

Case Study

Gender Differences in Anxiety and Anger: A Study on Clinical Cases

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ABSTRACT

This study examines gender differences in the experience and expression of anxiety and anger among clinical cases. Using a sample of 200 individuals diagnosed with anxiety and anger issues, measured anxiety levels with the Beck Anxiety Inventory and anger expression styles with the State-Trait Anger Expression Inventory. Results revealed that females reported significantly higher anxiety levels than males, while males exhibited greater outward anger expression. No significant gender differences were found in anger control abilities. These findings suggest that gender influences the presentation and management of anxiety and anger in clinical populations. Understanding these differences can inform gender-sensitive approaches in mental health care, allowing for more targeted therapeutic interventions that align with the unique emotional needs of male and female patients. This study highlights the need for further research into gender-based treatment strategies to enhance therapeutic effectiveness and patient outcomes.

Keywords: *Anxiety, Anger, Clinical Cases, Disparities, Gender*

Emotions such as anxiety and anger are central to human experience and significantly influence mental health (APA, 2013). While both emotions serve adaptive functions, when dysregulated, they can lead to psychological distress and clinical conditions. Anxiety, characterized by excessive worry and fear, and anger, often marked by frustration and hostility, are commonly observed in clinical populations, affecting individuals' well-being and interpersonal relationships (Buss, 2005; Kessler et al., 2005). A substantial body of research has shown that these emotional states are not experienced uniformly across genders, suggesting that men and women may differ in their susceptibility, expression and coping strategies for anxiety and anger (McLean & Anderson, 2009).

Gender differences in emotional responses have garnered considerable interest in psychology, with research suggesting that these disparities may be driven by a mix of biological, psychological and sociocultural factors (Kring & Gordon, 1998). Biologically, hormonal variations are believed to play a role in how emotions like anxiety and anger are experienced and expressed (Nolen-Hoeksema, 2012). Psychologically, men and women may develop different coping mechanisms and response patterns based on societal expectations

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and gender roles (Chaplin, 2015). Culturally, men are often socialized to express anger more freely than anxiety, while women may be more inclined to internalize anxiety, which can affect how these emotions manifest and are managed in clinical settings (Brody & Hall, 2008).

The clinical relevance of these gender differences is profound. Clinicians need to be mindful of gender when diagnosing and treating emotional disorders, as traditional approaches may not fully address the unique needs of male and female patients (Simon & Nath, 2004). For example, women tend to experience higher rates of anxiety disorders than men, whereas men may exhibit anger in ways that are more socially and interpersonally disruptive (Kessler et al., 1994). Consequently, understanding these gendered patterns is essential for developing targeted therapeutic interventions that can better support patients in managing these emotions.

The present study seeks to examine the gender differences in anxiety and anger among individuals receiving treatment for these conditions in clinical settings. Specifically, this research aims to assess how men and women differ in the intensity, expression, and clinical presentation of these emotions. By examining these differences, the study intends to contribute valuable insights into the importance of gender-sensitive approaches in mental health treatment and provide recommendations for improving therapeutic outcomes for both men and women experiencing anxiety and anger-related challenges.

METHOD

Sample

The study sample comprised clinical cases of patients diagnosed with anxiety and anger disorders. A total of 209 participants were selected, however nine patients were dropped due to the missing data. Also, purposive sampling was selected and used to ensure equal gender distribution. Inclusion criteria required that participants be aged 18–60 and have a primary diagnosis of an anxiety or anger disorder, as per the DSM-5 criteria. Patients with severe comorbid psychiatric conditions, cognitive impairments, or active substance abuse disorders were excluded to maintain sample homogeneity and reduce confounding variables.

Measures

- Assess anxiety and anger levels of patients the Beck Anxiety Inventory and State-Trait Anger Expression Inventory were used. The ***Beck Anxiety Inventory (BAI)*** is a 21-item self-report questionnaire widely used to measure the severity of anxiety symptoms (Beck, Epstein, Brown, & Steer, 1988). Each item is scored on a 4-point Likert scale ranging from 0 (not at all) to 3 (severely), with higher scores indicating greater anxiety levels. The BAI has demonstrated high internal consistency (Cronbach's alpha = 0.92) and is well-validated for clinical populations.
- Further, ***the State-Trait Anger Expression Inventory-2 (STAXI-2)*** assesses anger as both a state (temporary emotion) and a trait (enduring characteristic) and measures various anger expression styles, such as outward and inward anger expression (Spielberger, 1999). The instrument consists of 57 items scored on a 4-point Likert scale, with subscales for anger expression, control, and suppression. This tool is widely used in clinical settings and has demonstrated excellent reliability (Cronbach's alpha = 0.93).
- Finally, the ***Demographic Questionnaire*** form was administered to collect information on age, educational level, occupation, marital status, and other relevant

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variables to understand sample characteristics and control for demographic influences on emotional expression.

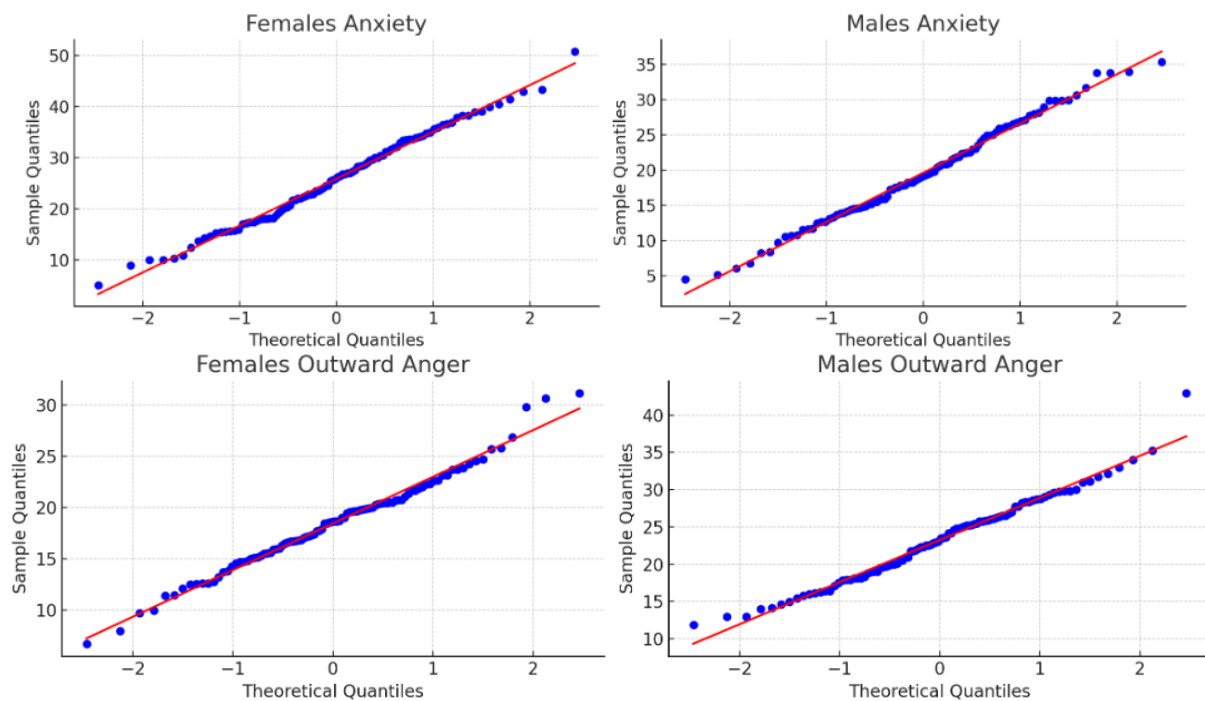
Procedure

Participants were recruited through the psychiatry department, Aligarh, and written informed consent was obtained from all participants before data collection. Each participant completed the BAI, STAXI-2, and demographic questionnaire in a single session under the supervision of trained researchers. Participants were encouraged to ask questions for clarification and were assured of the confidentiality and anonymity of their responses. The research followed ethical guidelines, with approval obtained from the institutional ethics review board.

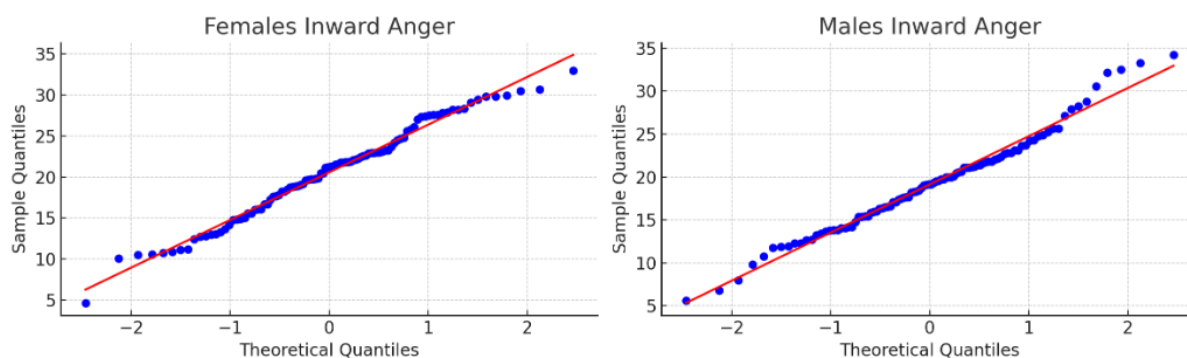
Data Analysis

Data were analyzed using IBM SPSS Statistics software (Version 27). Descriptive statistics (mean, standard deviation) were calculated to summarize the anxiety and anger levels of male and female participants. Independent t-tests were conducted to assess differences between genders in anxiety and anger scores. Additionally, a multivariate analysis of variance (MANOVA) was used to explore gender differences across the various dimensions of anger expression as measured by the STAXI-2 subscales. Effect sizes were calculated to gauge the magnitude of observed differences, and a significance level of 0.05 was set for all analyses.

Figure 1 Q-Q Plot for Anxiety and Anger Expression Scores by Gender



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Note: The Q-Q plots for anxiety and anger expression scores across gender groups. Each plot compares the sample quantiles against the theoretical quantiles of a normal distribution, helping to assess whether the distributions of scores follow a normal pattern.

RESULTS

Table 1 Mean and Standard Deviation of Anxiety and Anger Expression Scores by Gender

Variable	Gender	M	SD
Anxiety (BAI)	F	25.3	8.2
	M	20.1	7.5
Outward Anger	F	18.7	5.3
	M	22.4	6.1
Inward Anger	F	20.6	5.4
	M	19.2	5.6
Anger Control	F	23.1	4.8
	M	22.8	5.0

Note. F=Female, M=Male

Table 1 shows the results of anxiety and anger expressions by gender. The descriptive statistics revealed that the mean anxiety score, as measured by the Beck Anxiety Inventory (BAI), was higher among female participants ($M = 25.3$, $SD = 8.2$) than male participants ($M = 20.1$, $SD = 7.5$). Similarly, the mean scores on the State-Trait Anger Expression Inventory-2 (STAXI-2) varied between genders across different anger expression styles, with males showing higher outward anger expression scores ($M = 22.4$, $SD = 6.1$) compared to females ($M = 18.7$, $SD = 5.3$), while females exhibited slightly higher inward anger scores ($M = 20.6$, $SD = 5.4$) than males ($M = 19.2$, $SD = 5.6$).

Gender Differences in Anxiety

Table 2 Independent Sample t-test for Gender Differences in Anxiety

Variable	Gender	M	SD	t	df	p	d
Anxiety (BAI)	F	25.03	8.2	4.47	198	.001	0.68
	M	20.1	7.5				

Note: M=Mean, SD= Standard Deviation

F=Female, M=Male

Table 2 shows the results of independent sample t-test. The independent samples t-test was conducted to compare anxiety levels between male and female participants. The results indicated a significant gender difference in anxiety scores, ($t(198) = 4.47$, $p < .001$), with

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females showing significantly higher levels of anxiety than males. The effect size, calculated using Cohen's d , was 0.68, indicating a medium to large effect of gender on anxiety levels.

Gender Differences in Anger Expression

Table 3 Multivariate Analysis of Variance (MANOVA) for Gender Differences in Anger

Variable	Source	Wilks Lambda	F	Df	p
Anger Expression Styles	Gender	0.89	4.75	(5,194)	.001

Table 3 shows the results of MANOVA. The results indicated a statistically significant effect of gender on anger expression styles, Wilks' Lambda = 0.89, ($F(5, 194) = 4.75, p < .001$). Further, the Post Hoc Analyses on Anger Subscales were conducted on each anger subscale to identify specific areas of difference. In *Outward Anger Expression* the male participants had significantly higher outward anger expression scores than females, ($F(1, 198) = 14.32, p < .001$), with an effect size of ($\eta^2 = 0.07$), suggesting a moderate effect. In *Inward Anger Expression* the female participants showed higher inward anger expression scores, although this difference was not statistically significant, ($F(1, 198) = 2.43, p = .12$). Finally in *Anger Control* the results shows No significant gender differences were observed in anger control scores, ($F(1, 198) = 1.86, p = .18$), indicating that both genders reported similar levels of anger management skills.

DISCUSSION

The present study aimed to investigate gender differences in anxiety and anger expression among clinical cases, focusing on how these emotions vary in intensity and expression across male and female participants. The findings revealed significant differences, with females reporting higher levels of anxiety and males displaying a greater tendency toward outward anger expression. These results align with previous research, suggesting that gender plays a role in emotional experiences and their manifestation in clinical settings (Nolen-Hoeksema, 2012; McLean & Anderson, 2009).

Consistent with prior research, the study found that females reported significantly higher anxiety levels than males. This finding may be partly explained by biological factors, such as hormonal differences, and sociocultural factors, including societal expectations around emotional expression (Cahill, 2006; Kuehner, 2017). Women are often encouraged to express vulnerability and worry, which may contribute to higher reported levels of anxiety (Nolen-Hoeksema, 2012). Additionally, research indicates that women tend to employ more rumination-based coping strategies, which are associated with prolonged anxiety (Nolen-Hoeksema & Aldao, 2011). These factors highlight the need for clinicians to be aware of potential gender biases in anxiety diagnosis and treatment, as women may be more likely to report or display anxiety symptoms, while men may underreport due to social stigma or masculine norms (Addis & Mahalik, 2003).

The study's findings also demonstrated that males are more likely to express anger outwardly, whereas females show a tendency toward inward anger, although this difference was not statistically significant. Outward anger expression is often socially accepted or even encouraged in men, potentially as a means of asserting dominance or control (Simon & Nath, 2004). In contrast, women may internalize their anger due to social expectations of being composed and agreeable, leading to increased inward anger (Chaplin, 2015). This internalization can sometimes contribute to psychological conditions such as depression or anxiety (Brody & Hall, 2008). Understanding these differences in anger expression can

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inform gender-sensitive therapeutic approaches, such as helping males to manage outward anger in healthier ways and supporting females in acknowledging and processing internalized anger.

The analysis revealed no significant differences between males and females in anger control abilities. This suggests that, while men and women may express anger differently, they possess similar levels of anger regulation skills when controlling their anger in challenging situations. This finding could imply that training in anger control might be equally effective across genders, though more research is necessary to determine whether certain anger regulation strategies may work better for one gender over the other (Gross & John, 2003).

Clinical Implications

The study's findings underscore the importance of considering gender in clinical practice. Gender-sensitive treatment approaches can help clinicians tailor their interventions to better meet the needs of male and female patients experiencing anxiety and anger. For instance, therapeutic strategies for female patients might involve anxiety-reduction techniques, such as mindfulness-based interventions and cognitive-behavioral therapy (CBT) tailored to address rumination. For male patients, interventions could focus on teaching constructive ways to express anger, such as assertiveness training and anger management techniques, which may help reduce outward aggression.

Limitations and Future Directions

Despite its contributions, this study has several limitations. First, the sample consisted of clinical cases from a single mental health facility, which may limit the generalizability of the findings to broader populations. Future research should include a more diverse sample across multiple clinical settings. Second, while standardized self-report measures (e.g., BAI and STAXI-2) were used, these rely on subjective responses and may be influenced by social desirability bias. Observational or physiological measures could provide more objective insights into gender differences in emotional experiences. Lastly, this study focused on gender as a binary variable (male and female), which does not account for non-binary or gender-diverse individuals who may experience anxiety and anger in unique ways. Future research should explore these dynamics in diverse gender groups and examine other factors, such as cultural background and age that may influence emotional expression. Additionally, longitudinal studies could provide valuable insights into how these gender differences in anxiety and anger evolve over time and respond to therapeutic interventions.

CONCLUSION

This study highlights significant gender differences in anxiety and anger expression among clinical cases, with females experiencing higher anxiety and males more frequently expressing anger outwardly. These findings emphasize the importance of gender-sensitive approaches in diagnosing and treating emotional disorders, as men and women may experience and cope with these emotions in distinct ways. By incorporating gender-aware strategies into therapeutic interventions, clinicians can better address the unique needs of their patients, ultimately leading to more effective and personalized mental health care.

REFERENCES

- Addis, M. E., & Mahalik, J. R. (2003). Men, masculinity, and the contexts of help seeking. *American Psychologist*, 58(1), 5–14.
- American Psychological Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). American Psychiatric Publishing.

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- Beck, A. T., Epstein, N., Brown, G., & Steer, R. A. (1988). An inventory for measuring clinical anxiety: Psychometric properties. *Journal of Consulting and Clinical Psychology, 56*(6), 893–897.
- Brody, L. R., & Hall, J. A. (2008). Gender and emotion in context. *Handbook of Emotions* (3rd ed.), 395–408.
- Buss, D. M. (2005). *The evolutionary psychology handbook*. Wiley & Sons.
- Cahill, L. (2006). Why sex matters for neuroscience. *Nature Reviews Neuroscience, 7*(6), 477–484. <https://doi.org/10.1038/nrn1909>
- Chaplin, T. M. (2015). Gender and emotion expression: A developmental contextual perspective. *Emotion Review, 7*(1), 14–21.
- Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology, 85*(2), 348–362.
- Kessler, R. C., Chiu, W. T., Demler, O., & Walters, E. E. (2005). Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry, 62*(6), 617–627. <https://doi.org/10.1001/archpsyc.62.6.617>
- Kessler, R. C., McGonagle, K. A., Swartz, M., Blazer, D. G., & Nelson, C. B. (1994). Sex and depression in the National Comorbidity Survey. *I: Lifetime prevalence, chronicity, and recurrence*. *Journal of Affective Disorders, 29*(2-3), 85–96. [https://doi.org/10.1016/0165-0327\(94\)90064-7](https://doi.org/10.1016/0165-0327(94)90064-7)
- Kring, A. M., & Gordon, A. H. (1998). Sex differences in emotion: Expression, experience, and physiology. *Journal of Personality and Social Psychology, 74*(3), 686–703. <https://doi.org/10.1037/0022-3514.74.3.686>
- Kuehner, C. (2017). Why is depression more common among women than among men? *The Lancet Psychiatry, 4*(2), 146–158.
- McLean, C. P., & Anderson, E. R. (2009). Brave men and timid women? A review of the gender differences in fear and anxiety. *Clinical Psychology Review, 29*(6), 496–505.
- Nolen-Hoeksema, S. (2012). Emotion regulation and psychopathology: The role of gender. *Annual Review of Psychology, 64*, 1–26.
- Nolen-Hoeksema, S., & Aldao, A. (2011). Gender and age differences in emotion regulation strategies and their relationship to depressive symptoms. *Personality and Individual Differences, 51*(6), 704–708.
- Simon, R. W., & Nath, L. E. (2004). Gender and emotion in the United States: Do men and women differ in self-reports of feelings and expressive behavior? *American Journal of Sociology, 109*(5), 1137–1176.
- Spielberger, C. D. (1999). *State-Trait Anger Expression Inventory-2 (STAXI-2)*. Psychological Assessment Resources.

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Conflict of Interest

The author(s) declared no conflict of interest.

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