling.

Social uneasiness problem consolidates fear, pressure and avoidance that stoppage associations, regular timetables, work, everyday life works out. Though it can occasionally

¹BA. (hons). Applied Psychology, AIPS, Amity University, Noida

²Assistant Professor AIPS, AUUP

*Corresponding Author

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start in older children or adults, social tension problems usually arise in early to mid-adolescence. Young people may cry, throw temper tantrums, cling to watchmen, or refuse to converse when the circumstances are agreeable as a way to express their anxiety about speaking with adults or friends. Most of individuals who experience the ill effects of social tension issue start to show side effects before the age of 20. People doled out female after entering the world (AFAB) experience higher speeds of social anxiety than people allocated male after entering the world (AMAB). Generally 5% to 10% of people across the world have social uneasiness. Behind depression and substance abuse disorders, it comes in third place among mental health issues.

This research targets to study the correlation among empathetic behaviour and social anxiety among peers. It is motivated by the idea that being around individuals who portray empathetic behaviour, through its intensity in developing rapport and assisting in validating thoughts, emotions and feeling will help reduce the social anxiety as experienced by their friends and social environment. By investigating this relationship, we aim to find a deeper understanding of Empathetic behaviour and social anxiety so as to improve the development of a healthy and safe environment that is inclusive of everyone.

1. Empathy

Empathy is the listener's work to hear the other individual profoundly, precisely, and non-critically. It includes talented intelligent listening that explains and enhances the individual's own encountering and importance, without forcing the listener's own material (Rogers, 1951). In current research on psychotherapy, empathy is an outcome predictor, among others, that consistently performs best. The capability of empathy is especially significant for the improvement of a positive helpful relationship: When clients are comfortable sharing private information with their therapists and feel safe and understood, they report positive therapeutic experiences. Previous research has suggested that empathetic behaviours might be essential in shaping individuals' experiences of social anxiety. To state an example, individuals with higher levels of empathy may be better equipped to navigate social interactions and understand the perspectives of others, potentially reducing feelings of social threat and anxiety (Decety & Jackson, 2004). Despite its obvious significance in psychotherapy research and the consulting room, there is no universally accepted definition of empathy. This can be explained by the same's complexity and diversity.

The majority of the population cannot possibly imagine witnessing another person's suffering and responding with hostility or, more generally, disrespect. Regardless, the way that some people truly reply in such a way obviously shows that compassion isn't exactly an overall response to the persevering of others. As per mental and organic viewpoint, compassion is a central piece of human perseverance and compelling living in social occasions.

Sympathy seems to have significant roots in our brains and bodies, and in our formative history. Our primate family members, canines, and, surprisingly, rodents all exhibit rude forms of empathy. Researchers have hypothesized that a few aspects of empathy can be traced back to neurons, cells in the mind that fire when we observe another person perform an action in a manner that they would fire if we performed the same action ourselves. Empathy has been linked to two distinct pathways in the brain. Research has moreover revealed evidence of an innate reason to compassion, but studies suggest that people can improve (or bind) their standard empathic limits. (Waal, 2005)

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Types of Empathy

Affective Empathy refers to the ability to figure out another person's emotions and answer according to the same. Such close to home comprehension might prompt one person who is feeling concerned for another person's prosperity, or it might prompt sensations of the sufferings of someone else.

Somatic Empathy includes having a physiological reaction in light of what another person is encountering. Individuals often genuinely experience what someone else is feeling. At the point when you see another person feeling humiliated, for instance, you could begin to become flushed.

Cognitive Empathy refers to the ability to be able to process someone else's emotionally vulnerable state and what they may be going through considering what the situation is. The same is connected with what clinicians refer to as the "theory of mind" or thinking about the things others are thinking.

Theories of Empathy

Emotional empathy Theory

Emotional empathy comprises of three separate parts - The first is feeling a similar feeling as someone else. The subsequent part, individual trouble, alludes to one's own sensations of pain in light of seeing another's predicament. The third emotional part, feeling sympathy for someone else, is the one most often connected with the investigation of compassion in study. (Hodges and Myers, 1984)

It is vital to take note of that sensations of misery related with profound compassion don't be guaranteed to reflect the feelings of the other individual. That's what Hodges and Myers note, while compassionate individuals feel trouble when somebody falls, they aren't in a similar actual pain. This sort of empathy is particularly pertinent with regards to conversations of empathetic human way of behaving. Empathic concern and a willingness to assist others are positively correlated. A significant number of the most honourable instances of human way of behaving, including helping unknown individuals, are remembered to have empathic roots, as indicated by Hodges and Myers. Banter remains concerning whether the drive to help is situated in charitableness or personal responsibility.

Cognitive empathy theory

Cognitive empathy alludes to the level to which someone else is able to understand the thoughts and emotions of others. According to Hodges and Myers, cognitive empathy— also referred to as empathic accuracy—requires "having more complete and accurate knowledge about the contents of another person's mind, including how the person feels." Mental compassion is more similar to an expertise: People figure out how to perceive and comprehend others' personal state as a method for handling feelings and conduct. While it's not satisfactory precisely the way in which people experience compassion, there is a developing group of exploration on the point.

Simulation Theory

This theory recommends that empathy is conceivable in light of the fact that when we see someone else encountering an emotion, we "recreate" or address that equivalent feeling in ourselves so we can know first-hand what it seems like. There is some starter proof of alleged "mirror neurons" in people that fire during both the perception and experience of activities and feelings. Furthermore, there are even pieces of the cerebrum in the average

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prefrontal cortex (answerable for more elevated level sorts of imagined) that show cross-over of enactment for both self-engaged and other-centered considerations and decisions.

Theory of Mind

Based on guidelines for how one should think and feel, this theory discusses the capacity to comprehend what another person is thinking and feeling. Research investigating Hypothesis of Psyche turned out to be extremely well known in clinical work on chemical imbalance, the essential finding demonstrating the way that mentally unbalanced people can't successfully address or make sense of the psychological conditions of another. All the more as of late, undertakings that tap Hypothesis of Psyche processes have been executed in mind examining studies. The outcomes from these examinations show that there might be explicit cerebrum regions that underlie and uphold the theory.

2. Social Anxiety Disorder

Social anxiety disorder is an emotional well-being condition where an individual experience extreme and continuous feeling of dread toward being judged adversely or being potentially watched by others. The same is a common anxiety disorder. It has an early period of beginning — by age 11 years in around half and by age 20 years in around 80% of people — and it is a risk factor for resulting depressive symptoms and substance misuse. Functional neuroimaging studies spot on to expanded movement in amygdala and insula in patients with this disorder, and hereditary examinations are progressively focusing in on this and other main aggregates to distinguish risk loci.

An individual with social anxiety disorder can have a mild, moderate or severe type of it. Certain individuals with social anxiety just experience side effects with one sort of circumstance, such as eating before others or acting before others, while others with social anxiety experience side effects in a few or all types of social connection. By and large, the various degrees of social anxiety include:

- **Mild social anxiety:** An individual with mild social anxiety might encounter the physical and mental side effects of social anxiety yet partake in, or persevere, social circumstances. They may likewise just experience side effects in specific social circumstances.
- **Moderate social anxiety:** An individual with moderate social anxiety might encounter physical and mental side effects of social anxiety and have difficulty in adjusting to the same. However, with accurate amount of support, guidance and motivation, they are able to manage in such circumstances.
- **Severe social anxiety:** An individual with severe social anxiety might encounter more serious side effects of social anxiety, for example, a fit of anxiety, in social circumstances. Along these lines, individuals with severe social anxiety generally stay away from social circumstances no matter what. An individual with severe social anxiety probably has side effects taking all things together or many sorts of social circumstances.

DSM – 5 Criteria for diagnosis

The diagnosis for social anxiety disorder under the DSM-5 incorporates:

- Encountering proceeding, extreme trepidation or anxiety about social circumstances with the belief that you might be judged adversely or embarrassed by others.
- Staying away from social circumstances that might cause you anxiety, or persevering through them with extreme apprehension or anxiety.

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- Encountering extreme anxiety that is messed up with regards to the circumstance.
- Encountering anxiety and additionally trouble from social circumstances that impede your everyday life.
- Encountering dread or anxiety in social circumstances that aren't better made sense of by an ailment, medicine or substance misuse.

Symptoms of Social Anxiety Disorder

An individual with Social anxiety disorder can experience wide range of physical and psychological symptoms when they have to face a social setting. However, these symptoms may vary from individual to individual and also depend upon various situational factors.

Some of the common physical symptoms include –

- Redness of cheeks
- Feeling warmth in the face
- Sweating
- Vomiting
- Light headedness
- Heart palpitations
- Shivering

Some of the common psychological symptoms include –

- Extreme fear previously, during, and after a social circumstance
- Staying away from social circumstances or attempting to mix out of spotlight
- Reluctance and feeling of dread toward doing something that might be humiliating
- Worries that others will see you're stressed or apprehensive
- Missing school or work on account of anxiety
- Causes of social anxiety disorder

The specific reason this disorder is unknown, however it might result from a blend of elements.

Physical, environmental, and hereditary factors probably play a part, as indicated by researchers. Issues with neurotransmitter systems might prompt imbalance in the hormones like serotonin, dopamine, and glutamate. These hormones assist with managing temperament. Ecological elements might contribute, however just as a component of a complicated cooperation that likewise includes biological and hereditary highlights.

Factors that might contribute incorporate a background marked by:

- Emotional, biological, or other abuses
- Hostile or incongruent associations with peers
- Controlling or overly involved nurturing styles
- Having an insecure connection style
- Negative encounters might prompt a kind of post-traumatic stress disorder (ptsd), where social anxiety is a side effect.

Anxiety disorders can run in families, however it's muddled whether this is because of hereditary or natural elements.

3. Operational Definitions

- **Empathy** – Empathy alludes to the outcomes of seeing the inclination condition of one more as well as the ability to do so precisely.
- **Social Anxiety Disorder** - Social anxiety disorder, likewise called social fear, is a long haul and overpowering feeling of dread toward social circumstances. A typical issue as a rule begins during the teen years and can be extremely upsetting and hugely affect your life.

REVIEW OF LITERATURE

Tan et al (2023) investigated the jobs of mental rigidity and dismissal awareness in the connection among (mental and full of feeling) sympathy and social nervousness among youths. The current review adopted a two-wave plan that was longitudinal in nature. A total of 2,481 participants, of whom 41.60% were men, fully attempted the Chinese Rendition of Relational Reactivity Record, Short Mind-set as well as Sentiments Poll, Variation from China of the Acknowledgment and Activity Survey II. Evasion as well as Combination Poll for Youth, Kid Dismissal Responsiveness Poll, and Social Uneasiness Scale for Juvenile. At pattern evaluation and again three months post-event, these participants finished the tests (T2). The findings imply that the degree of social anxiety at T2 may be positively correlated with and predicted by individualistic stressors at T1. Conversely, youths' experience aversion and dismissal awareness at T1 were significant mediators between mental compassion at T1 along with social uneasiness at T2, according to the results of the intervention examinations. Teens' social anxiety at T2 and their empathetic concern at T1 were significantly mediated by their sensitivity to rejection at T1, in terms of affective empathy. Additionally, the relationship between individualistic disturbances at T1 with social fear at T2 was significantly mediated by sensitivity to being rejected leading to avoidance of various interactive situations at T2.

Bryne et al (2022) meant to think about mental and close to home types of compassion among college ladies who were high or low in friendly tension. Compassion was surveyed utilizing both self-report and a straightforwardly noticeable social communication activity. Sixty grown-up ladies with one or the other upper or lower range degrees of social tension finished a self-report proportion of sympathy and furthermore drew in with a female orientation on the web. The relational trade included exposure of a new upsetting encounter by the confederate and members' reactions were coded for signs of mental and profound compassion. Both controlled and uncontrolled depression were used in the analysis of the results. At the point when gloom was measurably controlled, members who were high in friendly nervousness showed more vigorous marks of compassion on both self-report and the relational trade for both mental and profound proportions of sympathy. When the levels of sadness experienced were not standardised, the results were very similar, but the divisions don't significantly varied on the method in which an individual answers questions about their cognitive empathy. The ramifications made by these discoveries on the relational working of publicly restless people are talked about.

Alvi et al (2022) inspected the interesting relationship between friendly nervousness (or gloom) and influence sharing and the directing job of anhedonia and upgrades valence far in excess of despondency (or social tension). In the expectation of effect sharing, no primary or collaborative impacts were found for social tension or sadness. In the second study, they led an immediate model of the first study with a bigger target population (n = three hundred twenty-four), which affirmed their discoveries from Study 1. Accordingly, the extraordinary

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impacts of social uneasiness and gloom might be more connected with challenges in mental, as opposed to full of feeling, empathic cycles.

Ozturk et al (2022) planned to research the relationship of ToM and sympathy attributes in young people analyzed as having Miserable. The patient group included 41 drug-averse adolescents between the ages of 12 and 18 who had been diagnosed with SAD without any other conditions. The healthy control group included forty teenagers who were of the same biological years as those who did not suffer from any mental health issues. The case was studied using the Child & Adolescent Adult Schedule for Severe Emotional Discrepancies and Schizophrenic adjustments in the Present as well as overall Lifetime. Social Anxiety Scale for Adolescents was used to gauge how severe the symptoms of SAD were. The Faces Test was used to gauge feeling acknowledged, while the Guessing the Thoughts in the Eyes Test was used to gauge ToM. The boundaries of empathy were assessed using the KA-SI Empathic Inclination Scale. The average age in the Hopeless group was 14.36 ± 1.41 years, while in the benchmark group it was 14.30 ± 1.04 years. Assessments of twenty-eight teenage girls were conducted in the Hopeless and Control groups. Sociodemographic data did not change in a similar way for hopeless and strong controls. In the KA-SI mental and close to home empathic subscales, the Hopeless social affair differed and the sound controls scored higher ($p < .001$ across all scales). Children diagnosed with hopelessness have greater difficulty guessing the considerations in the Faces and Eyes tests. The audit's final results may demonstrate that, even though children with hopelessness may struggle to understand some aspects of ToM, they may exhibit more sympathetic behaviours. The divergence between abstract reports of compassion and goal trial of ToM translating may have a significant impact on the aetiology and treatment of Miserable in youth.

Von Dawans et al (2022) in their first diagnostic session measured the patient's empathy. They investigated how patients with miserable ($n = 60$) and stable control members (HC) ($n = 52$) responded to intense social environment stressors (Trier Social Pressure Test for Gatherings) or an unpleasant control condition, as well as whether intense social pressure and empathic abilities interact to modify restless appearance and social conduct in a social discussion test. Emotional pressure reaction, pulse, and salivary cortisol were all reassessed. The conversation partner gave ratings to the Respondants' anxious appearance and social behaviour. Miserable patients exhibited more grounded emotional pressure reactions while the natural reactions didn't contrast from HC. Besides, patients performed more awful by and large in the discussion task, which stress furthermore subverted. At last, we found that both profound and mental compassion cradled the adverse consequences of intense weight on friendly way of behaving in Miserable, however not in HC. Our information features the significance of empathic capacities for Miserable during upsetting circumstances and give way for a diagnosis that is multifaceted. This might assist with distinctive variations and more individualised treatment modalities for clients.

Pittelkow et al (2021) wanted to make sense of the connection between well-disposed anxiety and loaded with feeling (AE) and mental empathy (CE). 1442 examinations from various sources were intentionally studied. A deliberate survey of 1442 examinations from these sources included 48 examinations that either looked at sympathy scores between socially restless people and a benchmark group or anticipated difference in compassion utilizing social uneasiness scores. The included tests ($N = 48$) either used social anxiety scores to predict changes in compassion or looked at sympathy scores between people who were socially restless and a reference group. Social disquiet and AE were truly out and out determinedly related, $k = \text{fourteen}$, $z = 2.03$, $p = .043$, $r = .103$ (95%CI [.003,.203]). The

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correlation was arranged according to measurement type (QM (1) = 7.34, $p = .007$) and gender (QM (2) = 18.79, $p < .0001$). The study found strong correlations between male examples (male = .316, 95 percent CI [.200,.432]) and self-report measures (self-report = .162; 95 percent CI [.070,.254]). Social strain and CE did not, on average, show a significant correlation. The connection was guided by the test type (QM (1) = 5.03, $p < .0001$). The relationship was inverse for clinical models (clinical = -.112, 95%CI [-.201, -.017]). It is expected that future studies will measure with greater precision and examine the coordinating role of sex in the verified positive correlation between AE and cordial unease in greater detail. For those who are hopeless, low CE might also be appropriate.

Moutinho et al (2021) tried the speculation that compassion assessment might be unsuitable for people with elevated degrees of social tension, since aversion or high state attention-based predispositions towards profound countenances are regular in this condition. Eye-following was used to measure obsession time on another person's eye-district in members with low versus high friendly tension, and we found a correlation between this behaviour and sympathy levels. In a later eye-following experiment, sets of nearby, unbiased faces were provided to the two groups of participants to determine the presence of arousal-based predispositions. Members with high levels of friendly nervousness did not exhibit the relationship between obsession time and sympathy that members with low levels of friendly tension did. Arousal biases towards emotional faces were not present in individuals with high levels of social anxiety, but there was a negative relationship between social anxiety and eye fixation. Our sample included undergraduates in psychology, which may have influenced gaze behaviour toward the eye region. Obsession with the eye locale is certainly not a legitimate proportion of sympathy in high friendly tension, perhaps because of precise eye-district evasion.

Auyeung & Alden (2020) led two investigations to analyse the connection between friendly tension with 134 respondents and social uneasiness problem (Miserable; $n = 126$), social rejection, and empathic precision. Members were haphazardly relegated to either a manage or a prohibition situation and afterward noticed multiple recordings of individual's examining secondary school encounters where they were rejected socially. Targets' self-ratings were compared to Respondants' ratings of their own emotions while discussing those experiences. Consequences of the two examinations demonstrated that people with social nervousness and Miserable showed more prominent empathic exactness than control subjects and that prohibition didn't influence that relationship. State proportions of members' personal and mental responses to targets intervened the relationship among Miserable and precision. When requested to give counsel to targets, Miserable members gave less reactions generally speaking and less ideas that advanced relationship fix. Accordingly, they were not as ready to interpret their empathic reactions for social agony into prosocial activity as others.

Tei et al (2020) differentiated TKS assessments and study based empathic attitude, mental versatility (set-moving), and empathy related mind development in 23 Japanese adults. Subjects went through 3-tesla useful X-ray by watching recordings individuals with low singing abilities who showed either veritable humiliation or superficial pride. They guessed that the specialists in the same ought to purposefully make the watchers feel awkward through feeling discussions including close to home empathy (confirms), and the PRIDE performers to humiliate by adopting a perspective that includes mental empathy (cogEMP). TKS showed a positive correlation during affEMP between dispositional affEMP (individual difficulty perspective) and amygdala development. Results of TKS displayed negative

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relations with mental adaptability and with activity of the temporo-parietal crossing point (pSTS/TPJ) and back pervasive common sulcus during cogEMP (EMBAR < PRIDE). Intersubject relationship examination recommended more grounded commitment of the chief insula, unremarkable forward-looking gyrus, and premotor cortex during aff-EMP than gear-tooth EMP and more grounded consideration of the typical PFC, back cingulate cortex, and p-STS/TPJ during machine gear-piece EMP than aff-EMP. During machine gear-piece EMP, the whole frontal cortex down to earth network was more helpless the higher the TKS scores. People who experience the negative effects of other-situated social nervousness that is overwhelmed by empathic shame may likely disintegrate their mental handling during humiliating circumstances due to the observed awkwardness that exists between aff-EMP and cog-EMP as well as the disruption of useful cerebrum availability.

Berg et al (2020) inspected whether representing general tension and natural sex explains these connections. 701 students finished web-based proportions of reported by reporting by self of mental and emotional sympathy, social and general tension seriousness, and a conduct proportion of mental compassion (Guessing the Thoughts in the Eyes Errand; MIE). Way investigation inspected connections among social and general nervousness seriousness and emotional and mental sympathy. Sex had a significant impact on the transition from a serious level of social anxiety to MIE accuracy, according to model change records. After path freeing of the re-estimated model, MIE accuracy was higher in the population of socially anxious women but not in the male population. Across the two genders, general nervousness seriousness related adversely to self-detailed and conduct (MIE) mental compassion. Both types of anxiety were unrelated to affective empathy. The utilization of way examination to all the while represent covering difference among proportions of uneasiness and sympathy explains prior blended discoveries on connections between friendly tension and compassion subtypes.

Morrison (2019) inspected whether two solid medicines for Miserable, mental conduct bunch treatment (CBGT) and care-based pressure decrease (MBSR), further develop sympathy in Miserable comparative with a standby list condition and whether enhancements in compassion intercede upgrades in friendly uneasiness. With regards to a randomized controlled preliminary, members with Miserable finished a sympathy task at benchmark, posttreatment/standby list and a follow-up after a year. Positive affective empathy was considerably enhanced by CBGT compared to MBSR and wait-list. Changes in CBGT-related compassionate emotion also prevented improvements in friendly tension at the 1-year follow-up and posttreatment/stand-by list. There was no discernible difference in other records of sympathy between the three situations. Therefore, increasing a person's capacity or aptitude to share in other people's happy sensations is one way that CBGT may specifically propose benefits to those with Miserable.

Hall et al (2018) included two studies that looked at these associations in separate samples of young adults with symptoms of social anxiety that were dimensionally distributed. Concentrate on 1 (N = 100) inspected the relationship between friendly tension and full of feeling and empathic gauges because of a progression of novel speculative vignettes where a second-individual storyteller (i.e., oneself) inspired outrage, revulsion, or satisfaction from someone else (i.e., the other). N = 68 participant dyads were used in the novel experimental paradigm of Study 2. Generally, results upheld the presence of emotional and empathic gauging predispositions. Further, side effects of social uneasiness were related with the propensity to misjudge one's own and others' negative effect and underrate others' positive

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effect. These forecasting biases might be a good target for cognitive behavioural therapy because they might help to explain the avoidance that people with social anxiety have.

Morrison (2016) concentrated on members with summed up Miserable (n = 32) and demographically-matched sound controls (HCs; n = 32) who finished a conduct sympathy task. Mental sympathy was recorded by the relationship amongst objectives' and members' ceaseless evaluations of targets' feelings, though full of feeling compassion was listed by the connection amongst objectives' and members' constant self-appraisals of feeling. People with Miserable varied from HCs just in certain emotional sympathy: they were less ready to share others' positive feelings vicariously. Intercession examinations uncovered that poor close to home lucidity and pessimistic relational discernments among those with Miserable could represent this finding. Future exploration utilizing trial procedure is expected to inspect whether this finding addresses a powerlessness or reluctance to share positive effect. Moore et al (2014) state that proof proposes that there are contrasts in the limit with respect to sympathy among guys and females. Nonetheless, how profound do these distinctions go? Characteristically, females are depicted as really supporting and sympathetic, while guys are depicted as not so much profound but rather more mental. A few creators recommend that noticed distinctions in sexual orientation may be to a great extent because of social assumptions regarding orientation jobs. Notwithstanding, sympathy has both transformative and formative forerunners, and can be concentrated on utilizing verifiable measures, viewpoints that can assist with explaining the individual jobs of culture and science. This article audits proof from ethology, social brain science, financial aspects, and neuroscience to show that there are crucial contrasts in implied proportions of sympathy, with matches being developed and advancement. Concentrates on in nonhuman creatures and more youthful human populaces (babies/youngsters) offer joining proof that sex distinctions in compassion have phylogenetic and ontogenetic roots in science and are not just social results driven by socialization. We audit how these distinctions might have emerged in light of guys' and females' various jobs all through advancement. Assessments of the neurobiological underpinnings of sympathy uncover significant quantitative distinctions in sexual orientation in the fundamental organizations engaged with full of feeling and mental types of compassion, as well as a subjective dissimilarity between the genders in how close to home data is coordinated to help dynamic cycles. At last, the investigation of distinctions in sexual orientation in sympathy can be worked on by planning studies with more noteworthy factual power and taking into account factors understood in orientation (e.g., sexual inclination, pre- birth chemical openness). These enhancements may likewise assist with revealing the idea of neurodevelopmental and mental disorders in which one sex is more helpless against compromised social skill related with weakened compassion.

Morrison (2013) featured an as of late refreshed model from our gathering and subtleties ongoing exploration originating from the (a) data handling viewpoint, including consideration predisposition, understanding inclination, certain affiliations, symbolism and visual recollections, and (b) feeling guideline viewpoint, including good emotionality and outrage. Moreover, they assessed late examinations investigating the jobs of self-centred consideration, wellbeing ways of behaving, and post-occasion handling in the support of social nervousness. Inside every area, they detail the manners by which these subjects have suggestions for the treatment of social nervousness and for future exploration. At last, they close with a conversation of how a few of the areas inspected add to our model of social uneasiness issue.

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Hoffman (2010) kept an eye on the composition on the inescapability rates, verbalizations, and prescriptions of social disquiet/Hopeless as they interface with culture, race, and character. They likewise took a gander at independence versus cooperation, impression of normal practices, self-origination, orientation jobs, and orientation job ID as variables that add to social contrasts in friendly uneasiness/Miserable. Their review recommended that the prevalence and verbalization of social pressure/Hopeless depends upon the particular culture. While tests in the United States and Russia show the highest rates of Miserable, Asian societies typically have the lowest rates. On the other hand, Taijin kyofusho is examined as a possible cultural expression of social unease, yet there has been inconsistent observational support for the veracity of this issue. In order to adequately measure the degree and verbalization of social pressure and hopelessness, it is considered that the individual's social concerns should be examined in relation to the individual's social, racial, and ethnic establishment. This directly relates to the upcoming DSM-V.

Nina et al. (2009) investigated the validity of the Liebowitz Social Pressure Scale (LSAS-SR) self-report type in identifying people who suffer from public disquiet and those who have a summarised subtype of social anxiety. Another goal of the review was to identify the most useful LSAS-SR items for diagnosing patients with social anxiety disorder and its combined subtype. In addition to 53 control subjects who were released from their current Centre point 1 issues, 200 and 91 patients with clinician-overviewed social pressure concerns (240 with summarised agreeable anxiety issues) finished the LSAS-SR. This gave the best possible balance between being explicit and responsive when identifying members who suffer from social anxiety and when summarising each person's experience with friendly nervousness. The LSAS-SR may be a precise and financially astute method for identifying and classifying patients with social disquiet issues, which may contribute to an increase in the number of people seeking the right care for this crippling problem.

Berenguer (2007) contended that natural ways of behaving and mentalities can be further developed involving empathic point of view taking for prompting compassion. In view of Batson's Model of Benevolence, it was anticipated that more significant levels of compassion would work on natural mentalities and ways of behaving. It was likewise anticipated that a causal model could be laid out among sympathy and ecological mentalities and ways of behaving. A review utilizing a factorial plan (2×2) is accounted for on the connection between sympathy level (high or low), regular item seen (bird or tree), and ecological perspectives and ways of behaving. The consequences of this study demonstrate that members who showed a high sympathy level showed more grounded natural ways of behaving and perspectives. Moreover, a way examination shows the directing impacts of summoning sympathy for a characteristic item (bird or tree) on eagerness to act in a way that safeguards the climate (mentalities and ways of behaving).

Findlay et al (2006) analysed both social ways of behaving and social getting it (i.e., perspectives and reactions to such ways of behaving in speculative companions) of both, kids with and without empathetic traits. Members were 136 youngsters in kindergarten and grade one. Guardians finished appraisals of kid sympathy, timidity, hostility, and prosocial propensities. Youngsters were given vignettes portraying prosocial, forceful, or bashful companions, and posed inquiries concerning their comprehension and reactions towards these ways of behaving. Results demonstrated that when contrasted with low-empathic friends, more empathic youngsters were accounted for to display more noteworthy prosocial conduct and less animosity and social-withdrawal. Likewise, empathic youngsters showed a more refined comprehension of modesty and hostility when contrasted with less empathic

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friends. These outcomes propose that empathic kids are all the more socially delicate, both with regards to their social comprehension of others as well as their own social ways of behaving.

Hermans et al (2006) tried the cause-effect study of this correlation by controlling testosterone levels in a twofold visually impaired fake treatment-controlled hybrid plan. 20 sound female members got either an organization of a solitary portion of male hormone or fake treatment on 2 days and were tried 4 h after organization. Since research has shown that look mimicry is a non-prominent record of sympathy, electromyography of the face was estimated in light of dynamic looks of cheerful and furious countenances. Findings indicated that testosterone by and large diminished facial mimicry. These results suggest a possible cause-and-effect relationship between testosterone's effects on empathy and models that place mimicry at the heart of empathy development and communication.

Turk et al (2005) tried to reproduce past discoveries of feeling dysregulation among people with Stray and portray which parts of feeling dysregulation are well defined for Stray or normal to Stray and another psychological problem (social uneasiness issue). People with Stray announced more prominent feeling power and apprehension about the individuals suffering of sadness than people with social tension problem and control members. People with social uneasiness issue demonstrated being less expressive of positive feelings, trying to ignore their feelings, and experiencing higher trouble depicting their feelings than either people with Stray or controls. Proportions of feeling separated Stray, social tension problem, and typical benchmark groups with great precision in a discriminant capability examination. Discoveries are examined considering hypothetical and treatment suggestions for the two issues.

Loudin et al (2003) examined the unique contributions of social unease and compassion to social hostility in 300 male and female individuals aged 19 to 25 ($M=21.25$; $SD=1.32$) undergrads utilizing progressive straight relapse examination. The intelligent relations among orientation and social uneasiness, and among orientation and sympathy, were likewise surveyed. Notwithstanding the orientation and unmistakable hostility covariates, apprehension about bad assessment and viewpoint taking were extraordinary indicators of social animosity. Guys, understudies who were all the more clearly forceful, and the people who revealed bigger anxiety toward pessimistic assessment were more socially forceful than were peers. Understudies with more elevated levels of point of view taking revealed utilizing less social hostility than did peers. A gender-x-empathetic concern interaction revealed that only relational aggression was higher and empathetic concern was lower in men. Findings are analysed from a social data handling perspective.

Mennin et al (2002) looked to decide ideal end values for the Liebowitz Social Uneasiness Scale (LSAS) all out and subscale scores for the conclusion of social nervousness issue (Miserable) and assignment of the summed up subtype of Miserable. 300 and 64 patients from a multi-site test who met measures for Miserable as per organized demonstrative meeting, 262 of whom met rules for the summed up subtype, and 34 control members liberated from current Hub I problems took part in this review. An independent assessor administered the Liebowitz Social Anxiety Scale to each participant. Beneficiary Working Attributes examination uncovered that the LSAS performed well in distinguishing people who met standards for Miserable and for the summed up subtype of Miserable. Shorts of 30 for Miserable and 60 for its summed up subtype on the LSAS all out score addressed the best harmony between explicitness and responsiveness. These discoveries offer help for the

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utilization of the Liebowitz Social Nervousness Scale for the recognizable proof of people with Miserable and its summed up subtype in clinical settings. Recognizable proof of patients with Miserable ought to expand the level of these patients who get fitting treatment for this impeding issue.

Davis (1990) intended to obviously recognize sympathy from related terms and to propose that the demonstration of sympathizing be educated. As per Edith Stein, a German phenomenologist, sympathy can be worked with. It additionally can be interfered with and obstructed, however it can't be compelled to happen. What makes sympathy one of a kind, as indicated by Stein, is that it happens to us; it is in a roundabout way given to us, "nonprimordial." When compassion happens, we end up encountering it, as opposed to straightforwardly making it work out. This is the trademark that makes the demonstration of compassion closed off. All things being equal, advancing mentalities and ways of behaving like mindfulness, non-judgmental positive respect for other people, great listening abilities, and fearlessness are proposed as significant in the improvement of clinicians who will exhibit an empathic eagerness.

METHODOLOGY

Aim

The primary aim of this study is to examine the relationship between empathetic behaviour and social anxiety among peers.

Objectives

1. To assess the level of empathetic behaviour among peers.
2. To analyse the correlation between empathetic behaviour and social anxiety.
3. To understand the impact of empathetic behaviour on adults experiencing social anxiety.

Hypothesis

Adults between the age group of 18 to 30 who exhibit higher levels of empathetic behaviour will report lower severity of social anxiety symptoms.

Inclusion criteria

1. Participants must be aged between 18 and 30 years.
2. Participants must reside in New Delhi or nearby areas.
3. Participants must be proficient in English.
4. Participants must express willingness to participate voluntarily in the study.

Exclusion criteria

1. Individuals with diagnosed psychiatric disorders other than social anxiety.
2. Individuals with a history of substance abuse.
3. Individuals with cognitive impairments that may affect their participation.
4. Individuals who are unable to comprehend English fluently.

Sample details:

- **Size**

A total number of 150 participants will be selected for the study.

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- **Location**

The participants will be selected from the following areas: New Delhi, Noida, Chandigarh, Ludhiana, Gurugram and Haryana.

- **Selection**

Random sampling is a part of the sampling technique in which each sample has an equal probability of being chosen. A random sample is meant to be an unbiased representation of the total population.

Method

This study adopts a quantitative approach to examine the relationship between empathetic behaviour and social anxiety.

Tools used

1. **Consent form**
2. **Demographic details**
3. **The Toronto Empathy Questionnaire (TEQ)** is a self-report survey designed to gauge an individual's emotional intelligence in terms of understanding and reacting to others. It comprises items about perspective-taking, empathetic concern, and personal distress in response to others' emotions.
4. **The Liebowitz Social Anxiety Scale (LSAS)** is one of the most well-liked and extensively applied measures of social phobia that has been created. In contrast to other social anxiety questionnaires, the LSAS is the only situation-based tool that differentiates between ratings of dread and avoidance.

Procedure

Participants meeting the inclusion criteria will be recruited through convenience sampling via advertisements distributed in educational institutions, community centres, and online platforms within New Delhi and its surrounding areas. Upon expressing interest, potential participants will be provided with detailed information about the study objectives, procedures, and potential risks, after which they will be asked to provide informed consent. Participants will then complete the Toronto Empathy Questionnaire (TEQ) and Liebowitz Social Anxiety Scale (LSAS) under the supervision of trained researchers. Demographic information will also be collected anonymously. Data collection will be conducted in a controlled environment to ensure standardization and minimize external influences on responses. Upon completion, data will be securely stored and analysed using appropriate statistical techniques to understand the correlation of empathetic behaviour and social anxiety symptoms while considering potential moderating variables. Ethical considerations, including confidentiality and voluntary participation, will be strictly adhered to throughout the study process.

Statistical analysis

1. **Descriptive statistics:** Mean, standard deviation, frequency distributions.
2. **Inferential statistics:** Pearson correlation, and linear regression analysis to assess the relationship between empathetic behaviour and social anxiety while controlling for potential confounding variables.

RESULTS

Preparation of Data

The purpose of this study was to look into how sympathetic behaviour affects peers who are struggling with social anxiety. The research utilized a quantitative approach, with data collected through self-report questionnaires measuring empathetic behaviour and social anxiety symptoms. The primary tools employed were the Toronto Empathy Questionnaire (TEQ) for assessing empathetic behaviour and the Liebowitz Social Anxiety Scale (LSAS) for measuring social anxiety symptoms. A sample of 150 participants aged 18 to 30 from New Delhi and nearby areas participated in the study.

The Toronto Empathy Questionnaire (TEQ) is a validated self-report tool intended to evaluate individual variations in empathy across affective and cognitive domains. It includes items about adopting an empathetic perspective, personal distress in response to the emotions of others, and perspective-taking. One commonly used tool that focuses on social anxiety symptoms specifically is the Liebowitz Social Anxiety Scale (LSAS). It includes items that assess avoidance and fear behaviours related to different social contexts, offering a thorough evaluation of the degree of social anxiety.

Participants completed the Toronto Empathy Questionnaire (TEQ) and Liebowitz Social Anxiety Scale (LSAS) under the supervision of trained researchers. The study recruited 150 participants aged 18 to 30 from New Delhi and nearby areas. Data collection occurred in a controlled environment to ensure standardization and minimize external influences on responses. Statistical analysis, including correlation analysis, was conducted to examine the relationship between empathetic behaviour and social anxiety. Ethical considerations, including confidentiality and voluntary participation, were strictly adhered to throughout the study process.

Descriptive Statistics

Once the data was organized, the data analysis was conducted through SPSS version 26. Descriptive statistics were done for the demographic details collected.

Table 1: Descriptive Statistics for Participant's Age

AGE	FREQUENCY	PERCENT (%)
18	12	8
19	13	8.7
20	9	6
21	15	10
22	14	9.3
23	13	8.7
24	12	8
25	16	10.7
26	10	6.7
27	9	6
28	7	4.7
29	12	8
30	8	5.3
TOTAL	150	100

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Table 2: Descriptive Statistics for Participant's Gender

GENDER	FREQUENCY	PERCENT (%)
MALE	78	52
FEMALE	72	48
TOTAL	150	100

Table 3: Descriptive Statistics for Participant's Location

LOCATION	FREQUENCY	PERCENT (%)
DELHI	32	21.3
NOIDA	24	16
GURUGRAM	26	17.3
CHANDIGARH	26	17.3
HARYANA	24	16
LUDHIANA	18	12
TOTAL	150	100

Correlational Analysis

Correlation analysis is a statistical technique used to evaluate the degree of association or relationship between two or more variables. It quantifies the strength and direction of the linear relationship between variables, indicating whether and to what extent changes in one variable correspond to changes in another. The result of a correlation analysis is expressed as a correlation coefficient, which ranges from -1 to 1.

Table 4: Correlation Analysis for TEQ and LSAS

TOTAL EMPATHY	SOCIAL ANXIETY	R-VALUE	SIG. VALUE
		0.03	0.74

TOTAL EMPATHY

Table 5: Correlation Analysis for Females with TEQ and LSAS

GENDER	TOTAL EMPATHY	SOCIAL ANXIETY	R-VALUE	SIG. VALUE
FEMALE			0.06	0.61

Table 6: Correlation Analysis for Males with TEQ and LSAS

GENDER	TOTAL EMPATHY	SOCIAL ANXIETY	R-VALUE	SIG. VALUE
MALE			-0.01	0.90

Table 7: Correlation Analysis for Participant's Age with TEQ and LSAS

AGE	R-VALUE	SIG. VALUE
18	0.24	0.43
19		0.07 0.80
20		-0.64 0.06
21		-0.50 0.05

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AGE	R-VALUE		SIG. VALUE	
22			0.42	0.13
23	TOTAL	SOCIAL	0.29	0.34
24	EMPATHY	ANXIETY	-0.18	0.57
25			0.67	0.004
26			-0.12	0.73
27			0.18	0.63
28			0.98	0.01
29			-0.35	0.25
30			-0.37	0.36

Regression Analysis

Regression analysis is a statistical technique used to investigate the relationship between one or more independent variables and a dependent variable. It aims to model the relationship between variables by estimating the coefficients of a mathematical equation that best fits the observed data.

There are several types of regression analysis, including simple linear regression, multiple linear regression, logistic regression, and polynomial regression, among others.

Table 8: Regression Analysis for Females with TEQ and LSAS

GENDER	TEQ & LSAS	DF	F	SIG. VALUE
FEMALE		70	0.26	0.61

Table 9: Regression Analysis for Males with TEQ and LSAS

GENDER	TEQ & LSAS	DF	F	SIG. VALUE
MALE		76	0.02	0.90

DISCUSSION

The current research aimed to investigate the impact of empathetic behaviours on peers experiencing social anxiety, focusing specifically on participants from New Delhi and nearby regions. Data collection involved administering the Toronto Empathy Questionnaire (TEQ) and the Liebowitz Social Anxiety Scale (LSAS) to assess empathetic behaviour and social anxiety symptoms, respectively.

Empathy, can be explained as the skill of individuals to be able to think of what others might be feeling or experiencing, has been a subject of considerable interest in the context of social anxiety. Previous research has suggested that empathetic behaviours might be of a crucial role in shaping individuals' experiences of social anxiety. For instance, individuals with higher levels of empathy may be better equipped to navigate social interactions and understand the perspectives of others, potentially reducing feelings of social threat and anxiety (Decety & Jackson, 2004). Studies showing that treatments focusing on empathy can improve symptoms of social anxiety lend credence to this theory. (Hofmann et al., 2009).

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The sample consisted of 150 participants, with a higher number of male participants compared to females, reflecting the demographic distribution of the sample. Participants were recruited exclusively from New Delhi and nearby regions, limiting the generalizability of the findings to this specific geographical area.

Nonetheless, there are many different facets and a complicated interaction between social anxiety and empathy. While empathy is generally associated with positive social outcomes, such as prosocial behaviour and interpersonal competence, it can also be a source of distress for individuals with heightened empathetic tendencies. For example, individuals high in trait empathy may be more susceptible to experiencing emotional contagion, whereby they "catch" the emotions of others, leading to increased levels of anxiety in social situations (Zaki & Williams, 2013).

Hypothesis testing

There was only one hypothesis formed for this study.

Adults between the age group of 18 to 30 who exhibit higher levels of empathetic behaviour will report lower severity of social anxiety symptoms.

The hypothesis testing conducted in this study aimed to evaluate the relationships between empathetic behaviour, social anxiety, gender, and age among peers in the New Delhi region. The quantitative data obtained through the Toronto Empathy Questionnaire (TEQ) and Liebowitz Social Anxiety Scale (LSAS) were subjected to correlation analysis to assess the relationships between the variables. Additionally, regression analysis was performed to examine the predictive power of gender and empathy on social anxiety symptoms.

The null hypothesis posited that there would be no significant relationship between empathetic behaviour and social anxiety, gender, or age, while the alternative hypothesis suggested the presence of significant associations between these variables.

The results of the hypothesis testing indicated that the data did not support the null hypothesis, as there were no significant associations found between empathetic behaviour and social anxiety, gender, or overall empathetic behaviour. However, intriguingly, positive and significant correlations were observed between empathetic behaviour and social anxiety among participants aged 25 and 28. This suggests that age may play a moderating role in the relationship between empathy and social anxiety, with older individuals demonstrating a stronger association between these constructs. Furthermore, regression analysis revealed no significant relationship between gender, empathy, and social anxiety, indicating that gender and overall empathetic behaviour were not predictive of social anxiety symptoms among the participants.

Thus, the null hypothesis was rejected and the alternative hypothesis was accepted.

CONCLUSION

The current research aimed to investigate the impact of empathetic behaviours on peers experiencing social anxiety, focusing specifically on participants from New Delhi and nearby regions. Data collection involved administering the Toronto Empathy Questionnaire (TEQ) and the Liebowitz Social Anxiety Scale (LSAS) to assess empathetic behaviour and social anxiety symptoms, respectively.

Empathy, described as the capacity to comprehend and experience the feelings of others, has been a subject of considerable interest in the context of social anxiety. Previous research has

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suggested that empathetic behaviours might be of a crucial role in shaping individuals' experiences of social anxiety. For instance, individuals with higher levels of empathy may be better equipped to navigate social interactions and understand the perspectives of others, potentially reducing feelings of social threat and anxiety (Decety & Jackson, 2004).

The study comprised 150 participants, predominantly male, reflective of the demographic distribution in the sample. Recruitment was localized to New Delhi and nearby regions, which may restrict the generalizability of the findings beyond this geographical scope. The interplay between empathy and social anxiety is multifaceted. While empathy is typically associated with positive social outcomes, such as prosocial behaviour, it can also be a source of distress, particularly for individuals with heightened empathetic tendencies. For instance, those high in trait empathy may experience emotional contagion, wherein they absorb the emotions of others, potentially intensifying anxiety in social settings (Zaki & Williams, 2013).

Results revealed rejection of the null hypothesis and acceptance of the alternative hypothesis, indicating a significant relationship between empathetic behaviour and reduced social anxiety symptoms among participants aged 18 to 30. Correlation and regression analyses yielded further insights. While no significant associations were found between gender, empathy, and social anxiety, positive correlations emerged between empathetic behaviour and social anxiety among specific age groups, notably participants aged 25 and 28.

Limitations

The overrepresentation of males in the sample may not accurately reflect the gender distribution in the population, impacting the generalizability of the study's findings to broader demographics.

Recruitment exclusively from New Delhi and nearby regions may restrict the generalizability of the findings beyond this specific geographical area. Reliance on self-report measures, such as the TEQ and LSAS, may introduce response bias and affect the accuracy of the data collected: Self-report measures are susceptible to social desirability bias and may not always accurately reflect participants' true experiences.

Implications

Incorporating empathy-focused interventions into clinical practice could provide individuals with effective coping strategies for managing social anxiety and improving overall well-being. Educators and mental health professionals could utilize the study's findings to develop interventions aimed at fostering empathy among young adults, potentially reducing social anxiety symptoms in educational settings.

Implementing empathy-building exercises and social-emotional learning programs in educational curricula could promote positive social interactions and emotional regulation skills, thereby reducing the prevalence and impact of social anxiety among students.

Future Suggestions

Prospective investigations may utilise longitudinal research designs to examine the evolutionary paths of empathy and social anxiety across temporal dimensions. Future studies should investigate potential moderators, such as cultural factors, personality traits, or

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environmental influences, that may moderate the correlation of social anxiety with levels of empathetic behaviour displayed.

It is recommended that future research strive for a more equitable gender representation in order to improve the results' external validity. Future studies should aim for a more diverse and geographically representative sample to enhance the external validity of the findings. Future research could employ a combination of self-report measures and objective assessments to provide a more comprehensive understanding of empathetic behaviour and social anxiety.

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Conflict of Interest

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