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SELF-SILENCING AND ANXIETY SYMPTOMS AMONG FEMALE UNIVERSITY STUDENTS IN MALAKAND: TESTING A SERIAL MEDIATION MODEL OF ANGER AND DISTRESS TOLERANCE

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Abstract

This study investigated whether self-silencing is associated with anxiety symptoms in Pakistani female university students and if anger and distress tolerance account for this association sequentially. Purposive sampling was used to select 221 female University of Malakand students (aged 18–30) to participate in a cross-sectional survey. The Dimensions of Anger Reactions Scale (DAR-5), the Distress Tolerance Scale, the Zung Self-Rating Anxiety Scale, and the Silencing the Self Scale were all completed by participants. Simple regression, correlations, and PROCESS Model 6 (5,000 bootstrap samples) were used to analyze the data. Self-silencing did not substantially correlate with anger (r =.089, p >.05), but it did connect negatively with distress tolerance (r = −.223, p <.01) and positively with anxiety (r =.198, p <.01). Anxiety was predicted by self-silencing (B = 0.101, p =.003; R2 =.039). There was no significant serial pathway from anger to distress tolerance (B = 0.007, 95% CI [−0.003, 0.020Nevertheless, the direct effect of self-silencing was no longer significant if mediators were included, while distress tolerance alone carried a substantial indirect effect (B = 0.045, 95% CI [0.015, 0.076]). According to the findings, repressing one's wants and emotions is linked to anxiety primarily because it is accompanied by a reduced ability to handle emotional distress. Young women's vulnerability to anxiety may be lessened by university counseling that fosters emotional expression and distress tolerance..

INTRODUCTION

In many nations, women are more likely than males to experience internalizing problems including depression and anxiety (McLean et al., 2011; Nolen-Hoeksema, 2001; Weissman & Klerman, 1977). According to sociocultural interpretations, a portion of this disparity might be attributed to gender socialization: women may be more vulnerable to psychological stress due to expectations regarding their duties,

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emotional control, and intimacy in relationships (Jack, 1991; McGrath et al., 1990). Anxiety is one of the most common issues identified by students globally, and university life adds additional stress due to academic obligations, social adjustment, and future uncertainty (Beiter et al., 2015; Stallman, 2010).

Self-silencing is one idea that has gained attention in this area. The phrase was coined by Jack (1991) to describe a tendency in which people, especially women, suppress their needs, wants, and opinions in order to maintain relationships and prevent conflict. According to Jack and Dill (1992), this pattern can lead to suffering, such as despair, anxiety, and low self-esteem, and is the result of internalized expectations of self-sacrifice and compliance. Self-silencing has been frequently associated with internalizing symptoms in subsequent research (Harper & Welsh, 2007; Thompson et al., 2001).

How silencing turns into anxiousness may be explained by two emotional processes. Anger is the first. People experience anger when they sense injustice, obstacles to their goals, or conflict, but habitual suppressors may rarely express their anger, allowing it to remain internalized and poorly controlled (Spielberger, 1999). Anxiety and other emotional problems have been linked to poorly controlled rage (Deffenbacher, 2011). The ability to encounter and tolerate unfavorable emotional states without being overwhelmed or turning to unhealthy coping mechanisms is known as distress tolerance (Simons & Gaher, 2005). Numerous psychopathological problems have been linked to low distress tolerance (Leyro et al., 2010).

When considered collectively, these concepts point to a sequential process: suppressing one's emotions can exacerbate anger, which can weaken one's capacity for distress tolerance, which can subsequently increase anxiety (Hayes, 2018). However, the majority of research on self-silencing has focused on depression in Western populations, anxiety has received less attention, and little is known about the emotional mechanisms at play or about women in Pakistani university settings. In order to close these gaps, the current study tests this serial model on female University of Malakand students.

Literature Review and Theoretical Background

Self-silencing and psychological distress

Self-silencing is linked to distress in a substantial body of research. Harper et al. (2006) found that fear of rejection was linked to depressed symptoms in a sample of teenage dating couples, in part because it promoted self-silencing. Pintea and Gatea's (2021) meta-analysis of 42 research revealed a somewhat favorable correlation between depression and self-silencing, with the divided self and externalized self-perception appearing as particularly significant factors. Research on anxiety-related outcomes is scarcer but consistent: among university students, self-silencing has been linked to social anxiety (Baek & Hong, 2022); among young women, it has been linked to lower self-esteem and, consequently, higher levels of stress, anxiety, and depression (Demir-Kaya & Kaya, 2023)

Gender, culture, and mechanisms

Research indicates that the cost of self-silencing may vary depending on the gender and type of self-silencing. Davoodi et al. (2024) discovered that while overall levels of silencing were comparable across gender and culture groups, women's depression was more closely correlated with prioritizing the needs of others. Emran et al. (2022) demonstrated that self-silencing was a stronger relationship between depression and insecure attachment in women.Self-silencing was linked to decreased well-being among married people, in part due to co-dependency (Naeem et al., 2023), while depressed married women in Pakistan reported higher self-silencing and worse marital adjustment than non-depressed women (Ahmed & Iqbal, 2019). Sharma et al. (2025)

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found that self-silencing was associated with women's display of rage in India, with depressed symptoms serving as a mediating factor.

Overall, co-dependency, depression symptoms, attachment, and self-esteem have been identified as processes in previous research. However, as sequential explanations for anxiety, anger and distress tolerance have hardly ever been investigated simultaneously, and even less frequently in Pakistani female students.

Theoretical framework

Three viewpoints are used in the investigation. According to the Silencing the Self Theory (Jack, 1991), long-term repression of needs and emotions leads to misery, rage, and helplessness. Avoiding emotional expression, according to cognitive-behavioral theory, maintains maladaptive thought processes that can exacerbate anger and impair coping. According to distress tolerance theories, those who find emotional discomfort difficult to handle react more strongly to stress and are more likely to experience anxiety.

When taken as a whole, they suggest that self-silencing indirectly increases anxiety by diminishing tolerance for distress and raising anger (Figure 1).

Figure 1. Hypothesized serial mediation model: Self-silencing → Anger → Distress tolerance → Anxiety symptoms (with a direct path from self-silencing to anxiety).

Hypotheses

H1: Self-silencing is positively related to anxiety symptoms.

H2: Self-silencing is positively related to anger and negatively related to distress tolerance.

H3: Self-silencing positively predicts anxiety symptoms.

H4: Anger and distress tolerance serially mediate the self-silencing–anxiety relationship: higher self-silencing leads to more anger, which lowers distress tolerance, which raises anxiety.

Method

Design and participants

The study employed a cross-sectional, quantitative correlational design. Female University of Malakand students were the target demographic. Purposive sampling was used to enroll 221 participants. Female,

between the ages of 18 and 30, enrolled in an undergraduate or graduate degree, and willing to participate were the requirements for inclusion. Students who failed to perform tasks despite being requested to do so or who self-reported having a serious mental illness were not allowed to participate.

As shown in Table 1, most participants were aged 18–20 (58.4%), single (89.1%), and from nuclear families (72.9%).

Table 1. Demographic characteristics (N = 221)

Variable	n	%
Age 18–20	129	58.4
Age 21–23	43	19.5
Age 24–25	46	20.8
Age 26–27	3	1.4
Single	197	89.1

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Married	24	10.9
Nuclear family	161	72.9
Joint family	60	27.1

Measures

Silencing the Self Scale (STSS; Jack & Dill, 1992). Externalized self-perception, care as self-sacrifice, silencing the self, and the divided self are the four dimensions covered by this 31-item test with a 5-point agreement scale. Higher scores indicate more self-silencing; totals range from 31 to 155.

Zung Self-Rating Anxiety Scale (SAS; Zung, 1971). Four dimensions are covered by this 31-item test, which has a 5-point agreement scale: externalized self-perception, care as self-sacrifice, silencing the self, and the divided self. Higher scores indicate more self-silencing; totals vary from 31 to 155.

Distress Tolerance Scale (DTS; Simons & Gaher, 2005). The perceived capacity to tolerate emotional suffering is measured by fifteen items (tolerance, evaluation, absorption, regulation) that are assessed on a five-point scale. Greater distress tolerance is indicated by higher numbers since totals were reverse-scored using the scoring key (reversed total = 90 − recorded total).

Dimensions of Anger Reactions Scale (DAR-5; Forbes et al., 2014). Anger intensity and regulation difficulty are measured by five items on a 5-point scale (range 5–25). Anger problems that are clinically relevant are typically indicated by a score of 12 or higher.All instruments were administered in English.

Procedure and ethics

Permission was given by the relevant departmental authorities. Each participant was contacted one-on-one on campus, informed of the study's purpose, and asked to sign an informed consent form. They completed a booklet including the four scales in a quiet setting and were told that there were no right or wrong answers. After items were returned, participants were asked to complete surveys if any were missing. Responses were anonymous and private, participation was voluntary and unpaid, withdrawal was available at any moment, and data was solely utilized for academic purposes. Where necessary, permission was acquired to utilize the standardized scales.

Data analysis

SPSS was used for the analyzes. Descriptive statistics, Pearson correlations, Cronbach's alpha, and a straightforward regression of anxiety on self-silencing were all calculated. Using 5,000 bootstrap resamples and 95% confidence intervals, PROCESS Model 6 (Hayes, 2018) was used to test the serial mediation hypothesis; an indirect impact was considered significant when its interval excluded zero. P
<.05 was the significance level.

Results

Reliability and descriptive statistics

The anxiety scale had the lowest reliability (α =.649), so results involving it should be interpreted with caution. Internal consistency ranged from questionable to good (Table 2). The mean raw SAS score (44.96) corresponds to a standardized index of about 56.20, within the mild-to-moderate range; the mean anger score (12.88) was above the DAR-5 cut-off of 12.

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Table 2. Descriptive statistics and reliability of the scales

Scale	M	SD	Range	α
Silencing the Self	94.02	15.57	54–125	.832
Zung Anxiety	44.96	7.91	31–63	.649
Dimensions of Anger	12.88	4.27	5–25	.749
Distress Tolerance	41.26	8.61	22–57	.770

Correlations (H1 and H2)

Table 3. Pearson correlations among study variables

Variable	1	2	3	4
1. Self-silencing	—			
2. Anxiety	.198**	—		
3. Anger	.089	.343**	—	
4. Distress tolerance	−.223**	−.539**	−.368**	—

Note. **p < .01.

Self-silencing demonstrated a weak negative correlation with distress tolerance and a weak positive correlation with anxiety, supporting H1. There was little correlation between it and rage. Distress tolerance had the highest correlation with anxiety (r = −.539), while anger had a moderate relationship with both reduced distress tolerance and higher anxiety. As a result, H2 was only partially supported.

Regression (H3)

Self-silencing significantly predicted anxiety (B = 0.101, β = .198, SE = 0.034, p = .003), explaining 3.9% of the variance (R^2 = .039). H3 was supported, although the effect was small.

Table 4. Simple regression of anxiety on self-silencing

Predictor	B	β	SE
Constant	35.500	—	3.208
Self-silencing	0.101	.198	0.034

Note. R^2 = .039.

Serial mediation (H4)

The path coefficients are shown in Table 5, and the indirect effects are shown in Table 6. Self-silencing predicted reduced distress tolerance (p =.002) but not anger (p =.187). Lower discomfort tolerance was predicted by anger, and anxiety was predicted by both distress tolerance and anger. The direct effect of self-silencing on

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anxiety was no longer significant when the mediators were included in the model (B = 0.041, p =.161), but the overall indirect effect was still significant (B = 0.060, 95% CI [0.023, 0.097]).

Table 5. Path coefficients (PROCESS Model 6, N = 221)

Path	B	SE	p
Self-silencing → Anger (a1)	0.024	0.019	.187
Self-silencing → Distress tolerance (a2)	−0.106	0.034	.002
Anger → Distress tolerance (d21)	−0.707	0.125	< .001
Anger → Anxiety (b1)	0.309	0.111	.006
Distress tolerance → Anxiety (b2)	−0.423	0.057	< .001
Self-silencing → Anxiety, direct (c′)	0.041	0.029	.161
Self-silencing → Anxiety, total ©	0.101	0.034	.003

Table 6. Indirect effects of self-silencing on anxiety (5,000 bootstrap samples)

Indirect pathway	B	Boot SE	95% CI
Total indirect effect	0.060	0.019	[0.023, 0.097]
Self-silencing → Anger → Anxiety	0.008	0.007	[−0.003, 0.023]
Indirect pathway	B	Boot SE	95% CI
Self-silencing → Distress tolerance → Anxiety	0.045	0.015	[0.015, 0.076]
Self-silencing → Anger → Distress tolerance → Anxiety	0.007	0.006	[−0.003, 0.020]

Only the pathway via distress tolerance alone was significant. The anger-only and serial pathways had intervals containing zero. H4 was thus not supported.

Discussion

The purpose of this study was to determine whether self-silencing among female university students in Malakand is linked to anxiety and whether the relationship can be explained sequentially by anger and distress tolerance. According to the Silencing the Self Theory (Jack, 1991) and other research relating silencing to distress in young women (Demir-Kaya & Kaya, 2023; Harper et al., 2006), self-silencing was somewhat but consistently associated with anxiety and predicted it. Silencing is one factor among several, as seen by the little explained variance (3.9%).

There was no evidence to support the theory that self-silencing and rage are related. The difference may be due to cultural context, as Sharma et al. (2025) did detect such a connection among Indian women.

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Women may be discouraged from expressing or even acknowledging their anger in conservative environments like Malakand, which could result in underreporting on self-report measures; long-term silencers may also lose touch with their angerEven though it had nothing to do with silencing, it is noteworthy that the average anger score was higher than the screening cut-off, indicating that other factors, including social or academic pressures, may be the source of anger in this group. Patterns found primarily in married women may not transfer immediately to the group, which is primarily young, single, and living in nuclear homes.

As previous research would suggest, anger itself was significantly linked to increased anxiety and decreased distress tolerance (Deffenbacher, 2011; Spielberger, 1999). Distress tolerance was the most significant finding. The relationship between self-silencing and anxiety was primarily explained by a reduced capacity to tolerate emotional distress because it was the largest predictor of anxiety and the only mediator with a substantial indirect effect (Leyro et al., 2010; Simons & Gaher, 2005). One reasonable explanation is that people who routinely suppress their emotions have little experience confronting and resolving challenging emotions, which makes them less prepared for times of difficulty. This is a statistical pathway rather than proof of causal mediation because the design is cross-sectional.

Implications

Workshops on healthy and assertive emotional expression, distress tolerance techniques, and anger management could be included in university counseling services. Additionally, awareness campaigns could draw attention to the psychological consequences of persistent self-silencing and promote getting assistance. Early detection of anxiety would be supported by voluntary screening and counseling facilities with sufficient funding.

Limitations

Causal implications cannot be drawn due to the cross-sectional design. Because the sample was limited to female students from a particular university, it cannot be applied to men or to other areas or establishments. Self-report data are susceptible to limited self-awareness and social desirability. The reliability of the anxiety scale was dubious (α =.649), which would have decreased measurement accuracy. Since most participants did not speak English as their first language, comprehension may have differed. Lastly, just four constructs were measured; social support, sadness, and self-esteem were not looked at.

Future research

Longitudinal and experimental work is needed to clarify temporal order. Studies should draw on larger, multi-university and mixed-gender samples, use validated Urdu and Pashto versions of the scales, add qualitative interviews, and test alternative mediators such as depression, self-esteem, and social anxiety. Intervention trials targeting self-silencing and distress tolerance would also be valuable.

Conclusion

Among female university students in Malakand, self-silencing was somewhat correlated with and predictive of anxiety. Since self-silencing had nothing to do with anger, the serial pathway via anger and distress tolerance was not supported. However, the primary explanatory component turned out to be distress tolerance: students who suppressed themselves more had a tendency to handle suffering less well, which was then associated with higher levels of anxiety. It seems that silence isn't always quiet, and improving young women's ability to communicate and handle challenging emotions could be a viable path to improved mental health.

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Declarations

Ethics approval: Approval was obtained from the relevant departmental authorities, University of Malakand. **Consent:** Written informed consent was obtained from all participants. **Conflict of interest:** The authors declare none. **Funding:** None. **Data availability:** Available from the corresponding author on reasonable request.

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