

Use of mature and immature defense mechanisms in competitive exam aspirants: A cross-sectional study

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Abstract

Competitive examination preparation is a prolonged stressor for many young adults in India, yet evidence on defense mechanisms in aspirant groups remains limited. This cross-sectional study assessed mature and immature defense styles among competitive exam aspirants in Jammu City. A convenience sample of 400 aspirants preparing for UPSC/PSC (n = 110), SSC (n = 100), NDA/SSB (n = 97), and Banking (n = 93) completed the Defense Style Questionnaire, DSQ-60. Primary outcomes were mature defenses (Adaptive Defenses) and immature defenses (Image Distorting Defenses), with affect-regulating defenses examined as a secondary outcome. Group differences were tested using one-way ANOVA with effect sizes and assumption checks, with Kruskal–Wallis tests as sensitivity analyses. Covariate-adjusted comparisons were estimated using GLM univariate models controlling for gender, age group, educational qualification, family income, and previous exam attempts. Reliability and dimensionality were evaluated using Cronbach alpha and exploratory factorability indices. Mean scores for mature and immature defenses were similar across exam streams and omnibus differences were not significant, and adjusted models yielded the same conclusion. Internal consistency was extremely high across DSQ composites and composite intercorrelations were near perfect, indicating substantial shared variance and limited discriminant separation between domains in this cohort. Defense style profiles did not differ meaningfully by exam category, and findings underscore the importance of cautious interpretation of domain-specific DSQ composite scores in competitive exam populations.

Keywords: Defense mechanisms; Defense Style Questionnaire (DSQ-60); Competitive exam aspirants; Psychological stress; Psychometrics

How To Cite This Article: Sharma A, Jagawat S. Use Of Mature And Immature Defense Mechanisms In Competitive Exam Aspirants: A Cross-Sectional Study. *Int J Drug Deliv Technol.* 2026;16(27s):245-253. Doi: 10.25258/ijddt.16.27s.29

1. Introduction

Defense mechanisms are automatic psychological mechanisms that govern the conflict and distress within, through influencing how individuals perceive, interpret, and react to threatening experience. The modern literature defines defenses as self-regulation mechanisms that promote emotion regulation in the easy state of pressure (Di Giuseppe *et al.*, 2024). The defensive responding is context sensitive and might change according to the intensity of stress and coping resources. The presence of immature defenses is particularly relevant in case of the severe level of dysregulation, such as the presence of clinical manifestations associated with impulsivity and a risk of self-harm (Sahin *et al.*, 2025). Typically, more adaptive defense use accompanies improved psychological adaptation in the face of a prolonged stress (Gori *et al.*, 2020).

Competitive examination preparation is a long-term stress ecology that is manifested by uncertainty, repetitive appraisal, and identity investment in future results. Indian aspirant communities can take months or years to prepare, and it can be cost-restrictive, family-pressuring, and can have many tries. The data on the context of competitive entrance examination revealed that academic pressure and perceived parental pressure often go hand in hand with anxiety and poor well-being

(Pienyu *et al.*, 2024). The same type of research findings regarding test anxiety indicates that anxiety reactions vary based on demographic and academic factors, indicating patterned instead of homogeneous stress reactions (Torrano *et al.*, 2020). The differences in perceived stress and coping between males and females have been found in student samples, which highlights that subgroups can vary in the regulation processes (Graves *et al.*, 2021). These characteristics render aspirants a population of interest to understand implicit regulatory processes (like defenses) that can contribute to persistence and interpretation of setbacks.

Defensive functioning is also associated with general coping. Coping styles and defense mechanisms are correlated in healthy young adults, which allows concluding that defenses are integrated into broader stress-regulation repertoires (Pilecka *et al.*, 2025). The defensive responding can also change according to environmental threat; in the case of stressors, the patterns of defense can be the sign of uncertainty and perceived uncontrollability (Altwajri *et al.*, 2022). The difference in defenses and coping depending on gender has been reported to occur in high-stress conditions among adolescents (Foto-Ozdemir *et al.*, 2016).

The Defense Style Questionnaire (DSQ) is a self-report method used to evaluate defensive functioning scale, which is one of the most common methods of self-report.

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High-order composites resulting with the DSQ-60 are typically understood as adaptive/mature and image-distorting/immature defenses, and further additional affect-regulating composite in most scoring methods. Recent efforts have focused on streamlining DSQ-based measurement systems and the need to report psychometric behavior in the target population (Sarrar and Goth, 2022). Psychometric reviews of the DSQ-40 variants justify the use of composite scoring but mention the differences between the factors structure and reliability between the settings (Tapp *et al.*, 2018; Pital and Ghazali, 2021). The structural results using adolescent samples indicate that psychometric properties may vary according to the developmental stage (Giovazolias *et al.*, 2017).

The cohorts of competitive exam applicants are still underrepresented in the defense-mechanism studies in Indian cities. Medical and university student studies have been attributed to defense styles and quality of life, symptom clustering, and academic-relevant outcomes (Borges *et al.*, 2020; Waqas *et al.*, 2018). Stress, anxiety, and depressive symptoms plus defensive functioning have also been investigated among the students (Pawlaczyk *et al.*, 2020). The correlations between defense strategies and learning approaches imply the association with motivational and cognitive-affective strategies that can be applied to long-term preparation (Karagiannopoulou *et al.*, 2018). Nonetheless, there is little evidence using the DSQ-60 as to mature and immature defense composite among aspirants undertaking the exams to UPSC/PSC, SSC, Banking, and NDA/SSB in Jammu City.

Accordingly this cross-sectional study was conducted on defense styles in competitive exam aspirants of Jammu City using DSQ-60 composite scores. The major goals were to characterize adaptive (mature) and image-distorting (immature) defenses in general and by exam group. Secondary objectives were to examine ways of affect regulation (i.e., defenses), to estimate internal consistency and dimensionality, and to test for the association of mature and immature composite scores. It was hypothesized that mean mature and mean immature defense scores would be differentially associated by categories of exam, and that the composites would be significantly associated.

2. Methods

2.1 Study design and setting

A cross sectional, group comparative study was carried out among competitive examination aspirant in Jammu City, India. Aspirants were divided into four streams for the exam i.e., UPSC/PSC, Banking, NDA/SSB, and SSC. The period of data collection is not identified in study records.

2.2 Participants and sampling

Participants were selected if they were actively preparing for UPSC/PSC, Banking, NDA/SSB or SSC examinations. Participants with full DSQ composite scores were included; 'previous attempts' nonresponse was kept as a separate category.

A non-probability, convenience sampling procedure was followed in the aspirant preparation settings of Jammu City. The final analytic sample size was $N = 400$ aspirants who were distributed as follows: UPSC/PSC ($N=110$), SSC ($N=100$), NDA/SSB ($N=97$), Banking ($N=93$).

2.3 Measures

2.3.1 Sociodemographic and preparation variables

Participant characteristics were gender, age group, educational qualification, family income, and number of previous attempts (including "not reported", which was retained as a category to be analyzed in adjusted models).

2.3.2 Defense mechanisms (DSQ-60)

Defense measurements were done with the Defense Style Questionnaire-60 (DSQ-60), a self-report instrument with a response scale of 1-9 and an aggregate of the higher-level defense styles (Thygesen *et al.*, 2008). DSQ-60 measurement considerations and structural evaluation have been stressed in previous work, in favor of the reporting of psychometric indices in applied samples (De Page & Rossi, 2023).

Two composite mean scores were co-primary outcomes of DSQ-60 (1-9 metric): mature defenses (Adaptive Defenses.1) and immature defenses (Image Distorting Defenses.1). Affect-regulating defenses (Affect Regulating Defenses.1) were also examined as a secondary DSQ outcome.

2.4 Data handling and quality control

Participant records were checked for completeness and reasonableness before they were analyzed. DSQ composite scores were checked to be in the valid 1-9 metric. Missingness was summarized for participant characteristics and the "previous attempts" nonresponse category ("not reported") was maintained in order to reduce case loss in adjusted models. No casewise exclusion was conducted in extreme DSQ scores because the values were within allowable scale limits.

2.5 Statistical analysis

All analyses were conducted in IBM SPSS Statistics 31 (Base Edition) Software.

2.5.1 Descriptive analyses

Frequencies and percentages were determined for categorical variables. For each group of exams and overall, means, SD and 95% confidence intervals (CIs) were calculated for mature and immature defense composites. Distributional inspection was with boxplots and exploratory diagnostics.

2.5.2 Reliability (internal consistency)

Internal consistency of DSQ-60 item blocks that are associated to the composite outcomes was assessed by use of Cronbach's alpha for the adaptive (mature) block (18 items), image-distorting (immature) block (20 items), and affect-regulating block (22 items).

2.5.3 Item-level dimensionality and factorability

Item level factorability was assessed with the Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett's test of sphericity. Dimensionality was investigated by eigenvalue inspection and one factor exploratory solution to measure the shared variance in terms of communality estimates.

2.5.4 Primary inferential analysis (exam-group differences)

Exam-group differences were tested using one-way ANOVA separately for adaptive (mature) and image distorting (immature) defenses. Homogeneity of variances was tested using Levene's test. Post hoc comparisons were specified a priori (Tukey under homoscedasticity; Games-Howell under heteroscedasticity) and were interpreted only when supported by meaningful omnibus effects. Effect sizes were summarized using η^2 .

2.5.5 Assumptions and sensitivity analysis

Residual normality was evaluated with the help of diagnostic procedures (including Shapiro-Wilk tests). Because of possible significance of normality tests in large samples, a nonparametric sensitivity analysis was performed using Kruskal-Wallis tests for exam-group comparisons for each primary outcome.

2.5.6 Robustness analysis (covariate-adjusted models)

Covariate-adjusted models were estimated using a framework of general linear models to include exam type as the fixed factor and gender, age group, education, family income and previous attempts as entered covariates (categorical factors). Adjusted marginal means and 95% CIs were reported by exam group. Confidence intervals for the means of groups were derived from the standard estimated marginal means output in the Statistical Package for the Social Sciences (SPSS).

2.5.7 Secondary regression analysis

To further characterize shared variance between DSQ composites, an ordinary linear regression model was estimated by least squares with immature (image distorting) defenses as the dependent variable and mature (adaptive) defenses as the focal predictor, controlling for gender, age group, educational qualification, family income and previous attempt at exam (including "not reported". Unstandardized coefficients (B), standard errors, t values, p values, 95% confidence intervals, standardized beta (β) coefficients and variance inflation factors (VIF) were reported. DSQ composites were highly correlated and regression results were understood descriptively rather than in terms of independent predictor effects due to construct overlap.

2.5.8 Multiple testing control

Because two co-primary outcomes were tested, familywise error control was applied using a Bonferroni-adjusted threshold ($\alpha = .025$).

2.6 Ethics and reporting standards

Participation was voluntary and anonymous, and no personally identifying information was taken. Participants were informed about study purpose, procedures, and the right to decline or withdraw from the study at any time without penalty and informed consent was obtained prior to participation. Data were stored in a secure manner and used only for research purposes.

3. Results

3.1 Participant characteristics

The analytic sample was composed of N = 400 competitive-exam aspirants belonging to the Jammu city that include UPSC/PSC (n = 110; 27.5%), SSC (n = 100; 25.0%), NDA/SSB (n = 97; 24.2%) and Banking (n = 93; 23.2%) aspirants. Participants were mostly male (69.8%) and mostly between 18-27 years (91.7%). Additional sociodemographic characteristics are shown in Table 1.

Table 1 Participant Characteristics (N = 400)

Characteristic	Category	n	%
Gender	Male	279	69.8
	Female	121	30.2
Age group (years)	18–22	189	47.2
	23–27	178	44.5
	28–31	24	6.0
	32–35	9	2.2
Education	12th pass	176	44.0
	Graduate	190	47.5
	Postgraduate	34	8.5
Family income	Below ₹2,50,000	85	21.2
	₹2,50,001–₹5,00,000	190	47.5
	₹5,00,001–₹10,00,000	113	28.2
	Above ₹10,00,000	12	3.0
Previous attempts	1–2	173	43.2
	3 or more	56	14.0
	Not reported	171	42.8

Note. Percentages may not sum to 100 because of rounding. “Not reported” indicates missing/blank responses in the dataset.

3.2 DSQ-60 descriptive statistics (primary outcomes)

Defense mechanisms were studied with the DSQ-60 composite mean scores (1-9 response metric). The major defenses found were mature defenses (Adaptive Defenses.1) and immature defenses (Image Distorting Defenses.1). At the overall level, there was a great deal of similarity between mature and immature defense scores (Mature: M = 5.11, SD = 2.27; Immature: M = 5.11, SD = 2.27). Group-wise descriptive statistics and 95% confidence intervals are shown in Table 2.

Table 2 DSQ-60 Mature and Immature Defense Scores by Exam Type (N = 400)

Exam group	n	Mature M (SD)	95% CI	Immature M (SD)	95% CI
Banking	93	4.78 (2.30)	[4.30, 5.25]	4.77 (2.30)	[4.30, 5.25]
NDA/SSB	97	5.22 (2.24)	[4.77, 5.67]	5.22 (2.24)	[4.77, 5.67]
SSC	100	5.30 (2.22)	[4.86, 5.74]	5.30 (2.22)	[4.85, 5.74]
UPSC/PSC	110	5.12 (2.31)	[4.68, 5.56]	5.12 (2.31)	[4.68, 5.56]

Note. CI = confidence interval for the mean. Mature = Adaptive Defenses.1; Immature = Image Distorting Defenses.1.

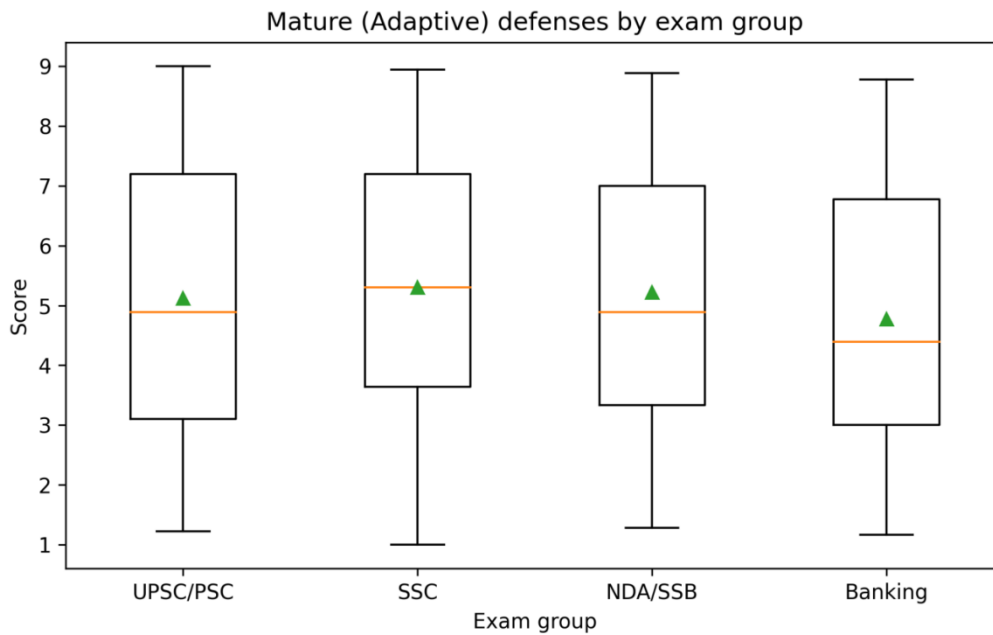


Figure 1. Boxplot of Mature (Adaptive) defenses by exam type.

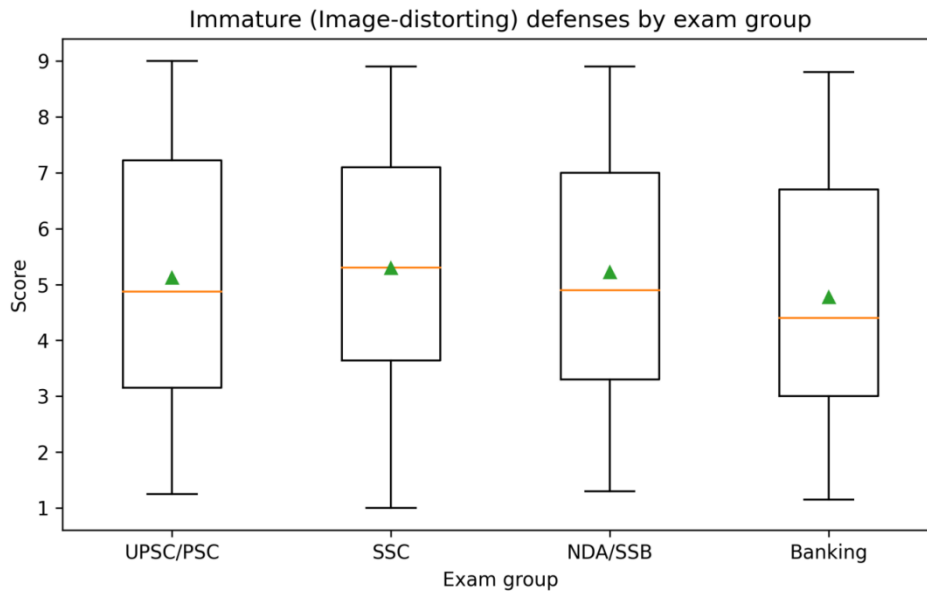


Figure 2. Boxplot of Immature (Image-distorting) defenses by exam type.

3.3 Internal consistency (DSQ-60)

Internal consistency was excellent for the DSQ-60 blocks that were used to calculate composite scores. Internal consistency coefficients were extremely high across domains, suggesting that there is much shared variance among DSQ items in this sample. Cronbach’s alpha values were extremely high across domains (Table 3). Reliability for the affect regulating block (secondary) was similarly high.

Table 3. Internal Consistency of DSQ-60 Blocks (N = 400)

DSQ-60 block	Items (k)	Cronbach’s α
Adaptive (mature)	18	.9966
Image-distorting (immature)	20	.9970
Affect-regulating (secondary)	22	.9973

Note. Cronbach’s α values are reported to four decimals.

3.4 Dimensionality and factorability (item-level check)

Item-level diagnostics were supportive of factorability of DSQ-60 responses (KMO = 0.957). Eigenvalue inspection showed the existence of a dominant first eigenvalue ($\lambda_1 \approx 56.79$) followed by eigenvalues less than 1 in line with a strong general-factor pattern in this data set. A single factor solution produced high communalities (mean ≈ 0.947) and suggests that there is a substantial amount of shared variance among items.

3.5 Primary analysis: exam-group differences in mature and immature defenses

A one-way analysis of variance (ANOVA) tested exam-group differences for each primary outcome. There were no statistically significant differences in mature defenses across exam categories, $F(3, 396) = 0.98, p = .403, \eta^2 = .007$. Similarly, immature defenses did not differ across exam categories, $F(3, 396) = 0.98, p = .403, \eta^2 = .007$. Omnibus ANOVA results are shown in Table 4. Because the omnibus tests were not significant and effects were small, post hoc comparisons were not interpreted.

Table 4. One-Way ANOVA for DSQ-60 Outcomes by Exam Type (N = 400)

Outcome	df (between, within)	F	p	η^2
Mature (Adaptive Defenses.1)	3, 396	0.98	.403	.007
Immature (Image Distorting Defenses.1)	3, 396	0.98	.403	.007

Note. η^2 = eta squared.

3.6 Assumption checks and sensitivity analysis

Homogeneity of variances was supported using Levene’s test based on the median (Mature: $p = .8345$; Immature: $p = .8540$). Shapiro–Wilk tests of residual normality were significant for both outcomes ($ps < .001$), which is common in large samples. Accordingly,

a nonparametric sensitivity analysis was conducted. Kruskal–Wallis tests similarly indicated no exam-group differences (Mature, $H = 3.12, p = .374$; Immature, $H = 3.17, p = .366$).

3.7 Robustness analysis: covariate-adjusted models

To evaluate robustness, covariate-adjusted models were estimated controlling for gender, age group, education, family income, and previous attempts (with “Not reported” retained as a category). Exam type remained

non-significant for mature defenses, $F(3, 385) = 0.58, p = .630$, and for immature defenses, $F(3, 385) = 0.55, p = .646$. Covariate-adjusted marginal means are presented in Table 5.

Table 5 Covariate-Adjusted Marginal Means for DSQ-60 Outcomes by Exam Type (N = 400)

Outcome	Exam group	Adjusted <i>M</i>	95% CI
Mature	Banking	4.92	[4.11, 5.53]
	NDA/SSB	5.32	[4.55, 6.10]
	SSC	5.43	[4.77, 6.15]
	UPSC/PSC	4.80	[4.06, 5.47]
Immature	Banking	4.92	[4.21, 5.62]
	NDA/SSB	5.31	[4.48, 6.21]
	SSC	5.42	[4.78, 6.15]
	UPSC/PSC	4.81	[4.11, 5.50]

Note. Models adjusted for gender, age group, education, family income, and previous attempts (including “Not reported”).

3.8 Secondary association between defense composites

Mature and immature composite scores were extremely strongly correlated ($r = .9998, p < .001$). Immature defenses were also strongly correlated with affect-regulating defenses ($r = .9999, p < .001$), and mature defenses correlated strongly with affect-regulating defenses ($r = .9996, p < .001$). The direction and magnitude of these associations were interpreted in light of the item-level dimensionality results indicating a dominant shared-variance structure.

3.9 Secondary regression model predicting immature defenses

A linear regression model was estimated with immature (image-distorting) defenses as the dependent variable and mature (adaptive) defenses as the focal predictor, controlling for gender, age group, educational qualification, family income, and previous exam attempts (Table 6). The overall model fit was high ($R^2 = 0.9997$, adjusted $R^2 = 0.9997$). Mature defenses were a strong positive predictor of immature defenses ($B = 1.000, SE = 0.001, t = 963.00, p < .001$; standardized $\beta \approx 1.000$), whereas demographic covariates showed negligible associations ($ps > .05$).

Table 6. Linear Regression Predicting Immature (Image-distorting) Defenses (N = 400)

Predictor	B	SE	t	p	95% CI LL	95% CI UL	β (standardized)	VIF
Intercept	-0.007	0.015	-0.45	.651	-0.036	0.022	0.000	—
Gender: Male (vs Female)	-0.007	0.004	-1.56	.119	-0.016	0.002	-0.001	1.03
Age: 23–27 (vs 18–22)	-0.011	0.012	-0.91	.366	-0.035	0.013	-0.002	9.30
Age: 28–31 (vs 18–22)	-0.015	0.018	-0.79	.430	-0.051	0.022	-0.002	4.74
Age: 32–35 (vs 18–22)	-0.011	0.025	-0.44	.660	-0.061	0.039	-0.001	3.51
Education: Graduate (vs 12th)	0.014	0.012	1.24	.215	-0.008	0.037	0.003	8.43
Education: Postgraduate (vs 12th)	0.019	0.020	0.95	.343	-0.021	0.059	0.002	7.91
Family income: Below ₹2.5L (vs Above ₹10L)	0.007	0.013	0.56	.578	-0.019	0.033	0.001	7.27
Family income: ₹2.5–5L (vs Above ₹10L)	0.005	0.012	0.39	.697	-0.019	0.029	0.001	9.10
Family income: ₹5–10L (vs Above ₹10L)	0.011	0.012	0.88	.381	-0.013	0.035	0.002	7.65
Attempts: 3+ (vs 1–2)	-0.013	0.018	-0.71	.478	-0.048	0.022	-0.002	9.53
Attempts: Not reported (vs 1–2)	0.001	0.005	0.25	.806	-0.009	0.012	0.000	1.66
Mature defenses (Adaptive; continuous)	1.000	0.001	963.00	<.001	0.998	1.002	1.000	1.38

Note: Given near-perfect correlation between DSQ composites, multicollinearity/construct overlap is extreme; coefficients primarily reflect shared measurement variance.

4. Discussion

The present cross-sectional study analyzed mature (adaptive) and immature (image distorting) style of defense among the competitive exam aspirants in Jammu City in UPSC/PSC, Banking, NDA/SSB and SSC streams. Descriptively, minor differences were found with regard to mean scores with Banking aspirants showing slightly lower composite values and SSC/NDA aspirants slight higher values. However, these differences were not statistically significant, effect sizes were minimal, and the same inference was maintained with covariate adjustment for gender, age group, educational qualification, family income and previous attempts. Taken together, the results do not argue for meaningful differentiation at the exam stream in DSQ-60 composites mature and immature defense in this cohort.

A possible interpretation is that labels of exam-stream may be relatively coarse indicators of the lived psychological environment of preparation. In a variety of competitive situations in India, aspirants from various streams are subjected to prolonged uncertainty, frequent performance evaluation, repeated testing cycles, and high social stakes associated with outcomes, which may lead to a common stress ecology reducing differences between streams on broad regulatory tendencies. Evidence from India consistently shows high levels of depression, anxiety and stress among contenders for competitive exams is suggestive of the fact that prolonged preparation in many cases constitutes a chronic stress exposure irrespective of the category of the examination (Premkumar *et al.*, 2022; Pachole *et al.*, 2023). Studies in Indian competitive examinee contexts also emphasize on the variability of resilience and adjustment among stressed examinee cohorts, implying that individual differences may be more a function of streams than between them, if the grouping variable is taken as exam membership (Sarkar, 2024). This perspective is consistent with the current pattern of the small between-group differences and large within-group variability.

The most significant finding in terms of impact on interpretation was the excessive overlap of composite of DSQ-60. Immature and mature composites were virtually identical in degree of correlation, as well as both of them were also near-perfectly correlated with affect-regulating defenses. Parallel to this, diagnostics, which were item-level, indicated the existence of a large general factor with remarkably high communalities, and the extraordinarily high internal consistency coefficients. Such a set of results suggests that within this dataset, the DSQ composites acted as strongly overlapping measures of a common response tendency, and not distinct defensive domains. Although the theory of defense commonly separates mature and immature mechanisms along the continuum of adaptiveness, more modern studies also highlight that defences may co-exist and that defensive performance may demonstrate a

combination of underlying construct variance and response style variance (Di Giuseppe and Perry, 2021; Blanco *et al.*, 2023). The current findings would not, therefore, indicate that mature, and immature defenses are theoretically equal, but this would indicate that the DSQ-60 composite scores in this cohort have the limited ability of discriminating and thus should be interpreted cautiously that they represent a diffuse pattern of defensive endorsement.

The results of this action of measurement are directly applicable to the interpretation of hypothesis. H3 was developed in a non-directional manner in terms of anticipating a relationship between mature and immature composites, and this expectation is clearly upheld by the results. But the size of the association is so huge as to be better explained by the presence of a large shared component than by a delicate compromise between separate defensive areas. DSQ-60 was made to measure defense styles and has proved useful in a variety of settings, but the initial DSQ-60 psychometric construction and later structural analyses have pointed to the fact that factor structure and discriminant separation may depend on the sample to be studied, which supports the importance of reporting reliability and dimensionality in any given study population (Thygesen *et al.*, 2008; De Page and Rossi, 2023). In this cohort, the general factor pattern, on the whole, indicates that it is not credible to draw conclusions at domain level (e.g. more mature than immature) based on composite differences when the factor index of the defence balance is close to zero by nature since the composite values are very similar.

This shared-variance structure should also be taken into consideration in the light of lack of exam-stream differences. In situations where the DSQ composites capture a similar response dimension, then comparing groups of streams would naturally be null except in the case where the groups strongly differ on that general dimension. The η^2 values found were extremely negligible and this shows that the exam stream accounted <1% of variance in either one of the primary outcomes and the nonparametric and adjusted analyses concurred with the same. Therefore, the null results seem to be strong against normative decisions in analysis, and are constrained by measurement properties of the composites in this data set.

In applied terms, the findings indicate that the conceptualization of psychosocial support in Jammu City among aspirants could be expanded to be applicable to streams instead of being specific to exam category. Since there has been consistent evidence to suggest that the preparation of competitive exams is related to distress and strain in Indian settings, stress management, sleep hygiene, systematic study-recovery patterns, and ease of referral to counseling may be developed as interventions to be used with mixed-stream aspirant cohorts without presuming important psychological differences between exam types (Premkumar *et al.*,

2022; Pachole *et al.*, 2023). Simultaneously, since within-stream heterogeneity will probably be present in large amounts, support interventions can be improved by targeting individual risk predictors (e.g. long preparation, frequent failures, high perceived pressure) instead of stream membership.

There are few limitations, which should be stressed in order to be interpreted transparently. The study is cross-sectional and, therefore, no evaluation could be made whether defensive responding changed over the preparation phases or in relation to closer or farther dates of examinations. The generalizability of the research findings outside aspirants available within the settings of Jammu City is constrained by convenient sampling. Above all, such high levels of internal consistency and near-perfect composite correlations suggest that self-report measurement of defensive style in this group can be described as having an extreme degree of shared variance, making it difficult to draw solid conclusions about the domain-specific defense functioning. Future studies need to duplicate results in multi-city aspirant samples, integrate preparation-context factors (duration, coaching intensity, parental pressure, sleep disruption), and assess the measurement structure more stringently to discover whether the DSQ-60 domains could be split in the competitive-exam sample as structural assessments suggest (Thygesen *et al.*, 2008; De Page and Rossi, 2023). Irrespective of these limitations, the present findings give a baseline DSQ-60 profile of a large aspirant sample and suggest that exam-stream comparisons result in little variance when defense composites are highly overlapping.

5. Conclusion

This cross-sectional study was an examination of mature (adaptive) and immature (image distorting) defence mechanism among the competitive exam aspirants of Jammu City using DSQ-60 composites. Across UPSC/PSC, SSC, NDA/SSB and Banking streams, mean differences in mature and immature defenses were small and not statistically significant in unadjusted analyses, non-parametric sensitivity tests or covariate adjusted models controlling for gender, age group, educational qualification, family income and previous attempts. These results indicate that broad profiles of defensive styles could be more similar than different across exam categories in a common high pressure preparation situation. One of the key contributions of the study is the psychometric pattern that was observed in this cohort. DSQ composites demonstrated extremely high levels of internal consistency and near perfect positive intercorrelations along with evidence of a dominant general factor. Accordingly, composite scores must be interpreted cautiously as indicating considerable shared variance and poor discriminant separation between defense domains in the current sample. Future research should replicate these results in multi-site aspirant populations and employ designs that incorporate preparation phase, perceived pressure, and time-to-exam in order to elucidate whether defensiveness varies dynamically with the exposure to

stress. Incorporating other validity indicators (e.g., checks related to response style and alternative approaches to measurement) may add further precision to inference regarding domain-specific defensive functioning. Despite these limitations, the current results represent a first profile on the DSQ-60 in a large aspiring sample and identify measurement issues that are important for defense research in competitive educational settings.

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