

## Influence of Perceived Social Support on Perceived Stress and Ego Defense Styles among College Students

Michelle Anne Jojo<sup>1\*</sup>, Uma Krishnan<sup>2</sup>

### ABSTRACT

The current study, grounded in Vaillant's hierarchical model of defense styles, delves into the interplay among defense mechanisms, perceived stress, and perceived social support within the context of college students. Data (N=135) were analyzed using correlation and mediation analyses. Consistent with the literature the heightened utilization of mature defense styles exhibited a strong correlation with reduced levels of perceived stress. Furthermore, the research uncovered that both mature and immature defense mechanisms were linked to elevated levels of perceived social support, aligning with established theoretical frameworks. The mediating effect of perceived social support was unsupported by the data. This study highlights the importance of the role played by defense styles in our perception of stress and social support and can form the foundation for holistic interventions. This study also investigates the role of maladaptive defense styles and their links to perceived stress and social support, filling a gap in existing literature.

**Keywords:** *Perceived Social Support, Perceived Stress, Mature Defense Style, Immature Defense Style, Neurotic Defense Style*

Ego defense mechanisms are functions of the mind that shield a person from excessive anxiety caused due to external circumstances as well as internal psychological states (Freud, 1946). It safeguards the mind through modification, distortion, and removal of stressful thoughts, feelings, and perceptions. In the intricate tapestry of human psychology, defense mechanisms rise to the forefront as protective shields against stress and turmoil. This study is based on the hierarchical model of defense mechanisms proposed by American psychiatrist George E. Vaillant, a conceptual framework deeply rooted in Freudian principles (Vaillant, 1971). He classified defense mechanisms based on the degrees of maturity. Mature defenses such as suppression, sublimation, altruism, and humor are predominantly found in people who are highly successful in jobs and relationships and have relatively less psychopathology. Neurotic defense mechanisms are found across all levels of life and are less adaptive. Immature defense mechanisms such as projection, acting out, and passive aggression are maladaptive and associated with emotional regulation and expression difficulties (Vaillant, 2000). Mature defenses are linked to higher adaptive performance than neurotic and immature versions (Waqas et al., 2018). Mature defense mechanisms efficiently

<sup>1</sup>Department of Psychology, CHRIST (Deemed-to-be University), Bangalore.  
<https://orcid.org/0009-0001-0141-127X>

<sup>2</sup>Department of Psychology, CHRIST (Deemed-to-be University), Bangalore.

\*Corresponding Author

Received: February 13, 2025; Revision Received: May 28, 2025; Accepted: June 02, 2025

## **Influence of Perceived Social Support on Perceived Stress and Ego Defense Styles among College Students**

protect against threatening effects without distorting reality perception however, immature defense mechanisms frequently cause severe reality distortion (Cramer, 1991). The model's validity was investigated by Vaillant (1977, 1993) using a longitudinal sample of male college graduates.

### ***Ego Defense Mechanisms and Perceived Stress***

Literature shows mounting evidence that individual differences in responding to stressful situations are indeed influenced by ego defense styles (Vaillant, 1992). Theorists contend that humans subconsciously respond to stressful stimuli through defensive mechanisms when they attempt to cope with them unsuccessfully and become weary. It has been found that extreme levels of stress exposure have influenced the development and employment of maladaptive ego defense mechanisms (Lovko et al., 2007). Maladaptive defense mechanisms are defined by avoidance of conflict and regression (Vaillant, 1971). This study aims to assess the relationship between perceived stress and ego defense styles. Perceived stress refers to an individual's feelings or thoughts about how stressed they are at a certain point in time or throughout a given time period (Phillips, 2016). Most studies examining the potential relationships between ego defense mechanisms and perceived stress have focused on mature defense mechanisms. The relationship between perceived stress and neurotic and immature defense mechanisms is yet to be reviewed systematically.

Numerous studies have explored ego defense mechanisms based on Vaillant's hierarchical model. Parekh et al. (2010) identified that neurotic and mature defense styles were more prevalent than immature defense styles among Pakistani medical students. The high prevalence of neurotic defense mechanisms among medical students have been confirmed by other studies as well (La Cour, 2002; Waqas et al., 2015). As medical students are more highly stressed than the general population, these results do not confirm but are suggestive of the fact that high adoption of neurotic defense styles might be an indicator of significant amounts of stress. Further research is needed to determine the correlation between levels of defense mechanisms and perceived stress levels. Grevin (1996) examined the prevalence of Post-traumatic Stress Disorder, the extent and style of ego defense use, and empathy in urban paramedics and paramedic students. According to the findings, both paramedics and paramedic students scored much higher on Denial and Repression and significantly lower on Regression and Response Formulation. Lovko et al. (2007) investigated the primary ego defense mechanisms found in oncology and physical medicine departments, as well as the disparities in their frequency. The study found that excessive stress in the oncology department promotes the development of inadequate defense mechanisms. Nam et al. (2019) investigated the association between the adaptation abilities of persons experiencing forced military service and the characteristic of defense mechanisms used. The maladjusted group who were subjected to extreme stress, utilized immature defense, while the control group used mature defense mechanisms. In both these studies, maladaptive defense styles are found to be increasingly employed than the normal population. The above studies have focused on assessing the ego defense mechanisms in extremely stressed populations. This suggests the relationship between stress and individual ego defense styles.

Another study by Cramer (2003) examined the relationship between the use of defense mechanisms and autonomic nervous system response under laboratory stress settings. Both diastolic blood pressure (DBP) and skin conductance level (SCL) were measured; concurrently, the employment of three defense strategies was examined by coding Thematic Apperception Test stories. It was found that DBP was higher in people who used more

## **Influence of Perceived Social Support on Perceived Stress and Ego Defense Styles among College Students**

identification. In contrast, the usage of Projection was related with decreased DBP. Also, the usage of Identification was found to be connected with decreased SCL. A few studies have examined the relationship between individual defense styles and stress. A study reported that mature defenses negatively correlated with perceived stress due to COVID-19 and mediated between life satisfaction and perceived stress (Gori et al., 2020). Further probing is needed to understand the association between neurotic and immature defense styles and levels of perceived stress. Much research has assessed the relationship between mature defense and stress, but very few have assessed the relationship between maladaptive ego defenses and perceived stress.

Furthermore, various studies have explored the relationship between individual defense mechanisms and other variables. According to the research, mature and neurotic defense mechanisms have a direct relationship with academic achievement in medical students, but immature defense strategies had an indirect relationship (Waqas et al., 2015). In a study by Waqas et al. (2018), an examination of ego defense styles among medical students revealed that high achievers exhibited lower scores on immature defense styles and higher scores on mature and neurotic defense styles compared to their low-achieving counterparts. However, there is a dearth of studies that look into the correlation of individual defenses, especially maladaptive defenses, with perceived stress. The present study attempts to fill this gap. However, there is a dearth of studies that look into the correlation of individual defenses, especially maladaptive defenses, with perceived stress. The present study attempts to fill this gap.

### ***Perceived Social Support and Ego Defense Mechanisms***

Furthermore, this study assesses the relationship between levels of defense mechanisms and perceived social support. When people believe that they can rely on their friends, family, and significant others to support them in times of need, it is referred to as perceived social support (Gottlieb & Bergen, 2010).

Research suggests that defense maturity is necessary for developing social interactions (Malone et al., 2013). One of the crucial factors in developing ego defense mechanisms is ego resiliency (Cramer & Block, 1998). Perceived social support is found to be directly proportional to ego resilience (Ranjan et al., 2019). This implies the possibility of a relationship between perceived social support and ego defense mechanisms. Malone et al. (2013) found that more adaptive defenses in midlife were related to greater physical health at three late-life time points and social support played a role in mediating these interactions. The findings support the theory that defense maturity is necessary for developing social interactions, contributing to better late-life physical health. This study supports the probability of a relationship between perceived social support and ego defense mechanisms. It is noteworthy that there are very few studies that talk about the relationship between perceived social support and ego defense styles. Mehraban et al. (2023) found that there is a direct relationship between mature defense mechanisms and perceived social support. Several studies have examined the relationship between perceived social support and other variables related to defense styles. Ozdemir & Arslan (2018) investigated the relationship between social support and stress coping in women with breast cancer. According to the findings of this study, levels of efficient stress management improved as perceived social support from family and overall support scores rose. It was shown that social support was a strong predictor of good stress management. To understand the association between perceived social support and antenatal depression (AD) in pregnant women, Chen et al.

## **Influence of Perceived Social Support on Perceived Stress and Ego Defense Styles among College Students**

(2022) looked at the mediation effect roles of coping methods. Increased social support reduced the likelihood of AD not just directly but also indirectly through the mediating functions of coping methods. Though coping styles and defensive mechanisms are independent psychological processes with different theoretical foundations, some research has established a link between adaptive coping techniques and mature defenses, as well as dysfunctional coping strategies and immature defenses (Grebott et al., 2006).

### ***Perceived Social Support and Perceived Stress***

Seeking social support is one of the chief ways people cope with stress. Perceived social support is a significant predictor of stress (Matheny et al., 2002), and both variables are found to be negatively correlated (Chao, 2012). In general, the ability to control and manage stress and the perception of stress have been linked to social support (Uchino, 2009). The nature of the relationship between perceived social support and stress is well established.

### ***Perceived Social Support Between Perceived Stress and Ego Defense Mechanisms***

According to Vaillant (1992), a more dependable and facilitating social environment can be a powerful tool for changing a person's maladaptive defense mechanisms under stress. He posits that we are all more capable of altruism, suppression, and sublimation when we are with people who understand the pain we experience. People who are psychologically healthy rely on others for "solace and support" throughout their lives (Harriette, 1991). A key protective factor against psychological suffering in response to stressful circumstances is perceived social support. Furthermore, the perceived quality of a person's social support system, rather than an actual evaluation of their social support system is what protects against psychological distress (Nicolas & Jebrane, A, 2008).

This suggests the possibility of perceived social support as a mediator between ego defense mechanisms and perceived stress. Existing studies have uncovered the role of perceived social support as a mediating factor between coping strategies and anxiety. At the peak of the pandemic in China, Li and Peng (2021) investigated the potential mediating roles of three sources of social support (i.e., subjective support, family support, and counsellor support) between coping strategies (i.e., cognitive coping, emotional coping, and behavioural coping) and anxiety among college students. According to the findings, adopting positive coping skills may increase social support, reducing anxiety. The current study assesses the role of perceived social support between ego defense mechanisms and perceived stress.

The existing body of research has established a connection between ego defense styles and stress, particularly with respect to mature defense styles. However, there is a gap in understanding the relationship between maladaptive defense styles and the level of perceived stress among college students. The present study aims to investigate the relationship between various levels of defense styles as described by (Vaillant, 2000) and perceived stress and perceived social support. Correlational analysis of different levels of defense mechanisms and perceived stress will help us confirm whether increased stress levels are indeed associated with adopting maladaptive defense styles, as suggested by previous literature (Parekh et al., 2010). This study also seeks to investigate the potential association between perceived social support and ego defense mechanisms, guided by the idea that defense maturity is vital for forming social relationships. Lastly, this research aims to investigate the prospective role of perceived social support in mediating the relationship between ego defense mechanisms and perceived stress. This will help design interventions

## Influence of Perceived Social Support on Perceived Stress and Ego Defense Styles among College Students

that can integrate all these variables. This study will also help identify the students who employ maladaptive defense styles. Excessive use of defense is associated with psychopathology (Cramer, 2008), so awareness can be created among students through psychoeducation. This will result in a better quality of life for college students.

The results of this study may also form the basis for developing teaching interventions that can help shift from maladaptive defense employment to mature defense, as suggested by previous research (Parekh et al.,2010). It will also form the basis for evidence-based guidance for psychological interventions.

### **METHOD**

#### ***Sample and Procedure***

We conducted this study among 135 college students aged between 18 and 25 following a correlational research design. Power analysis was performed on G\*Power 3.1.9.4 and the required sample size was 84. The participants were recruited following a purposive sampling method. Participants aged between 18 and 25 and currently enrolled as college students in any course were deemed eligible to participate in this study. Participants who provided incomplete questionnaires were excluded from the study. The sociodemographic characteristics of the sample are provided in Table 1. The sample consisted of 45 (33.3%) males, 89 (65.9%) females, and 1 (0.7%) participant belonging to the other category. The highest education level of 35 (25.9%) participants were 12th grade, 82 (60.7%) participants were undergraduates, and the remaining 18 (13.3%) were postgraduates. 60 responses were collected offline through questionnaires distributed in a college, and the remaining 75 responses were collected online through Google Forms. Permission for data collection was obtained from the college authorities before data collection. The participants were asked to sign the informed consent form and gave assent to participate in the study. Then each of the participants were asked to complete a demographics questionnaire and three study questionnaires. The data collection process was conducted in the month of June 2023.

***Table 1 Sociodemographic Characteristics of the Sample***

	<b>n</b>	<b>%</b>
<b>Gender</b>		
Male	45	33.3%
Female	89	65.9%
Other	1	0.7%
<b>Highest Educational Level</b>		
12th Grade	35	25.9%
Undergraduate	82	60.7%
Postgraduate	18	13.3%

#### ***Transparency and Openness***

We report how we determined our sample size, all data exclusions, and all measures in the study, and we follow JARS. All data, analysis code, and research materials are available in the supplementary file. Data were analyzed using Jamovi version 2.3.21.

#### ***Measures and Variables***

This study used a sociodemographic sheet and three questionnaires to collect data.

## **Influence of Perceived Social Support on Perceived Stress and Ego Defense Styles among College Students**

- 1. Ego Defense Mechanisms:** Ego defense mechanisms are functions of the mind that shields a person from excessive anxiety caused due to external circumstances as well as internal psychological states. (Freud, 1946). Defense Style Questionnaire-40 (DSQ-40) is a 40-item questionnaire that was used to evaluate the various defense mechanisms employed by college students. The questionnaire investigates 20 defense mechanisms and three defense styles: (1) a "mature style," made up of four defenses: sublimation, humour, anticipation, and suppression; (2) a "neurotic style," made up of four defenses: undoing, pseudo-altruism, idealization, and reaction formation; and (3) a "immature style," made up of 12 defenses: projection, passive aggression, acting out, isolation, devaluation, autistic fantasy, denial, displacement, dissociation, splitting, rationalization, and somatization. On the DSQ, each defense is represented by two elements. The score for each defense mechanism was calculated by averaging the two items of each defense. It also yields three factor scores and these are obtained by averaging the scores of the defenses under them. The subjects were asked to give their responses on a nine point likert scale ranging from 1= strongly agree to 9= strongly disagree. The mature, neurotic, and immature elements of the DSQ demonstrate fair internal consistency, with alphas of 0.68, 0.58, and 0.80, respectively. The DSQ is reliable, with 4-week test-retest correlations ranging from 0.75 to 0.85 for the three components and from 0.38 to 0.80 for the defense mechanisms. The DSQ shows fair known-groups validity, notably distinguishing anxiety patients from "normal" controls, child-abusing parents from "normal" controls, and anxiety patients from child-abusing parents (Andrews et al., 1993).
- 2. Perceived Stress:** Perceived stress refers to an individual's feelings or thoughts about how stressed they are at a certain point in time or throughout a given time period (Phillips, 2016). Perceived Stress Scale (PSS) is a 10-item questionnaire used to assess how stressful one perceives particular life circumstances to be. The subjects were asked to give their responses on a five-point likert scale ranging from 0= never, 1 = Almost never, 2 = Sometimes, 3 = Fairly often, to 4 = very often. The PSS score was determined by totaling all item scores after reverse scoring items 4, 5, 7, and 8. Higher scores indicate higher levels of perceived stress. With an alpha of .78, the PSS has good internal consistency. The PSS has demonstrated good construct validity. The PSS scores were moderately associated to responses on other measures of evaluated stress as well as stress event frequency (Cohen et al., 1983)
- 3. Perceived Social Support:** When people believe that they can rely on their friends, family, and significant others to support them in times of need, it is referred to as perceived social support (Gottlieb & Bergen, 2010). The Multidimensional Scale of Perceived Social Support (MSPSS) is a brief study tool developed to assess perceptions of support from three sources: family, friends, and a significant other. The scale has a total of 12 elements, with 4 items for each subscale. The subjects are asked to give their responses on a seven-point likert scale ranging from 1 = very strongly disagree to 7= very strongly agree. An average of the scores obtained on all items will yield the total scale score. The MSPSS has been found to have strong internal and test- retest reliability and validity (Zimet et al., 1988).

### ***Data Analysis***

The data was analyzed using Jamovi version 2.3.21. A correlational analysis was performed to analyze the relationship between various levels of defense mechanisms and perceived

## Influence of Perceived Social Support on Perceived Stress and Ego Defense Styles among College Students

stress and perceived social support. A mediation analysis was performed to analyze the role of perceived social support in the relationship between various defense mechanisms and perceived stress.

### RESULTS

Table 2 shows the descriptive statistics and the results of the Shapiro-Wilk test of normality. The mean and standard deviation for mature defense styles ( $M = 5.82$ ,  $SD = 1.09$ ), neurotic defense styles ( $M = 5.43$ ,  $SD = 1.09$ ), immature defense styles ( $M = 4.87$ ,  $SD = 0.90$ ), perceived stress ( $M = 21.9$ ,  $SD = 6.54$ ) and perceived social support ( $M = 4.97$ ,  $SD = 1.30$ ) was obtained. Shapiro-Wilk test indicated that the data is normally distributed for mature, immature, and neurotic defense styles and perceived stress. However, the data was not normally distributed for perceived social support.

**Table 2 Descriptive Statistics**

	<b>M</b>	<b>SD</b>	<b>p</b>
Mature Defense	5.82	1.09	0.611*
Neurotic Defense	5.43	1.09	0.084*
Immature Defense	4.87	0.901	0.320*
Perceived Stress	21.9	6.54	0.175*
Perceived Social Support	4.97	1.30	<0.001

Note. \* $p > 0.05$

A correlation analysis was performed to analyze the relationship between various levels of defense mechanisms (mature, immature, and neurotic), perceived stress, and perceived social support. Table 3 shows the correlational analysis and descriptive statistics for the variables under study.

#### Perceived Stress and Ego Defense Styles

A Pearson correlation coefficient was computed to assess the relationship between perceived stress and the three levels of ego defense styles (mature, immature, and neurotic). There was a significant negative correlation between mature defense style and perceived stress ( $r = -0.22$ ,  $p < 0.05$ ). This means that increased levels of perceived stress result in the decreased employment of mature defense styles. There was found to be no significant correlation between perceived stress and immature and neurotic defense styles.

#### Perceived Social Support and Ego Defense Styles

A Spearman correlation coefficient was computed to assess the relationship between perceived social support and the three levels of ego defense styles (mature, immature, and neurotic). There was found to be a significant positive correlation between perceived social support and mature defense style ( $r = 0.21$ ,  $p < 0.05$ ). This indicates that the higher the rates of perceived social support, the higher the use of mature defense styles. There was also a significant correlation found between perceived social support and neurotic defense style, ( $r = 0.27$ ,  $p < 0.001$ ). This indicates that higher rates of perceived social support was associated with an increase in the employment of neurotic defense styles. There was found to be no significant correlation between perceived social support and immature defense styles.

## Influence of Perceived Social Support on Perceived Stress and Ego Defense Styles among College Students

**Table 3 Descriptive Statistics and Correlations for Study Variables**

	N	M	SD	1	2	3	4	5
Mature Defenses	135	5.82	1.09	-	-	-	-	-
Neurotic Defenses	135	5.43	1.09	0.428***	-	-	-	-
Immature Defenses	135	4.87	0.901	0.367***	0.530***	-	-	-
Perceived Social Support	135	4.97	1.30	0.216*	0.271***	-0.081	-	-
Perceived Stress	135	21.9	6.54	-0.220*	0.098	0.314	-0.213*	-

Note. \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$

### **Role of Perceived Social Support Between Perceived Stress and Ego Defense Styles**

In light of the correlation analysis, it was deemed appropriate to assess the role of perceived social support in mediating the relationship between perceived stress and mature defense styles. A mediation analysis was conducted using Jamovi, with mature defense styles as the outcome variable and perceived stress as the predictor variable, while perceived social support served as the mediator variable.

The results of the mediation analysis, as presented in Table 4, indicate that the indirect effect of perceived social support on the relationship between perceived stress and mature defense styles was not statistically significant ( $\beta = -0.00678$ ,  $t = -1.69$ ,  $p = 0.091$ ). This outcome suggests that the data did not support the notion of mediation in this context. However, it is noteworthy that the direct effect of perceived stress on mature defense styles was found to be statistically significant ( $\beta = -0.02973$ ,  $t = -2.12$ ,  $p = 0.034$ ), signifying a direct relationship between these two variables. This result implies that perceived stress directly influences the utilization of mature defense styles, independently of perceived social support.

Furthermore, the total effect of perceived stress on mature defense styles, which considers both the direct and indirect pathways, was statistically significant ( $\beta = -0.03651$ ,  $t = -2.16$ ,  $p = 0.009$ ). This suggests an overall impact of perceived stress on mature defense styles, encompassing both direct and indirect pathways.

These findings, in accordance with the mediation analysis conducted, highlight the presence of a direct relationship between perceived stress and mature defense styles, indicating that perceived social support did not act as a significant mediating factor in this relationship. These results provide insights into the complex dynamics between these variables, underscoring the need for further investigation to better understand their interplay and potential moderating factors.

**Table 4 Mediation Analysis**

Effect	$\beta$	t	SE	95% CI		p
				LL	UL	
Indirect	-0.00678	-1.69	0.00401	-0.0146	0.00108	0.091
Direct	-0.02973	-2.12	0.01403	-0.0572	-0.00224	0.034*
Total	-0.03651	-2.16	0.01396	-0.0639	-0.00914	0.009*

Note. \* $p < 0.05$

## **DISCUSSION**

Through its first objective, the study examined the relationship between perceived stress and the three ego defense styles (mature, immature, and neurotic). It was found that the increased employment of mature defense styles was associated with decreased perceived stress levels. This is in concordance with previous studies that indicate that mature defenses were critical in reducing perceived stress (Gori et al., 2020). This finding could be read in light of the effect of mature defense mechanisms in facilitating the healthy management of internal conflicts and stressful situations (Di Giuseppe et al., 2018). On the whole, this finding adds to the growing number of studies suggesting that mature defenses significantly influence the levels of stress and psychological symptoms (Gori et al., 2022; Di Giuseppe et al., 2020; Di Giuseppe et al., 2021).

However, both neurotic defense and immature defenses were found to have no significant relationship with the levels of perceived stress. This is in contradiction with the little research that has been conducted on these variables. Research suggests that the use of neurotic and immature defense mechanisms was associated with increased stress levels (Di Giuseppe et al., 2021). Lovko et al. (2007) have found that high levels of stress lead to the development of immature and neurotic defense mechanisms among medical staff. One possible explanation for this deviation from the literature might be the ambiguity in the threshold of stress that triggers the employment of immature and neurotic defense mechanisms. Existing literature has focused on the use of maladaptive defense styles among highly stressed populations. The current study has been conducted amongst college students from diverse backgrounds pursuing different courses and thus does not warrant an equal distribution of stress levels as well as high levels of stress. Thus, this finding can be a premise for future studies that would want to look at the stress threshold required to develop these maladaptive defense styles.

The second hypothesis that there is a significant relationship between perceived social support and the three levels of defense styles (mature, immature and neurotic) was partially supported by the data. The study found that increased levels of perceived social support were indeed associated with higher rates of mature and neurotic defense mechanisms. The results align with the established body of literature, which asserts that employing more adaptive defense mechanisms fosters the cultivation of improved interpersonal relationships and more positive social interactions (Malone et al., 2013). It also aligns with the theory that the degree of defense maturity is a fundamental factor in promoting positive social interactions. (Di Giuseppe et al., 2018) found that individuals employing high-adaptive defense mechanisms exhibited elevated levels of physical and emotional well-being, greater receptivity to social support, and an enhanced likelihood of survival.

The results also suggest a significant positive correlation between neurotic defense style and perceived social support. Although no literature as far as the researcher knows has probed into the relationship between neurotic defense and perceived social support, literature posits that higher neuroticism in an individual was associated with an increased need for social support and the need to gain acceptance (Han et al., 2021). This is in contradiction with the current findings of the study. This apparent contradiction can be understood within the framework of the diverse sociodemographic characteristics of the sample, consisting of college students with a wide range of professional backgrounds. The levels of neuroticism within this group exhibit significant variability, and currently, we lack information regarding

## **Influence of Perceived Social Support on Perceived Stress and Ego Defense Styles among College Students**

whether they generally exhibit high levels of neuroticism. Consequently, further investigation is required to determine the specific threshold of neuroticism at which an elevated need for social support becomes evident.

The third hypothesis that perceived social support mediates the relationship between perceived stress and ego defense styles was not supported by the data. There was found to be no mediation effect of perceived social support in the relationship between perceived stress and ego defense styles. But the results have confirmed a direct link between perceived stress and mature ego defense styles.

### **CONCLUSION**

In conclusion, this study delved into the intricate relationships between ego defense styles, perceived stress, and perceived social support among a diverse sample of college students. The findings highlighted the protective role of mature defense styles in mitigating perceived stress, affirming the importance of promoting adaptive coping mechanisms for students' psychological well-being. Interestingly, the study revealed that perceived social support was positively associated with both mature and neurotic defense styles, shedding light on the complex dynamics between social support and defense mechanisms. While the mediating role of perceived social support in the relationship between perceived stress and mature defense styles was not supported, the direct link between perceived stress and mature defenses was evident. These findings provide valuable insights into the psychological mechanisms at play among college students, suggesting potential avenues for further research and the development of targeted interventions to enhance their mental health and coping strategies.

### ***Future Implications***

Further exploration of maladaptive defense styles is warranted, as this study revealed no significant connections between perceived stress and neurotic or immature defense styles. Future research should delve into the conditions and stress thresholds that trigger the prevalence of these maladaptive defense mechanisms. Investigating specific stressors or contexts that provoke their usage could offer valuable insights. Longitudinal studies tracking the evolution of defense styles, perceived stress, and perceived social support over time may provide a more dynamic understanding of these relationships. Moreover, examining how cultural factors influence the adoption of defense styles and the perception of stress and social support is crucial to comprehending these constructs fully, considering that cultural norms and values can significantly affect individuals' defense mechanisms and responses to stress.

Additionally, investigating the interplay between individual differences in personality traits and coping strategies with defense styles, perceived stress, and social support can yield a more nuanced understanding, potentially revealing the role of resilience and coping mechanisms in moderating these associations. Research that focuses on developing interventions to enhance mature defense styles and reduce maladaptive ones among college students holds promise for improving mental health outcomes. It is also essential to explore how perceived social support can be leveraged as an intervention tool to promote adaptive defense mechanisms. Finally, broadening the demographic representation of the sample to encompass a more diverse range of college students from various cultural backgrounds and educational institutions can enhance the generalizability of findings and offer insights into potential subgroup differences.

## Influence of Perceived Social Support on Perceived Stress and Ego Defense Styles among College Students

### Limitations

This study's limitations include a potentially non-representative sample of primarily college students with diverse professional backgrounds, hindering generalizability. The cross-sectional design restricts causal inferences and longitudinal understanding. The exclusive focus on perceived stress, defense styles, and social support overlooks other influential variables like life events and personality traits. Self-report measures may introduce respondent bias and measurement error. Cultural differences in defense styles and social support were unexplored, limiting applicability to diverse contexts. Finally, the study lacks intervention exploration, necessitating future research for strategies to improve mental health among college students. These limitations highlight the need for more comprehensive and contextually relevant investigations.

### REFERENCES

- Andrews, G., Singh, M., and Bond, M. (1993). The Defense Style Questionnaire, *The Journal of Nervous and Mental Disease*, 181,246-256.
- Chen, Z., Li, Y., Chen, J., & Guo, X. (2022). The mediating role of coping styles in the relationship between perceived social support and antenatal depression among pregnant women: a cross-sectional study. *BMC Pregnancy and Childbirth*, 22(1), 1-11.
- Cramer, P. (1998). Coping and defense mechanisms: What's the difference?. *Journal of Personality*, 66(6), 919-946.
- Cramer, P. (2003). Defense mechanisms and physiological reactivity to stress. *Journal of personality*, 71(2), 221-244.
- Cramer, P. (2008). Seven pillars of defense mechanism theory. *Social and Personality Psychology Compass*, 2(5), 1963-1981.
- Di Giuseppe, M., Ciacchini, R., Micheloni, T., Bertolucci, I., Marchi, L., & Conversano, C. (2018). Defense mechanisms in cancer patients: a systematic review. *Journal of psychosomatic research*, 115, 76-86.
- Diehl, M., Coyle, N., & Labouvie-Vief, G. (1996). Age and sex differences in strategies of coping and defense across the life span. *Psychology and aging*, 11(1), 127.
- Freud, A. (1946). *The Ego and the Mechanisms of Defense*. New York (International Universities Press) 1946.
- Gori, A., Topino, E., & Di Fabio, A. (2020). The protective role of life satisfaction, coping strategies and defense mechanisms on perceived stress due to COVID-19 emergency: A chained mediation model. *Plos one*, 15(11), e0242402.16
- Di Giuseppe, M., Nepa, G., Prout, T. A., Albertini, F., Marcelli, S., Orrù, G., & Conversano, C. (2021). Stress, burnout, and resilience among healthcare workers during the COVID-19 emergency: the role of defense mechanisms. *International journal of environmental research and public health*, 18(10), 5258.
- Gori, A., Topino, E., & Caretti, V. (2022). The impact of COVID-19 lockdown on perceived stress: The role of defense mechanisms and coping strategies. *Journal of Contingencies and Crisis Management*, 30(4), 379-390.
- Grebout, E., Paty, B., & Girarddephanix, N. (2006). Relationships between defense mechanisms and coping strategies, facing exam anxiety performance. *L'encephale*, 32(3 Pt 1), 315-324
- Grevin, F. (1996). Posttraumatic stress disorder, ego defense mechanisms, and empathy among urban paramedics. *Psychological reports*, 79(2), 483-495.

## Influence of Perceived Social Support on Perceived Stress and Ego Defense Styles among College Students

- Kocijan Lovko, S., Gregurek, R., & Karlovic, D. (2007). Stress and ego-defense mechanisms in medical staff at oncology and physical medicine departments. *The European journal of psychiatry*, 21(4), 279-286.
- Kwon, P. (2002). Hope, defense mechanisms, and adjustment: Implications for false hope and defensive hopelessness. *Journal of personality*, 70(2), 207-231.
- Di Giuseppe, M., Zilcha-Mano, S., Prout, T. A., Perry, J. C., Orrù, G., & Conversano, C. (2020). Psychological impact of coronavirus disease 2019 among Italians during the first week of lockdown. *Frontiers in psychiatry*, 11, 576597.
- Han, J., Leng, X., Gu, X., Li, Q., Wang, Y., & Chen, H. (2021). The role of neuroticism and subjective social status in the relationship between perceived social support and life satisfaction. *Personality and Individual Differences*, 168, 110356
- Li, Y., & Peng, J. (2021). Does social support matter? The mediating links with coping strategy and anxiety among Chinese college students in a cross-sectional study of COVID-19 pandemic. *BMC public health*, 21(1), 1-10.
- Malone, J. C., Cohen, S., Liu, S. R., Vaillant, G. E., & Waldinger, R. J. (2013). Adaptive midlife defense mechanisms and late-life health. *Personality and individual differences*, 55(2), 85-89.
- Matheny, K. B., Curlette, W. L., Aysan, F., Herrington, A., Gfroerer, C. A., Thompson, D., & Hamarat, E. (2002). Coping resources, perceived stress, and life satisfaction among Turkish and American university students. *International Journal of Stress Management*, 9, 81-97.
- Mehraban, D., Farhangi, A., & Abolghasemi, S. (2023). Mediating Role of Coping Strategies and Defense Mechanisms in Relationship of Mental Health, Resilience, and Perceived Social Support with Posttraumatic Growth in COVID-19 Survivors. *Archives of Hygiene Sciences*, 12(1), 12-20.
- Nam, J. W., Ha, J. H., Choi, E., Park, D. H., & Ryu, S. H. (2019). Mature defense mechanisms affect successful adjustment in young Adulthood-Adjustment to military service in South Korea. *Psychiatry Investigation*, 16(7), 484.
- Parekh, M. A., Majeed, H., Khan, T. R., Khan, A. B., Khalid, S., Khwaja, N. M., ... & Jehan, I. (2010). Ego defense mechanisms in Pakistani medical students: a cross sectional analysis. *BMC psychiatry*, 10(1), 1-8.
- Ranjan, L. K., Ghadse, A. M., & Gupta, P. R. (2019). PERCEIVED SOCIAL SUPPORT AND EGO RESILIENCE IN SCHOOL GOING ADOLESCENTS: A GENDER BASED STUDY. *Indian Journal of Health Social Work*, 1, 2.
- Vaillant, G. E. (1971). Theoretical hierarchy of adaptive ego mechanisms: A 30-year follow-up of 30 men selected for psychological health. *Archives of general psychiatry*, 24(2), 107-118.
- Vaillant, G. E. (1992). Ego mechanisms of defense: a guide for clinicians and researchers. American Psychiatric Pub.
- Vaillant, G. E. (2000). Adaptive mental mechanisms: Their role in a positive psychology. *American psychologist*, 55(1), 89.
- Waqas, A., Naveed, S., Aedma, K. K., Tariq, M., & Afzaal, T. (2018). Exploring clusters of defense styles, psychiatric symptoms and academic achievements among medical students: A cross-sectional study in Pakistan. *BMC research notes*, 11(1), 1-6. 18
- Zeidner, M., & Endler, N. S. (Eds.). (1995). *Handbook of coping: Theory, research, applications* (Vol. 195). John Wiley & Sons.
- Zimet, G.D., Dahlem, N.W., Zimet, S.G. & Farley, G.K. (1988). The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment*, 52, 30-40

## Influence of Perceived Social Support on Perceived Stress and Ego Defense Styles among College Students

### ***Acknowledgment***

The author expresses deep gratitude to the Almighty, whose guidance made this dissertation possible, and to supervisor, whose invaluable mentorship has been instrumental in its completion. Heartfelt thanks are also extended to the author's family, friends, and all who provided unwavering support and encouragement throughout this journey.

### ***Conflict of Interest***

The author(s) declared no conflict of interest.

***How to cite this article:*** Jojo, M.A. & Krishnan, U. (2025). Influence of Perceived Social Support on Perceived Stress and Ego Defense Styles among College Students. *International Journal of Indian Psychology*, 13(2), 2822-2834. DIP:18.01.248.20251302, DOI:10.25215/1302.248