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Predicting Depression Based on Ego Weakness and Integrative Self-Knowledge with the Mediating Role of Defense Mechanisms and Psychological Pain

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ABSTRACT

The aim of the present study was to predict depression based on ego weakness and integrative self-knowledge with the mediating role of defense mechanisms and psychological pain. The research method was descriptive-correlational, and the aim was applied. The statistical population of this study included all men employed in a marine transportation company in the years 2020-2021, from which 378 participants were selected through convenience sampling. The research instruments included the Tangney et al. Self-Control Scale (2004), the Ghorbani et al. Integrative Self-Knowledge Scale (2008), the Andrews et al. Defense Style Questionnaire-40 (1993), the Orbach et al. Psychological Pain Scale (2003), and the Beck Depression Inventory (1961). The data of the present study were analyzed using structural equation modeling. By creating covariance between errors, the goodness-of-fit indices improved, and the resulting structural model fitted the collected data. There was a significant positive direct relationship between integrative self-knowledge and depression at the 0.01 level (P=0.010, β=0.453). There was a significant positive direct relationship between neurotic defense mechanisms and depression at the 0.05 level (P=0.014, β=0.174). There was a significant positive direct relationship between psychological pain and depression at the 0.01 level (P=0.010, β=0.622). Neurotic defense mechanisms mediated the relationship between integrative self-knowledge and depression (P=0.029, Z=2.17). The results of the present study showed that there was a significant direct relationship between integrative self-knowledge, neurotic defense mechanisms, and psychological pain with depression.

Keywords: *Depression, Integrative Self-Knowledge, Psychological Pain, Ego Weakness, Defense Mechanisms*

1. Introduction

Major depressive disorder is a common mental disorder that affects approximately 5% of adults worldwide, with a 12-month prevalence of 6% (Lee et al., 2024). Depression is characterized by a depressed mood, reduced interest and/or inability to enjoy activities, loss of energy, and negative self-evaluation (Hahner et al., 2024). Major depressive disorder is a heterogeneous condition that manifests a combination of various symptoms in affected individuals (Wen et al., 2025; Yang, 2025; Zheng et al., 2025). These symptoms may include mood changes, loss of pleasure, and fluctuations in energy levels, which disrupt an individual's daily life and, in severe cases, may lead to suicidal thoughts or actions (Kropp & Hodes, 2023). Among individuals facing mental health issues such as depression and suicidal risk, seafarers can be highlighted. Data on suicides reveal that the mental health of seafarers is often very poor and, in many cases, fatal (Iversen, 2012). Maritime jobs in the oil industry are considered highly stressful professions. Due to the harsh working conditions, offshore oil production is recognized as a stressful occupation. The nature of this work, along with its associated risks in marine environments, can have significant adverse effects on the health and well-being of offshore workers (Mellbye & Carter, 2017). Seafarers spend most of their lives at sea due to the unique and unusual nature of their profession. Being away from family, combined with occupational challenges and threatening hazards, significantly increases the risk of mental health issues in this group. Job stress is considered one of the major and widespread problems in workplaces in recent years, according to many researchers (Karimi et al., 2016).

Research has shown that resorting to various defense mechanisms and avoiding unpleasant inner emotions exacerbates negative mood and depression (Nikooseresht & Shomali Oskoei, 2021; Ziadni et al., 2017). Defense mechanisms are mental functions with an avoidant nature that either mask reality or alter the internal psychological content and perception of reality (Cramer & Porcerelli, 2016). They play a crucial role in an individual's response to stress and reducing cognitive dissonance and conflicts, which, if unresolved, lead to severe depression and suicidal thoughts (Carvalho et al., 2013; Vaillant, 1994, 1998, 2012). Vaillant (1994, 2012) proposed a hierarchical model of defense mechanisms based on their maturity level, encompassing mature defenses, neurotic defenses, and immature defenses along a continuum. Mature defenses allow individuals to cope with stressors effectively and rationally. Neurotic defenses, positioned in the middle of this continuum, prevent individuals from consciously confronting conflicts such as thoughts, emotions, desires, memories, and fears, resulting in neurotic functioning, including excessive worry, anxiety, and loss of control over situations. Immature defenses involve unconscious coping with conflicts, leading to an inability to access stressors, impulses, thoughts, emotions, or responsibilities, thereby distorting self-perception and attributing hostile feelings to external causes (Vaillant, 1994, 2012). In this regard, Pompili et al. (2006) demonstrated that relying on immature defense mechanisms, such as internalizing anger, may lead individuals to hopelessness, depression, and ultimately suicide (Pompili et al., 2006).

Defense mechanisms are considered tools for escaping psychological pain (Babl et al., 2019). Psychological pain is defined as an acute and intense psychological state associated with negative cognitive and emotional aspects. It often includes hopeless thoughts, feelings of guilt, anxiety, fear, panic, fear of loneliness, and helplessness. Psychological pain appears to result from the discrepancy between the perceived real self and the ideal self, posing a risk factor for various psychiatric disorders, including depression and suicidal thoughts. Conversely, psychological pain tolerance, or the ability to endure and manage adverse situations, is considered a protective factor associated with adaptive responses to psychological pain during stressful periods (Landi et al., 2023). Hao et al. (2022) and Lee et al. (2022) found that stressful life events and psychological pain were associated with suicidal thoughts and attempts in depressed patients (Hao et al., 2022).

Individual and personality traits are significant factors in determining an individual's adaptation to stressors and susceptibility to depression, as they influence how individuals adapt to stressful events and recover afterward (Ringwald et al., 2024). During childhood development, a coherent and distinct sense of 'self' is formed in response to others, emotional experiences, impulses, frustrations, and early traumas, leading to the development of defense mechanisms for coping (Meyers et al., 2016). Integrative self-knowledge refers to the capacity to understand internal processes and experiences in a temporally organized manner to regulate oneself. Integrative self-knowledge includes present-oriented and past-oriented self-knowledge within a personality structure that enables individuals to organize their thoughts and feelings based on their capabilities and choose the most appropriate actions for achieving desired

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outcomes (Akin et al., 2013). Self-knowledge plays a central role in self-awareness, defense mechanisms, self-regulation, self-control, and the experience of psychological pain (Salehmirhassani et al., 2016). Integrative self-knowledge involves awareness of one's 'self' and emotional experiences, leading to self-organization and avoidance of emotional pain and distressing feelings (Viskovich & De George-Walker, 2019). Reduced integrative self-knowledge is associated with increased self-harming and suicidal behaviors (Akbari & Tizdast, 2017).

Another variable that appears to influence effective coping with psychological stress and prevention of depression and suicide is ego strength/weakness. The ego is responsible for self-regulation and self-control, encompassing psychological functions that regulate emotional responses and manage the relationship between internal drives and painful emotions triggered by unmet external needs (Ali et al., 2025; Prout et al., 2019; Zhao et al., 2025). Effective self-regulation and self-control require careful monitoring of actions, emotions, and feelings such as psychological pain (Salehmirhassani et al., 2016). Ego weakness implies a lack of self-control and a sense of helplessness, with both lack of control and excessive control indicating ego weakness. A strong ego minimizes the manifestation of psychological distress and enhances tolerance to stress and painful life conditions (Lapsley & Power, 2012). In line with this, Haung et al. (2017) showed that lack of willpower, self-control, and ego weakness are correlated with depression and suicidal behavior (Huang et al., 2017).

Based on the reviewed literature, ego weakness and integrative self-knowledge, along with defense mechanisms and psychological pain, appear to be risk factors for depression. Psychological pain and defense mechanisms are maladaptive coping responses stemming from ego weakness and fragmented experiences. Therefore, a model could be designed in which ego weakness and integrative self-knowledge predict depression through their effects on defense mechanisms and psychological pain. The present study aimed to answer the following question using structural equation modeling:

Can depression in men employed in a marine transportation company be predicted based on ego self-control and integrative self-knowledge with the mediating role of defense mechanisms and psychological pain?

2. Methods and Materials

2.1. Study Design and Participants

The research method was descriptive-correlational, and the aim of the study was applied. The statistical population of this study included all men employed in a marine transportation company in the years 2020-2021. According to the participant-to-estimated-parameters ratio method, a 5:1 ratio results in a small sample size, a 10:1 ratio is considered appropriate, and a 20:1 ratio is considered optimal. Some researchers recommend 15 participants per observed variable, while others suggest 10 to 20 participants per observed variable (Kline, 2016; Myers et al., 2016). Therefore, the present study included 42 participants per variable (9 variables), resulting in a total sample size of 378 participants, considering the possibility of dropout. The participants were selected through convenience sampling. Inclusion criteria were at least one year of work experience and an age range of 25 to 60 years. Exclusion criteria included less than one year of work experience, physical disabilities, chronic illnesses, use of medication for physical or mental conditions, hospitalization in the past year due to physical or mental conditions, receiving psychotherapy concurrently or in the past year, and incomplete responses to the questionnaires.

After obtaining ethical approval from the Islamic Azad University, Karaj Branch, the call for participation, along with the researcher's contact information, was shared in the official and unofficial channels and groups of the company's counseling center. Volunteers contacted the researcher, were fully informed about the research objectives, and submitted their demographic information and a handwritten note indicating their consent and eligibility. After reviewing the demographic information, the questionnaires were prepared online and sent to the participants. Completing the questionnaires took 20 to 30 minutes.

2.2. Measures

2.2.1. Sexual Function

Self-Control Scale. The Tangney et al. Self-Control Scale (2004) consists of 36 items rated on a 5-point Likert scale ranging from 1 = not at all like me to 5 = very much like me. Items 2, 3, 4, 6, 8, 9, 10, 11, 12, 14, 16, 17, 19, 20, 21, 23, 25, 28, 29, 31, 32, 33, 34, and 35 are reverse-scored. Tangney et al. (2004) reported a Cronbach's alpha of 0.89 for this scale and correlations with the depression, anxiety, and hostility-aggression subscales of the SCL-90 of -0.41, -0.36, and -0.40, respectively (Tangney et al., 2004). Ahmadi

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Joybari (2017) reported a Cronbach's alpha of 0.91 and face and content validity confirmed by experts for this scale in an Iranian sample (Ahmaadi Joybari, 2017).

2.2.2. *Integrative Self-Knowledge*

The Ghorbani et al. Integrative Self-Knowledge Scale (2003) consists of 38 items with three subscales: reflective self-knowledge (items 3, 6, 9), experiential self-knowledge (items 1, 5, 7, 8), and integration of experiences (items 2, 4, 10, 11, 12), rated on a 5-point Likert scale from 1 = mostly false to 5 = mostly true. All items except 3, 6, and 9 are reverse-scored. Ghorbani et al. (2003) reported Cronbach's alpha coefficients ranging from 0.84 to 0.90 and a subscale correlation of 0.84 (Ghorbani et al., 2003). Ghorbani et al. (2008) reported a Cronbach's alpha of 0.82 for the 12-item short version of this scale in an Iranian sample and a concurrent validity correlation of 0.56 with the Rosenberg Self-Esteem Scale (Ghorbani et al., 2008).

2.2.3. *Defense Mechanisms*

The Andrews et al. Defense Style Questionnaire-40 (1993) consists of 40 items assessing 20 defense mechanisms in three categories: mature defenses (items 2, 3, 5, 25, 26, 30, 35, 38), neurotic defenses (items 1, 7, 21, 24, 28, 32, 39, 40), and immature defenses (items 4, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 27, 29, 31, 33, 34, 36, 37) rated on a 9-point Likert scale from 1 = strongly disagree to 9 = strongly agree. Andrews et al. (1993) reported Cronbach's alpha coefficients of 0.68, 0.58, and 0.80 for the mature, neurotic, and immature subscales, respectively, in healthy and anxious groups. Significant differences were found between anxious patients and healthy individuals in the use of mature ($F= -0.95$, $P<0.05$), neurotic ($F=0.40$, $P<0.05$), and immature defenses ($F=0.44$, $P<0.05$) (Andrews & Thomson, 2009). Heidari-Nasab et al. (2007) reported Cronbach's alpha coefficients of 0.81 and 0.87 for this scale in an Iranian sample and satisfactory validity based on correlations with the Revised NEO Personality Inventory (Heidari Nasab et al., 2007).

2.2.4. *Psychological Pain*

The Orbach et al. Psychological Pain Scale (2003) consists of 44 items assessing nine subscales: irreversibility, lack of control, narcissism/worthlessness, emotional turmoil, numbness, alienation, confusion, social distancing, and meaninglessness, rated on a 5-point Likert scale from 1 = strongly disagree to 5 = strongly agree. Orbach et al. (2003) reported test-retest reliability coefficients ranging from 0.79 to 0.94 over three weeks, Cronbach's alpha coefficients ranging from 0.75 to 0.95 for subscales, and correlations with the Beck Depression Inventory (BDI) ranging from 0.26 to 0.64 and the Beck Anxiety Inventory ranging from 0.27 to 0.50 (Orbach et al., 2003). Karami et al. (2018) reported Cronbach's alpha coefficients ranging from 0.61 to 0.96 and correlations with the BDI and BAI of 0.67 and 0.41, respectively, in an Iranian sample (Karami et al., 2018).

2.2.5. *Depression*

The Beck Depression Inventory (BDI) developed by Beck et al. (1961) consists of 21 items rated on a 4-point scale (0 to 3) measuring the severity of depressive symptoms. The cut-off scores are: 0-13 = minimal depression, 14-19 = mild depression, 20-28 = moderate depression, and 29-63 = severe depression (Beck et al., 1961). Joe et al. (2008) reported a Cronbach's alpha of 0.94, item-total correlations ranging from 0.47 to 0.70, and a correlation of 0.66 with the Hamilton Anxiety Rating Scale (1995), indicating good validity (Joe et al., 2008). Hamidi et al. (2015) reported a Cronbach's alpha of 0.93 and a correlation of 0.80 with the General Health Questionnaire, indicating convergent validity in an Iranian sample (Hamidi et al., 2015).

2.3. *Data Analysis*

Data analysis was conducted using structural equation modeling (SEM). First, the assumptions of SEM were evaluated. Hypothesis testing was performed using SEM with confirmatory factor analysis and fit indices such as chi-square, normed chi-square, root mean square error of approximation, comparative fit index, goodness-of-fit index, and adjusted goodness-of-fit index, using AMOS-24 software with maximum likelihood estimation.

3. Findings and Results

In the present study, 378 men participated. Among the participants, 61 (16.20%) were aged 25 to 30 years, 52 (13.8%) were aged 31 to 35 years, 82 (21.7%) were aged 36 to 40 years, 56 (14.8%) were aged 41 to 45 years, 24 (6.30%) were aged 46 to 50 years, 24 (6.30%) were aged 51 to 55 years, and 48 (12.70%) were aged 56 years and older. It should be noted that 31 participants (8.20%) did not report

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their age. The mean and standard deviation of participants' age were 39.87 ± 11.76 years, respectively. In terms of education level, 82 participants (21.7%) had a high school diploma, 54 (14.3%) had an associate degree, 140 (37.0%) had a bachelor's degree, 74 (19.6%) had a master's degree, and 16 (4.20%) had a doctoral degree. It should also be noted that 12 participants (3.20%) did not report their education level. In terms of marital status, 85 participants (22.5%) were single, 271 (71.7%) were married, and 8 (2.10%) were divorced, while 14 participants (3.70%) did not report their marital status.

Table 1

Means, Standard Deviations, Skewness, Kurtosis, Tolerance, and Variance Inflation Factor of Research Variables

Research Variables	Mean	±	Standard Deviation	Skewness	Kurtosis	Tolerance	Variance Inflation Factor
1. Reflective Self-Knowledge	5.82	±	2.56	1.21	1.54	0.824	1.21
2. Experiential Self-Knowledge	10.16	±	4.03	0.167	-0.653	0.292	3.42
3. Integration of Experiences	10.94	±	4.68	0.604	-0.289	0.278	3.59
4. Ego Weakness	125.62	±	12.27	0.040	2.94	0.482	2.07
5. Mature Defense Mechanisms	46.49	±	9.65	-0.503	-0.076	0.750	1.33
6. Immature Defense Mechanisms	106.44	±	24.93	0.277	-0.302	0.467	2.14
7. Neurotic Defense Mechanisms	42.94	±	9.38	-0.008	0.107	0.689	1.45
8. Psychological Pain	38.79	±	24.87	1.05	1.73	0.619	1.61
9. Depression	30.45	±	9.07	1.31	1.44	-	-

Table 1 shows that the distribution of univariate data in the present study was normal, as the skewness and kurtosis indices for none of the research variables exceeded the ±2 range. Additionally, the tolerance and variance inflation factor (VIF) values indicate that the assumption of non-collinearity among predictor variables was met, as tolerance values were greater than 0.1 and VIF values were less than 10. Further evaluation of skewness and kurtosis values, Mahalanobis distance, boxplot analysis, and the removal of outliers confirmed that the multivariate data distribution was normal (skewness = 1.55, kurtosis = 2.19).

Table 2

Correlation Matrix of Research Variables

Variables	1	2	3	4	5	6	7	8	9
1. Reflective Self-Knowledge	-								
2. Experiential Self-Knowledge	0.112	-							
3. Integration of Experiences	*0.179	**0.818	-						
4. Ego Weakness	**-0.355	**-0.601	**-0.620	-					
5. Mature Defense Mechanisms	**-0.234	0.044	0.058	*0.195	-				
6. Immature Defense Mechanisms	**0.112	**0.552	**0.586	**-0.420	**-0.255	-			
7. Neurotic Defense Mechanisms	0.018	**0.267	**0.245	-0.064	**-0.332	**0.492	-		
8. Psychological Pain	**0.193	**0.552	**0.552	**-0.511	-0.127	**0.376	0.073	-	
9. Depression	**0.088	**0.444	**0.419	**-0.343	-0.110	**0.317	0.038	**0.682	-

**p<0.01, *p<0.05

Table 2 shows significant correlations at the 0.01 and 0.05 levels between dimensions of integrative self-knowledge, including reflective self-knowledge, experiential self-knowledge, and integration of experiences, with ego weakness, defense mechanisms (including immature defense mechanisms), psychological pain, and depression. However, no significant correlation was found between immature and neurotic defense mechanisms with depression.

It should be noted that higher scores on the Integrative Self-Knowledge Scale indicate weaker integrative self-knowledge, and higher scores on the Self-Control Scale indicate stronger ego strength.

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Table 3

Fit Indices for the Initial and Modified Structural Model Predicting Depression

Fit Indices	Initial Model	Modified Model
Chi-Square	153.90	26.31
Degrees of Freedom	19	15
Normed Chi-Square	8.10	1.75
Goodness-of-Fit Index (GFI)	0.820	0.961
Adjusted Goodness-of-Fit Index (AGFI)	0.575	0.883
Comparative Fit Index (CFI)	0.740	0.978
Root Mean Square Error of Approximation (RMSEA)	0.227	0.074

Table 3 shows that the initial structural model did not fit the collected data. Therefore, by establishing covariance between the errors of mature, immature, and neurotic defense mechanisms, as well as the errors of integrative self-knowledge and ego weakness, the fit indices improved, resulting in a structural model that fitted the collected data.

Table 4

Standardized Path Coefficients for Direct and Indirect Effects between Integrative Self-Knowledge, Ego Weakness, Defense Mechanisms, Psychological Pain, and Depression

Path	Unstandardized Estimate	Standard Error	Standardized Estimate	p-value
Total Effect				
Self-Knowledge → Depression	7.68	0.143	0.453	0.010
Ego Weakness → Depression	-0.028	0.139	-0.037	0.825
Direct Effect				
Self-Knowledge → Depression	2.30	0.159	0.136	0.458
Ego Weakness → Depression	-0.086	0.095	-0.117	0.183
Mature Defense Mechanisms → Depression	-0.022	0.064	-0.024	0.664
Immature Defense Mechanisms → Depression	0.050	0.080	0.141	0.080
Neurotic Defense Mechanisms → Depression	0.164	0.060	0.174	0.014
Psychological Pain → Depression	0.226	0.095	0.622	0.010
Self-Knowledge → Mature Defense Mechanisms	-2.24	0.125	-0.121	0.330
Self-Knowledge → Immature Defense Mechanisms	30.71	0.098	0.643	0.010
Self-Knowledge → Neurotic Defense Mechanisms	7.69	0.130	0.427	0.010
Self-Knowledge → Psychological Pain	22.84	0.119	0.490	0.010
Ego Weakness → Mature Defense Mechanisms	0.224	0.115	0.277	0.035
Ego Weakness → Immature Defense Mechanisms	0.037	0.118	0.018	0.896
Ego Weakness → Neurotic Defense Mechanisms	-0.178	0.152	-0.227	0.129
Ego Weakness → Psychological Pain	-0.362	0.138	-0.178	0.229
Indirect Effect				
Ego Weakness → Defense Mechanisms & Psychological Pain → Depression	-0.114	0.104	-0.154	0.168
Self-Knowledge → Defense Mechanisms & Psychological Pain → Depression	5.38	0.128	0.317	0.010

Table 4 shows a significant positive direct relationship between integrative self-knowledge and depression at the 0.01 level (P=0.010, β=0.453). A significant positive direct relationship was found between neurotic defense mechanisms and depression at the 0.05 level (P=0.014, β=0.174). There was also a significant positive direct relationship between psychological pain and depression at the 0.01 level (P=0.010, β=0.622).

To calculate the specific mediating role of neurotic defense mechanisms and psychological pain in the relationship between integrative self-knowledge and depression, the Sobel test was used:

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Table 5

Sobel Test for Estimating the Mediating Role of Neurotic Defense Mechanisms and Psychological Pain

Path	Z-Value	Standard Error	p-value
Self-Knowledge → Neurotic Defense Mechanisms → Depression	2.17	0.034	0.029
Self-Knowledge → Psychological Pain → Depression	0.066	0.087	0.504

Table 5 shows that neurotic defense mechanisms mediate the relationship between integrative self-knowledge and depression (P=0.029, Z=2.17).

4. Discussion and Conclusion

The aim of the present study was to predict depression in men employed in a marine transportation company based on ego self-control and integrative self-knowledge with the mediating role of defense mechanisms and psychological pain.

The results of the present study showed a significant direct relationship between integrative self-knowledge, neurotic defense mechanisms, psychological pain, and depression. In explaining the present findings, it can be stated that since the ego is responsible for managing the psychological system, all psychological problems arise when the ego fails to fulfill its responsibilities. Overall, an individual's ability to cope with life, or psychological balance, depends on the strength and capability of the ego to withstand various pressures exerted upon it. Therefore, patients' egos must have strategies to endure anxiety, which would be valuable and effective in reducing psychological pressure and maintaining control over events (Parviz et al., 2016). Impulse and emotion regulation through adaptive strategies, along with flexibility in using defenses or coping strategies (emotional regulation), reality testing, and effective responses to stress for recovery from painful events without undue hardship, are capacities of a mature personality and ego strength (Lingiardi & McWilliams, 2017). Personality dimensions and defensive functions are associated with the ability to withstand psychological and physical distress and are therefore influential in effective coping by relying on cognitive flexibility and an individual's capacity to tolerate pain (Hyphantis et al., 2013; Prout et al., 2019). Individuals lacking ego strength and integrative self-knowledge are less able to control their impulses, are more unstable, and cope with stress less effectively than others. Consequently, when facing problems, they resort to maladaptive defense mechanisms for emotional regulation and stress reduction instead of finding solutions, leading to pathological distortion of internal and external realities. The use of such mechanisms has adverse effects, including reduced emotional management capacity, excessive distortion of the perceived threat, and failure to maintain self-coherence (Zandi et al., 2017).

Individuals with high integrative self-knowledge analyze their experiences through advanced and complex mental functions, resulting in more sophisticated behavioral patterns and broader perspectives for guiding behavior. Thus, self-knowledge, through the process of self-regulation, manages and regulates behavior, emotions, and thoughts (Morin & Racy, 2021). As internalized experiences become integrated, individuals gain greater capacity for self-reflection and self-awareness, enabling them to use coping skills or defenses that minimally distort reality. Greater organization of internal experiences and cognitive development, or integrative self-knowledge, increases the capacity to tolerate psychological pain. Increased tolerance of painful emotions reduces the need for reality distortion and promotes adaptive coping strategies (Huprich, 2015).

Overall, individuals with ego weakness, when faced with life crises, resort to psychological avoidance, repression, and distortion due to insufficient psychological and emotional capacities and the inability to effectively cope with events, leading to a vicious cycle of negative psychological experiences, including psychological pain. Psychological pain and maladaptive defenses disrupt the sense of self-coherence, identity perception, and self-integrity. The inability to control stressful events and provide effective responses over time results in maladaptive and distressing experiences, exposing individuals to unbearable negative emotions, pain, and guilt.

Regarding the mediating role of neurotic defense mechanisms in the relationship between integrative self-knowledge and depression, it can be stated that psychological defenses provide individuals with good functioning and cohesive identity, helping them experience intense internal emotions within a coherent context grounded in internal experiences (Clarkin et al., 2015). Defense mechanisms are automatic self-regulators that reduce cognitive dissonance and minimize sudden changes

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in internal and external reality by influencing the perception of threatening events. Dysfunction in defense mechanisms can result in deficits in recognizing and expressing emotions (Prout et al., 2019). Emotions are partially regulated by the ego and its defense mechanisms. The presence and intensity of emotions indicate that a significant subjective element is engaging the self, with corresponding affect emerging to help understand the individual's mental state (Rice & Hoffman, 2014). Negative emotions such as anxiety, guilt, and sadness arise from unconscious conflicts and serve to activate defenses (Caligor et al., 2007). Maladaptive coping and emotional regulation mechanisms are employed to protect against painful emotions (Rice & Hoffman, 2014). Excessive and inappropriate use of such mechanisms can hinder effective coping responses, as emotional and avoidant coping is more associated with depressive symptoms (Iversen, 2012). Neurotic defenses are maladaptive strategies used to manage internal fears and threats, reflecting an unhealthy personality structure, lack of self-awareness, and incoherence in internal and external psychological processes (Ciocca et al., 2017). In neurotic mechanisms, individuals avoid experiencing their emotions, but the ignored emotions manifest in behaviors that may sometimes be uncontrollable. In contrast, mature defense mechanisms are associated with good reality testing and appropriate, constructive responses to problems (Vaillant, 1998).

In conclusion, defense mechanisms are employed for emotional regulation and protecting against painful emotions such as guilt, sadness, and aggressive impulses, shielding individuals from painful self-awareness. Depressed individuals who use maladaptive defenses or avoid unpleasant internal emotions ultimately face intensified emotions due to their own behaviors. Lacking adaptive coping abilities and providing inadequate responses to stress, they direct their anger inward, leading to depression. Severe and overwhelming psychological stress disrupts integrated mental processes in these individuals through the use of neurotic defenses, temporarily pushing pain and suffering out of conscious awareness. Although this reaction may initially seem adaptive in the face of acute and chronic stressors, failure to organize, process, and cognitively reconstruct experiences results in greater hopelessness and depression over time.

Every study has its limitations. The sample in the present study consisted of men employed in a marine transportation company, and while the need for research in this population is evident, these individuals may avoid reporting psychological problems due to fear of stigma or job loss, affecting the study results. By conducting training sessions and providing mental health interventions focusing on maladaptive defense mechanisms, these individuals can be made aware of ineffective coping methods and their consequences, such as depression resulting from psychological pain, and can be taught more effective coping strategies. It is recommended that therapeutic interventions be designed and tailored to individual and personality characteristics, including personality predispositions and each patient's condition, to help patients achieve better psychological coherence and identity, enabling them to adapt to their environment. Additionally, it is suggested that management, clinicians, and therapists in this company provide accessible and free mental health education and services, assess personality types and predispositions, and offer tailored treatments to increase individuals' awareness of internal and external experiences and appropriate responses, enabling them to integrate negative emotional experiences and engage in adaptive coping without relying on maladaptive defenses or avoidance.

Authors' Contributions

Authors contributed equally to this article.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

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Declaration of Interest

The authors report no conflict of interest.

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Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

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