

NARCISSISTIC TRAITS AND LIFE SATISFACTION IN ISOLATED HIERARCHIES: A STRUCTURAL EQUIVALENCE MODEL ON THE MODERATING EFFECT OF EMOTIONAL REGULATING DIFFICULTIES AMONG SHIP CREW MEMBERS

Seyithan KAÇMAZ* **Bayram Barış KIZILSAÇ**** **Leyla TAVACIOĞLU*****

*Faculty of Maritime, MSc. Student, Istanbul Technical University, kacmaz23@itu.edu.tr, ORCID ID: 0009-0002-0338-8234

**Faculty of Maritime, Maritime Cognitive Ergonomics Research Laboratory, Istanbul Technical University, kizilsac@itu.edu.tr, ORCID ID: 0000-0002-7945-0914

***Corresponding Author, Faculty of Maritime, Maritime Cognitive Ergonomics Research Laboratory, Istanbul Technical University, tavaciog@itu.edu.tr, ORCID ID: 0000-0002-9919-8226

Received Date:19.02.2026

Accepted Date:04.05.2026

Copyright © 2026 Seyithan KAÇMAZ, Bayram Barış KIZILSAÇ, Leyla TAVACIOĞLU. This is an open access article distributed under the Eurasian Academy of Sciences License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

The purpose of this study is to examine the relationship between narcissistic personality traits and life satisfaction among seafarers working within the isolated and rigid hierarchical structure of the maritime sector, and to investigate the moderating role of emotion regulation difficulties in this relationship. The study sample consists of 220 seafarers working at different hierarchical levels. Employing a quantitative framework, empirical data were gathered utilizing standardized instruments measuring narcissism, emotional dysregulation, and life satisfaction. Subsequent hypothesis testing and construct validation were executed through Structural Equation Modelling (SEM) within the AMOS software. The research findings statistically demonstrate that seafarer's narcissistic tendencies negatively affect their life satisfaction. Furthermore, it was found that difficulty in emotion regulation plays a significant moderating role in this destructive interaction; narcissistic individuals who struggle to manage their own emotions experience a much more pronounced loss of life satisfaction under conditions of isolation and hierarchy. Consequently, the study emphasises that the traditional "stern-tempered authority" figure in the maritime sector is, in fact, a risk factor that undermines individual psychology, and theoretical recommendations for sector-specific human resources policies have been presented.

Keyword: Maritime Psychology, Narcissism, Life Satisfaction, Structural Equity Model

JEL-Classification: D91, J28, C38

1. INTRODUCTION

The maritime sector constitutes a distinct occupational ecosystem wherein physical isolation, rigid hierarchical structures and high operational risks are experienced simultaneously, testing the psychological flexibility and resilience of individuals under extreme conditions. Whilst the primary risk factors faced by seafarers are typically defined in the literature in term of physical fatigue, shift systems or technical difficulties by psychosocial factors such as authoritarian management structures, supervisory pressures and interpersonal conflicts has become a much more prominent subject of research (Baygi et al., 2022). For seafarers forced to live together for long periods in a confined space with limited social support mechanisms, friction in superior subordinate relationships and rigid authoritarian pressure pave the way for the erosion of individual defence mechanisms and the emergence of serious difficulties in regulating emotions (Besser & Priel, 2010). In this challenging ecosystem, the human element that ensures organisational continuity is not merely a passive executor carrying out technical tasks; rather,



it is a complex psychological entity at the heart of the system, shaped by its self- perception, emotional capacity and coping strategies. Particularly within closed hierarchies such as those found in the maritime industry, the establishment and maintenance of authority can often be masked by narcissistic tendencies on the part of managers or staff. Krizan and Herlache (2008) do not view narcissism merely as an outwardly self- admiring “grandiosity” attitude; they also conceptualise it as spectrum of “vulnerability” characterised by excessive sensitivity to criticism, introversion and emotional fragility. Within this theoretical framework, the “tough and uncompromising” figure of authority, which has become traditional in maritime culture, can function as a maladaptive narcissistic defence mechanism to which professionals resort in order to conceal their own internal inadequacies or operational anxieties. However, this narcissistic defence shield transforms into a structural threat to individuals emotional integrity during operational crises or in isolated environments where social validation is limited. The inability of individuals with high levels of narcissistic tendencies to recognise, interpret and manage their emotions appropriately in social contexts (emotional regulation) accelerates occupational burnout, social isolation and breakdowns in team communication; ultimately triggering a psychological breakdown (Kampe et al. 2021).

Furthermore, this structural breakdown is not limited to senior management holding authority. Mellbye and Carter (2017) highlight that psychological strain in the shipboard environment can vary according to demographic variables such as rank and role type; in particular, they emphasise that personnel at lower levels of the hierarchy (trainees and junior officers) or those participating in long- haul voyages are more vulnerable to such emotional distress. Consequently, a potential erosion of emotional regulation capacity among seafarers at every level of the hierarchical structure leads to an acute decline in the individual’s life satisfaction. Building on this theoretical framework, the present study aims to empirically test the destructive impact of seafarers narcissistic personality tendencies on life satisfaction within the isolated and rigid hierarchical structure of the maritime sector. The central research question is the assumption that this negative effect of narcissism on life satisfaction is nor independent of individuals capacity to regulate their own emotions. Correspondingly, this research operationalizes Structural Equation Modelling (SEM) to evaluate the moderating function of emotional dysregulation within these causal dynamics.

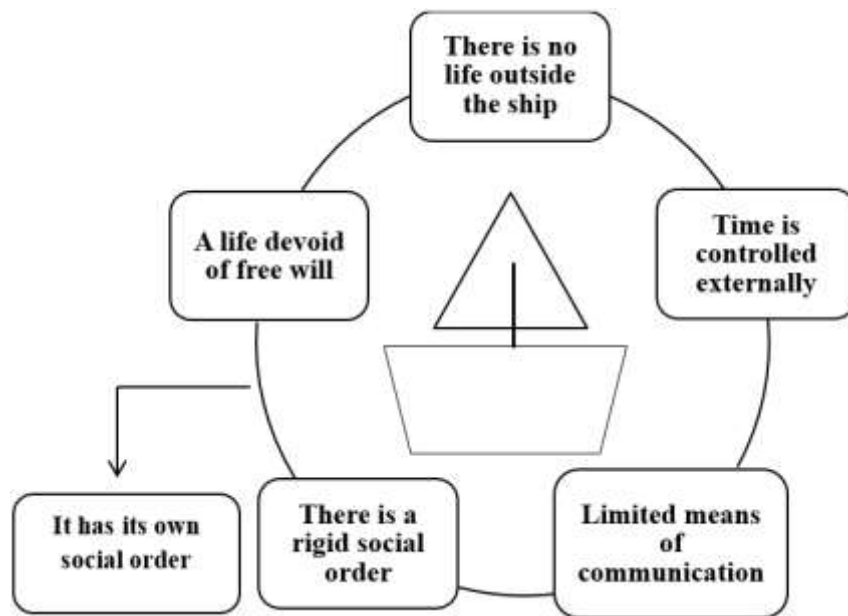
2. THEORETICAL FRAMEWORK AND HYPOTHESES

2.1. Psychological Effects of Individual and Environmental Stressors in the Maritime Sector

The shipboard environment is a unique working ecosystem where environmental stressors converge intensely due to structural characteristics such as isolation, constantly changing climatic conditions, long working hours and confined living spaces. Ali et al. (2023) classify these stressors encountered in seafaring into physical/environmental factors, individual factors, technological developments and workload. This lifestyle entails a structure that, much like Goffman’s (2011) concept of “total institution”, significantly restricts individuals’ scope of movement and social interaction.



Figure 1. Adapted maritime model of Goffman's (2011) "total institution"



In addition to physical constraints, seafarers working on shift systems experience not only a decline in mental and physical performance but also long-term physiological problems due to insufficient rest (James et al. 2017). In particular, long and irregular shift systems disrupt seafarers sleep patterns; chronic fatigue and a sense of burnout directly affect an individual's physical and mental functioning, manifesting as typical occupational stress responses such as "chronic responsibility risk" (Kaçmaz, et al..2024).

Even during short port calls, it is often not possible for crewmembers to leave the port area due to heavy workloads or various restrictions (Rogosic, 2019). The border closures and difficulties with crew changes brought about by the COVID-19 pandemic have also heightened concerns about job insecurity and family health, thereby increasing the individual psychological burden (Bailo et al., 2021). This prolonged isolation, exacerbated by the duration of voyages, is becoming increasingly evident and is creating a breeding ground for depression (Mellbye & Carter, 2017). Although "communication solutions" such as the internet and video-calling tools, recommended to cope with isolation, provide some relief; the perception of a "new idealised life" created by social media interaction can, paradoxically, reinforce social isolation and further trigger depressive tendencies (Zamora et al., 2021).

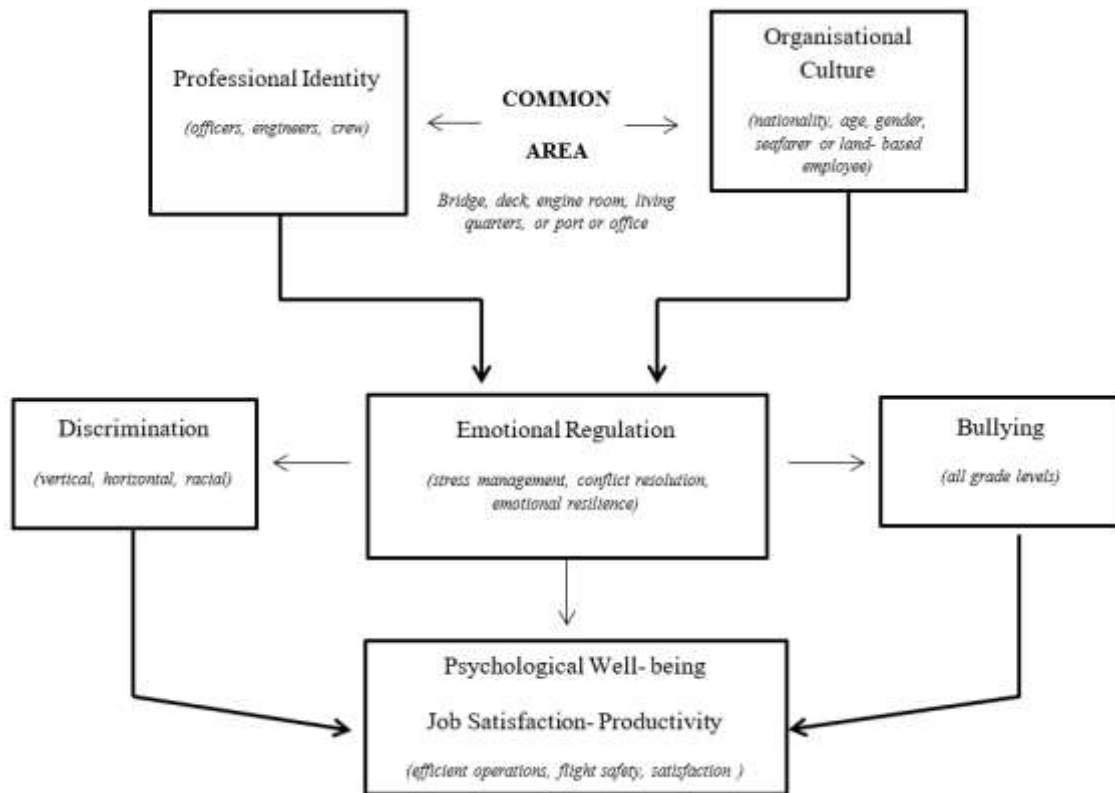
In combination with physical and digital stressors, the multicultural structure and rigid hierarchy of the shipboard environment, create a psychosocial crisis zone. McKay (2021) highlights how national differences within the maritime sector are gendered through discipline and division of labour, leading to the spread of racism, and demonstrates how these boundaries are interjectionally spatialized within the ship. Whilst the visibility of behaviours such as in-group solidarity and favouritism decreases in single – nationality crews, the cultural distance and lack of trust between members in multinational crews can, in some cases, serve a protective function against mistreatment (Gekara & Sampson, 2021).

This hierarchical structure, historically characterised in maritime culture as a "**stern authority**", keeps the crew under constant psychological pressure. Indeed, in a survey conducted by Nautilus International (2010), a seafarer summarised the situation as follows: "*I think it is almost impossible to change attitudes in the sector. Traditionally, seafarers are expected to accept bullying from our superiors.*" Behaviours defined as workplace bullying-



systematic, deliberate and prolonged psychological pressure directed at an individual or group- cause serious harm to the victim's mental health and social relationships (Tavacıoğlu, 2024).

Figure 2. The model of individual identity and organisational culture



In disputes of this kind, the balance of power shifts against the victim, group members may perceive the individual's experiences of failure or vulnerability as a sign of weakness (Grubb, 2011; Tavacıoğlu, 2024). As narcissism is a defensive mechanism developed by the individual to protect their fragile self and reinforce their self-worth through external validation; in such hierarchical environments where bullying behaviours are tolerated for the sake of maintaining status and exerting control, the likelihood of individuals exhibiting maladaptive narcissistic attitudes during crises increases dramatically (Saraç, 2011). This chain of severe environmental and social stressors clearly demonstrates that seafarer's capacity for emotional regulation acts as a vital filter during times of crisis.

2.2. The Relationship between Narcissistic Tendencies and Life Satisfaction in Isolated Hierarchies

Individual's psychological well-being and capacity to find meaning in life are directly linked not only to external achievements but also to various psychological variables such as self-efficacy, forgiveness and environmental adaptation (Demirtaş, 2018). However, narcissism- characterised by an individual's self- aggrandisement, excessive expectation of admiration, and lack of empathy- is a personality pattern that fundamentally undermines this harmony. Behind the perfectionist facade of individuals with high narcissistic tendencies lies, in fact, a deep lack of compassion and fragility (Aktaş & Şahin, 2018). This situation rapidly erodes an individual's life satisfaction, particularly in environments where external validation and appreciation are not consistently available. Indeed, clinical findings regarding narcissistic personality patterns reveal that these individual's exhibit a marked lack of emotional empathy and a high degree of self-centred behaviour (Riiter et al., 2011). A lack of empathy directly undermines social



interaction within the ships ecosystem, where a multinational crew lives together and where mutual tolerance and spontaneous cooperation are essential. The narcissistic individual's rigid attitude, which prioritises only their own interests, leads to crises of discipline and communication with other crew members in a confined space; every scenario in which they feel excluded or fail to receive and lowers their overall life satisfaction.

The maritime sector is one of the workplaces where narcissistic dissatisfaction is felt most acutely. Low employee engagement, role ambiguities, limited avenues and crewmates create a breeding ground for psychological strain and burnout among seafarers (Akamangwa, 2016). In this closed and hierarchical ecosystem where social validation is physically restricted, it is inevitable that seafarers whose narcissistic expectations are unmet will experience internal conflict and a decline in their overall life satisfaction. In this context, the first hypothesis of the study is formulated as follows:

- H1: Narcissistic personality traits among seafarers exert a substantial detrimental effect on their life satisfaction.

2.3. The Moderating Role of Difficulties in Emotion Regulation

Emotional regulation denotes the cognitive mechanism through which persons cultivate consciousness of their affective states, acknowledge these feelings, and subsequently recalibrate or constructively direct them when required (Cheshure et al., 2019). Flexibility in understanding and accepting emotions is recognised as one of the cornerstones of an individual's psychological well-being and life satisfaction (Young et al., 2019). However, recent studies have demonstrated a significant and detrimental interaction between narcissistic personality traits and difficulties in emotion regulation (Garofalo et al., 2020). In narcissistic individual's, due to grandiose self-perception, a sense of entitlement and sensitivity to criticism, low empathy and unstable emotional responses emerge during stressful situations (Moradi & Mohammadi, 2020). These people often use immature (maladaptive) defence mechanisms such as fantasy, denial, external blaming and projection in order to cope with their inner vulnerabilities and fears of failure (Jack & Kaufman, 2018; Kampe et al., 2021). Aldoa and Nolen-Hoeksema (2012) emphasise that whilst these maladaptive strategies- such as repression and denial- may protect the ego in the short term, they lay the groundwork for direct psychological distress and breakdown in the long term.

The unique challenges of the maritime industry render these incongruent strategies unsustainable for narcissistic individuals. Severe environmental factors such as time pressure, the necessity of interacting with a multicultural crew in a confined space, and physical isolation constantly trigger interpersonal conflicts within the shipboard environment. Lacking the ability to “re-evaluate” their emotions in a constructive manner in the face of this task- related stress; narcissistic seafarers are unable to resolve the conflicts they experience, thereby severing internal team communication and drifting into deep mental isolation (Mori et al., 2015). Consequently, the damage caused by narcissism in an individual is not a linear process; rather, it is a complex interaction that intensifies as the individual's inability to manage their own emotions (emotional regulation difficulties) increases. It is inevitable that a narcissistic sailor, unable to regulate their emotions within a closed ecosystem, will experience a far more dramatic decline in overall life satisfaction once their defence mechanisms have completely broken down.



- H2: In the negative relationship between narcissistic tendencies and life satisfaction, emotional regulation difficulties act as a moderating mechanism; with escalating regulatory deficits exacerbating the destructive impact of narcissism on life satisfaction.

2.4. The Role of Demographic and Occupational Characteristics in Psychological Outcomes

Beyond merely informing sociocultural architecture, **gender** fundamentally dictates collective societal expectations and established normative conduct (Connell, 2007). The general psychology literature indicates that narcissistic personality tendencies differ by gender, with men universally scoring higher on grandiose narcissism scales compared to women. This phenomenon is not merely a drive to maintain social status; it is also a structural element that fuels men's attitudes towards power, authority and grandiosity (Grijalva et al., 2015). Given the maritime sectors historically masculine and rigidly hierarchical structure, it is theoretically expected that this universal gender difference, when combine with perceptions of authority, would manifest as a more pronounced narcissistic defence strategy among male employees.

Social status and occupational hierarchy directly influence an individual's self- evaluation processes. People see possessing high social status as a valuable asset; the expectation of prestige, power and admiration that comes with status directly feeds narcissistic needs (Grijalva et al., 2015). According to the self-regulation model developed by Grapas et al., (2020) narcissism is shaped trough processes such as situation selection, vigilance, evaluation and response execution. In environments such as the maritime sector, where status is made visible through "epaulettes" and the need for validation is a constant source of vigilance, the use of narcissistic attitudes as a hierarchical weapon is inevitable.

However, these narcissistic tendencies are nor static; they evolve in conjunction with variables such as **professional experience an age**. Longitudinal studies in the literature demonstrate that younger individual's exhibit higher levels of narcissistic tendencies compared to older age groups. While Carlson and Gjerde (2009) note that narcissistic traits, which increase during adolescence, stabilise around the age of 23; a large-scale 23-year study conducted by Wetzel et al. (2020) reveals that tendencies towards leadership, arrogance and authority decrease significantly from young adulthood into middle age. In light of these findings, it is theoretically anticipated that young seafarers (with 0-5 years' experience), newly entering challenging and isolated work environments, may resort to reactive narcissistic defences in professional maturity increase, these self-centred attitudes are expected to weaken, leading to stabilisation in overall life satisfaction.

3. METHODOLOGY

3.1. Purpose of the Study

This study aims to examine the structural relationships among narcissistic personality traits, emotion regulation difficulties and life satisfaction levels among individual's working in the maritime sector. This research adopts a correlational survey design – a staple quantitative approach- to delineate the primary impact of the predictor (narcissism) on the outcome (life satisfaction), alongside the moderating influence of a tertiary (regulatory deficits) within this interplay. The validity of the theoretical model and the causal and directional relationships in the obtained data were tested using Structural Equation Modelling (SEM).

3.2. Population and Sample

The population of the study consists of seafarers who actively serving within the hierarchical structure of the maritime sector or who are in the process of entering the sector. The study



sample consists of 220 participants selected using a purposive sampling method. When planning the sample size, the rule accepted in the literature for validity and reliability analyses- “at least 5 participants per scale item”- was taken into account and followed accordingly.

The sample profile was strategically diversified to test the hypothesis that the “tough-guy authority” misconception in the maritime industry and psychosocial crises are not limited to the open sea but represent a sector- wide issue independent of location. Accordingly, the study group included ship personnel who directly experience long-term isolation (captains, officers, engineers, and crew), port/land- based maritime workers who reflect organizational culture, and trainees/officer candidates who, being at the lowest rung of the hierarchy, encounter authority shock for the first time.

An analysis of the demographic distribution of the 220 *individuals* who participated in the study reveals that *51.8% of the participants were male and 48.2% were female*. In terms of age groups, the majority of the sample consists of young professionals and students new to the sector (*45.5%; ages 18-25*) and employees in the early stages of their careers (*21.4%; ages 26-35*). In terms of educational background, *70.9% of participants hold a bachelor’s degree, while 13.6% hold a master’s degree*. Regarding professional characteristics, it was determined that *41.8% of participants work in port/land-based units, while 29.1% serve as active shipboard personnel*. In terms of seagoing experience, *43.2% of the sample has not yet gained active seagoing experience (student/trainee group), while 37.3% has 4 months or more of seagoing experience*.

3.3. Data Collection Methods

Data for the study were collected via a structured online questionnaire. The questionnaire consists of personal information from designed to determine participant’s demographic and occupational characteristics, along with three different scales measuring the study’s main variables. Because of the factor analysis conducted to test the construct validity of the collected data, it was determined that the factor loadings of all scale items were well above the 0.50 threshold (ranging from 0.59 to 0.84), and it was confirmed that the items demonstrated high internal consistency.

- **Narcissistic Personality Inventory (NPI-16):** The version adapted into Turkish by Atay (2009) and restructured by Akıncı (2015) into a short form (16 items) as used to measure participants general narcissistic tendencies. In the study conducted by Akıncı (2015), the internal consistency coefficient of the scale was calculated as $\alpha = 0.69$; in the current study, it was found that the item-factor loadings ranged from 0.68-0.81.
- **Emotional Regulation Difficulty Scale Short Form (DERS-16):** This scale, introduced to the literature by Bjureberg and Gratz to identify maladaptive coping strategies among seafarers in response to negative emotional states, as used in this study: its Turkish adaptation was conducted by Yiğit & Yiğit (2017). In the relevant adaptation study, the scales’ internal consistency coefficient was reported as $\alpha = 0.92$; in this study, the item factor loadings were calculated to range between 0.70 and 0.84.
- **Life Satisfaction Scale (SWLS):** A 5-item scale developed by Diener et al. (1985) to measure individual's overall level of satisfaction with their lives, with a Turkish adaptation by Durak, et al. (2011), was used. In the Turkish adaptation, the internal consistency coefficient was calculated as $\alpha = 0.81$, and it was determined that the factor loadings in the current research data ranged from 0.59 to 0.80.



4. FINDINGS

4.1. Reliability of the Study

To test the construct validity of the scales used in the study, Exploratory Factor Analysis (EFA) was initially executed to verify the structural integrity of the deployed instruments. Upon assessing the dataset's suitability for factor extraction, the KMO values were found to be *0.914 for the Narcissistic Personality Inventory*, *0.921 for the Emotional Regulation Difficulty Scale*, and *0.918 for the Life Satisfaction Scale*. The fact that results of the Bartlett Sphericity Test were statistically significant for all scales ($p < 0.01$) confirmed the suitability of the sample size for factor extraction.

Confirmatory Factor Analysis (CFA) was conducted to test the structural fit of the factor structures validated by EFA with the collected field data. Upon examining the fit indices of the established measurement model, it was observed that the chi-square-to-degrees-of-freedom ratio ($\chi^2 / df = 2.46$), which indicates overall model fit, fell below the accepted threshold for excellent fit (< 3). When the comparative and absolute fit indices are detailed; with values of GFI=0.982, AGFI= 0.983, IFI= 0.982, and CFI=0.986, the criteria for excellent fit (> 0.95) were met; NFI=0.920 and TLI (NNFI) = 0.983 met the acceptable fit thresholds (> 0.90). These findings demonstrate the statistical validity of the study's structural model and its strong fit with the dataset.

4.2. Normality Test and Descriptive Statistics

Prior to selecting between parametric and non-parametric analytical procedures for hypothesis verification, the distributional characteristics and baseline descriptive metrics of the gathered data from the Narcissistic Personality, Emotional Regulation Difficulty, and Life Satisfaction scales were examined.

Table 1. Descriptive Statistics and Normality Test Results

Dimensions	Mean Score	St. Deviation	Skewness	Kurtosis	Kolmogorov-Smirnova		Shapiro-Wilk	
					ist	p	ist	p
Narcissistic Personality Inventory	6,277	3,133	0,541	0,129	8,104	0,264	8,968	0,179
Life Satisfaction	23,309	6,054	-0,589	0,215	8,097	0,102	8,967	0,347
Difficulty in Emotional Regulation	35,554	13,147	0,861	0,258	7,109	0,445	8,938	0,512

An examination of Table 1 reveals that the data on levels of narcissistic tendencies ($\bar{X} = 6.27$), life satisfaction ($\bar{X} = 23.30$), and difficulty in emotion regulation ($\bar{X} = 35.55$) possess sufficient variance for structural analyses. When evaluating the assumption of normal distribution, it was determined that the skewness and kurtosis coefficients for all variables fall within the ± 1.0 range, which is accepted in the literature as the threshold for excellent normality. Kolmogorov-Smirnov and Shapiro-Wilk tests were non-significant ($p > 0.05$) for all three variables statistically confirmed that the dataset exhibits a normal distribution and allowed for the use of parametric analyses in hypothesis testing.

4.3. Relationships among Variables (Correlation Analysis)

Outcomes derived from the Pearson correlational evaluation, executed to ascertain the directionality and magnitude of inter- variable associations, are detailed in Table 2. In



accordance with the assumption of normality confirmed in the previous stage, the Pearson correlation coefficient (r) was used to test the bivariate relationships among variables.

Relationships between Narcissism and Difficulty in Emotional Regulation: A positive and moderately significant relationship ($r = 0.427$) was found between narcissistic personality traits and difficulty in emotional regulation. This finding indicates that as individual's narcissistic tendencies increase their capacity to regulate their own emotions during time of stress and crisis statistically weakens.

The Relationship between Emotional Regulation Difficulty and Life Satisfaction: The strongest correlation among the variables as found to be negative correlation ($r = -0.598$) between emotional regulation difficulty and life satisfaction. As emotional regulation difficulties increase, there is a significant inability to maintain emotional control under operational stress directly undermines overall life satisfaction.

Table 2. Analysis of the Relationship between Narcissistic Personalities, Difficulty in Emotional Regulation, And Life Satisfaction

	Narcissistic Personalities	Life Satisfaction	Difficulty in Emotional Regulation
Narcissistic Personalities	1		
Life Satisfaction	$r = -0.308^*$ $p = 0.000$	1	
Difficulty in Emotional Regulation	$r = 0.427^*$ $p = 0.000$	$r = -0.589^*$ $p = 0.000$	1

* $p < 0.05$ significant relationship

The Relationship between Narcissism and Life Satisfaction: A negative and relatively weak-to-moderate significant relationship ($r = -0.308$) was found between narcissistic traits and life satisfaction. The relatively low level of this bivariate relationship, which suggests that increasing narcissism tends to reduce life satisfaction, raises the question of whether the destructive effect to narcissism on life satisfaction occurs through mediating or moderating mechanisms rather than a linear relationship, thereby theoretically supporting the necessity of Structural Equation Modelling (SEM) analysis.

4.4. The Moderating Effect of Emotional Regulation Difficulty on the Relationship between Narcissistic Personality and Life Satisfaction

In line with study's central research question, Structural Equation Modelling (SEM) was applied to test the moderating role of emotional regulation difficulty in the relationship between narcissistic personality traits and life satisfaction. To prevent the problem of multicollinearity, the independent (Narcissism) and moderator (Emotional Regulation Difficulty) variables were first standardized; then, an "Interaction Term" was created by multiplying these two variables and included in the analysis. Upon examining the fit indices of the established structural model, the following values were obtained: $\chi^2 / df = 2.75$, $RMSEA = 0.015$, $CFI = 0.990$, $NFI = 0.998$, and $TLI = 0.980$. In particular, the fact that the $RMSEA$ value is well below the excellent fit threshold of 0.05 and that the other indices exceed the 0.95 threshold demonstrates the structural validity of the moderator model and its flawless fit with the dataset.



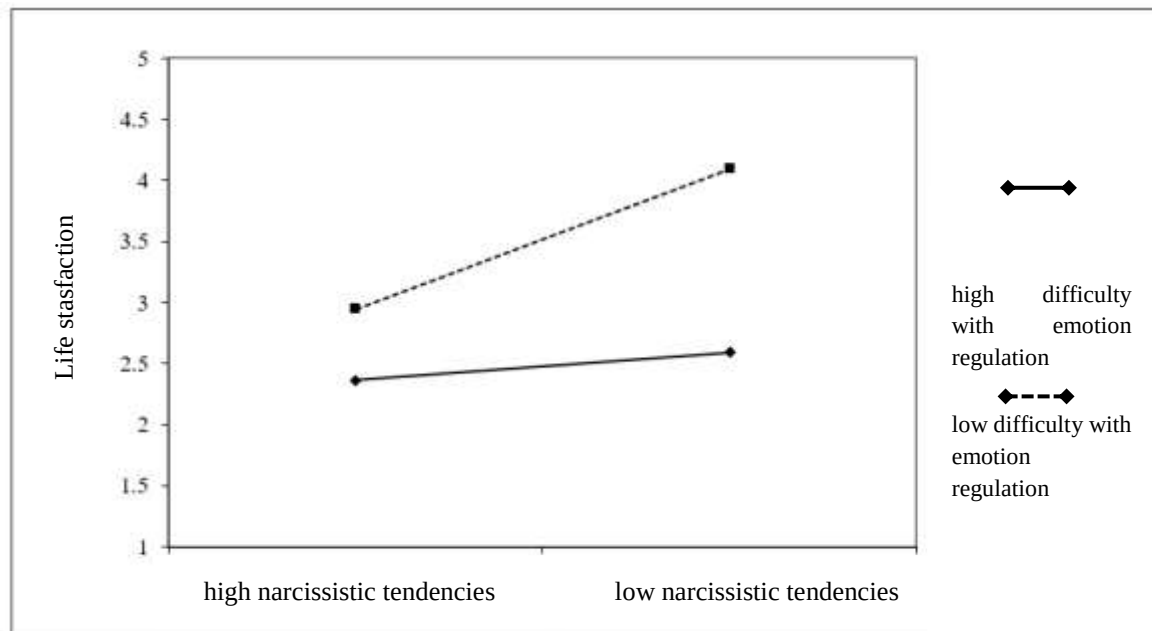
Table 3. YEM Estimation Results Regarding the Moderating Effect of Emotional Regulation Difficulty on the Impact of Narcissistic Personality on Life Satisfaction.

Structural Relationship	Direction	Estimated Coefficient	St. Error	t- statistic	p	result
NK→YD	-	-0.341	0.098	-3.480	0.001*	Significant Relationship
DDG→YD	-	-0.592	0.087	-6.805	0.000*	Significant Relationship
NK*DDG→YD	+	0.460	0.074	6.216	0.000*	Significant Relationship

*p<0.01 significant relationship

An analysis of the estimated coefficients in Table 3 revealed the narcissistic personality traits have a direct and significant negative effect on life satisfaction ($\beta = -0.341$, $p < 0.01$), thereby supporting H1. Similarly, it was observed that difficulty in emotion regulation also predicted life satisfaction with a strong negative effect ($\beta = -0.592$, $p < 0.01$). When examining the moderating effect (H2), which forms the core argument of the study, it was determined that the interaction term coefficient had a statistically significant effect on life satisfaction ($\beta = 0.460$, $p < 0.01$). This finding confirms H2 by demonstrating that the destructive effect of narcissism on life satisfaction is not fixed but varies depending on changes in the individual's emotional regulation capacity.

Figure 3. Moderator Effect Level Graph



Upon examining the simple slope graph created to determine the direction of the moderating effect, the mechanism of the effect was analysed as follows: When an individual has high difficulty in emotion regulation (i.e., is unable to regulate their own emotional state), narcissistic defence mechanisms become completely ineffective in the face of environmental



stressors, leading to a dramatic decline in life satisfactions. On the other hand, in situations where emotional regulation difficulties are low (where cognitive flexibility and emotional management are established), the negative and destructive impact of narcissistic tendencies on life satisfaction is buffered, and the individual's life satisfaction is preserved.

4.5. Analyses of Group Differences According to Demographic and Occupational Variables

To determine whether the study's main variables differed according to participants demographic and operational characteristics, independent samples t-test and analyses of variance (ANOVA) were conducted.

There was no statistically significant difference in life satisfaction and emotion regulation difficulties based on the *gender* variable ($p > 0.05$).

Table 4. Results of Gender-Independent Sample t-Test.

	Gender	n	Mean	Ss.	t	p
Narcissistic Personality Inventory	female	106	5,726	2,932	-2,546	0,012*
	male	114	6,789	3,238		
Life Satisfaction	female	106	23,896	5,539	1,390	0,166
	male	114	22,763	6,474		
Emotional Regulation	female	106	35,377	12,107	-0,193	0,847
	male	114	35,719	14,096		

* $p < 0.05$ significant difference

However, a significant difference ($p < 0.05$) as found between *female* and *male* participants in terms of narcissistic personality traits. It was observed that the mean narcissistic scores *for male* participants (6.79) were higher than those *for female* participants (5.73). This finding aligns with universal findings in the general psychology literature indicating that men exhibit relatively higher levels of grandiose traits. However, this statistical difference is interpreted as the traditional masculine structure of the maritime sector and the perception of a rigid hierarchical authority reinforcing existing narcissistic defence mechanisms in male employees in an more pronounced and visible manner.

According to the results of the ANOVA test by age groups presented in Table 5, was no statistically significant difference in participants narcissistic tendencies and levels of emotion regulation difficulties across *age* groups ($p > 0.05$). In contrast, a significant difference ($p < 0.05$) as found in life satisfaction levels based on age. Post-hoc analyses revealed that participants in the *46-55 age groups*. This finding is interpreted to mean that as professional maturity and life experience increase, individual's expectations are met, and the psychological adaptation mechanisms developed in response to challenges of a maritime career elevate overall satisfaction levels. The low life satisfaction observed in younger age groups, however, is attributed to stress caused by the competitive environment and career uncertainties within the sector.



Table 5. Results of the ANOVA Test by Age Group

	Age	n	Mean	Ss.	F	p	Post-hoc
Narcissistic Personality Inventory	18-25	100	6,750	3,082			
	26-35	47	6,446	3,119			
	36-45	45	5,644	3,517	1,737	0,143	
	46-55	24	5,333	2,371			
	56+	4	5,250	2,629			
Life Satisfaction	18-25	100	22,800	6,152			
	26-35	47	22,297	6,762			
	36-45	45	24,488	5,529	3,432	0,029*	4>2
	46-55	24	25,833	4,507			4>1
	56+	4	19,500	2,380			
Emotional Regulation	18-25	100	37,070	12,958			
	26-35	47	35,148	15,126			
	36-45	45	35,111	12,581	1,071	0,372	
	46-55	24	31,041	10,597			
	56+	4	34,500	11,789			

*p<0.05 significant difference

The variance analysis (ANOVA) conducted to test for differences between participants **hierarchical positions** (captain, officer/engineer, shore-based personnel, crew, and trainee) and the study's core dimensions revealed no statistically significant differences in the dimensions of narcissistic personality traits, difficulty in emotion regulation, and life satisfaction ($p > 0.05$). The theoretical expectation that managers at the top of the hierarchy, who represent authority, would exhibit more grandiose traits, or that lower-level personnel would experience higher levels of difficulty in emotion regulation, was not supported by the data.

Table 6. Results of the ANOVA Test by Job Position

	Job Position	n	Mean	Ss.	F	p
Narcissistic Personality Inventory	Captain	13	6,692	3,881		
	officer/engineer	44	6,477	3,114		
	Port, shore, or company personnel	72	5,763	2,820		
	Crew	10	5,200	3,119	1,152	0,333
	Deck Trainee	8	5,250	3,105		
	Engine room trainee	7	7,142	3,625		
	Student	66	6,818	3,248		
Life Satisfaction	Captain	13	22,000	5,147		
	officer/engineer	44	23,795	6,013		
	Port, shore, or company personnel	72	23,944	5,964	0,931	0,474
	Crew	10	22,200	7,284		
	Deck Trainee	8	23,125	5,083		



	Engine room trainee	7	19,000	8,755		
	Student	66	23,197	5,956		
Emotional Regulation	Captain	13	36,384	9,937		
	officer/engineer	44	36,590	15,084		
	Port, shore, or company personnel	72	33,513	12,854		
	Crew	10	33,300	12,383	0,922	0,480
	Deck Trainee	8	33,250	15,285		
	Engine room trainee	7	43,285	11,799		
	Student	66	36,727	12,614		

This homogeneous structure indicates that the operational anxiety caused by role ambiguities, heavy workloads, and crises (*seasickness, technical malfunctions, etc.*) in the maritime sector is a systemic issue affecting all personnel with similar intensity, regardless of rank. Similarly, no statistically significant differences were found between groups regarding the participants work schedule (*rotational/fixed*) and the duration of continuous time spent on board ($p > 0.05$). This lack of difference confirms two critical theoretical findings in maritime psychology.

The absence of a significant increase in life satisfactions among crew members working under a rotational schedule, despite having the opportunity to go ashore and rest, demonstrates that the chronic mental fatigue caused by the maritime profession “spills over” into off- duty hours and life on land. Even when individual's physically leave the ship, the continue to experience sector-specific anxiety and stress.

The fact that the length of time spent at sea does not have a distinguishing effect on psychological wear and tear (those staying for short periods experience as much difficulty regulating their emotions as those staying for long periods) indicates that isolation is experienced as an “acute shock” from the very moment one steps onto the ship, rather than as a chronic process. This situation demonstrates that stress stems not from the length of time spent at sea, but rather from the very nature of the closed ecosystem.

When the results of the analysis of variance (ANOVA) regarding participants years of professional experience were evaluated, no statistically significant difference was found between the groups in the dimensions of life satisfaction and difficulty in emotion regulation ($p > 0.05$). In contrast, a significant difference ($p < 0.05$) was found between the experience groups in the dimension of narcissistic personality traits. Upon examining the post-hoc analyses and mean values conducted to determine the source of the difference, it was observed that the mean narcissism scores of participants with “0-5 years” of experience ($Mean = 6.64$; $SD = 2.97$) were found to be significantly higher than those of the “11-15” ($Mean = 4.71$; $SD = 2.77$) and “16 years and over” ($Mean = 5.00$; $SD = 2.66$) groups, which had higher levels of professional experience.



Table 7. Results of the ANOVA Test by Work Experience

	Work Experience	n	Avg.	Ss.	F	p	Post-hoc
Narcissistic Personality Inventory	0-5 years	130	6,646	2,974	4,980	0,002*	1>3
	6-10 years	37	6,973	3,708			1>4
	11-15 years	21	4,714	2,777			2>3
	16 years and over	32	5,000	2,663			2>4
Life Satisfaction	0-5 years	130	23,030	6,221	0,401	0,753	
	6-10 years	37	23,513	6,837			
	11-15 years	21	23,142	4,574			
	16 years and over	32	24,312	5,354			
Emotional Regulation	0-5 years	130	35,930	12,785	1,480	0,221	
	6-10 years	37	35,864	14,755			
	11-15 years	21	38,809	13,844			
	16 years and over	32	31,531	11,821			

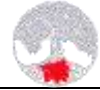
*p<0.05 significant difference

The finding indicates that young professionals entering the industry tend to rely more heavily on grandiose defence mechanisms driven by the need to prove themselves within the maritime sectors rigid hierarchical structure, to gain status in the face of authority, and to mask anxieties regarding potential inadequacy or inexperience. However, as professional experience and operational competence increase, the individual's external need for this defence mechanism diminishes; reactive narcissistic attitudes give way to professional maturity and internal regulation.

5. CONCLUSION AND DISCUSSION

The present research sought to structurally evaluate how regulatory affective deficits moderate the interplay between narcissistic predispositions and overall life satisfaction within the maritime workforce. The empirical findings demonstrate that narcissism- often tolerated as an element of “power” within the maritime industry’s traditional hierarchical structure- actually constitutes a structural vulnerability that leaves the individual defenceless against environmental stressors. A preeminent theoretical deduction of this inquiry is that the unmediated detrimental impact of grandiose traits on life satisfaction manifests at an unexpectedly marginal threshold. This phenomenon, which can be explain by the “Narcissistic Denial” mechanism in the literature, indicates that individual's with a grandiose self-perception tend to report their life satisfaction as artificially high rather than acknowledging their internal distress and anxiety.

Moderator effect analysis tested using the Structural Equation Model (SEM) however, has revealed the statistical limits of this denial shield. The analysis findings ($\beta = 0.460$, $p < 0.01$) demonstrated that narcissistic individual's life satisfaction can be maintained only “*as long as they are able to regulate their emotions.*” When an individual loses the capacity to manage anger and anxiety during operational stress, conflict, or crises, narcissistic defences completely collapse, leading to an acute decline in life satisfaction. Consequently, the research confirms that at the root of communication crises and burnout syndrome in the maritime sector lies not narcissism itself, but the “*inadequacy of emotional regulation*” underlying this structure. Additional analyses of demographic and occupational variables have yielded critical findings



regarding sectoral hierarchy and psychological adaptation. First, the fact that male participants scored higher than females on measures of narcissistic personality traits confirms the theoretical expectation that the maritime sectors historically masculine structure and rigid hierarchical perception of authority more strongly reinforce grandiose defence mechanisms among male employees. The fact that the work location variable (active vessel or land/port) does not produce a significant difference in psychological factors demonstrates that the psychological damage caused by narcissistic authority and stress does and deeply entrenched issue of sectoral culture. On the other hand, the fact that narcissistic tendencies are measured at the highest levels during the early years of professional experience (0-5 years) is interpreted as a reflection of the “**reality shock**” experienced by young professionals new to the sector in the face of rigid authority, as well as their efforts to prove themselves. As professional experience and age increase (particularly in the 46-55 age group), the decline in these maladaptive defence and the significant peak in life satisfaction indicate that individual's need for external validation decreases and they gain cognitive flexibility during the sectoral adaptation process.

Practical Conclusions and Recommendations;

In light of the findings, it is imperative for the global maritime industry to shift its human resources policies from a structure focused solely on technical skills to on center on “**cognitive and emotional flexibility**” in order to ensure operational safety. Predicated on these empirical insights, the subsequent systemic interventions are advocated for maritime corporations and training academies:

- In addition to technical simulator performance, individual's emotional regulation capabilities and psychological flexibility during crises should be measured using psychometric tools during hiring and promotion processes.
- Training curricula for ship personnel should integrate modules based on Cognitive Behavioural Therapy (CBT) principles, targeting anger management and stress regulation.
- Instead of the sectors “authoritarian” culture, modern leadership models that embrace error, foster open communication, and promote emotional transparency should be supported.

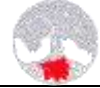
Subsequent investigations isolating specific narcissistic facets (grandiose versus vulnerable) through longitudinal frameworks across cross-cultural maritime cohorts would substantially enrich the existing theoretical corpus.

REFERENCES

- Akamangwa, N. (2016). Working for the environment or against it? A study of seafarers’ environmental behaviours. *Marine Policy*, 64, 1-8.
- Akıncı, T. (2015). Narsistik Kişilik Envanterinin (NKE-16) Türkçeye uyarlanması: Geçerlik ve güvenirlik çalışması [Adaptation of the Narcissistic Personality Inventory (NPI-16) into Turkish: A validity and reliability study]. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi*, 48(2), 243-268.
- Aktaş, A., & Şahin, M. (2018). Narsistik özellik, öz-şefkat ve duygu düzenleme güçlüğü arasındaki ilişkinin incelenmesi [Investigation of the relationship between narcissistic traits, self-compassion, and difficulty in emotion regulation]. *Avrasya Sosyal ve Ekonomi Araştırmaları Dergisi*, 5(6), 362-374.
- Aldao, A., & Nolen-Hoeksema, S. (2012). When are adaptive strategies most predictive of psychopathology? *Journal of Abnormal Psychology*, 121(1), 276-281.



- Atay, S. (2009). Narsistik kişilik envanteri'nin Türkçe'ye standardizasyonu [Standardization of the Narcissistic Personality Inventory into Turkish]. *Gazi Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 11(1), 181-196.
- Baygi, F., Smith, J., & Johansson, K. (2022). Workplace bullying and leadership styles in the maritime sector. *Marine Psychology Journal*, 15(2), 123-139.
- Baygi, F., Smith, A., Khonsari, N. M., Nasrabadi, F. M., Mahmoodi, Z., Gorabi, A. M., & Qorbani, M. (2022a). Seafarers' mental health status and life satisfaction: Structural equation model. *Frontiers in Public Health*, 10(969231), 1-8
- Besser, A., & Priel, B. (2010). Grandiose narcissism versus vulnerable narcissism in threatening situations: Emotional reactions to achievement failure and interpersonal rejection. *Journal of Social and Clinical Psychology*, 29(8), 874-902.
- Bjureberg, J., Ljótsson, B., Tull, M. T., Hedman, E., Sahlin, H., Lundh, L. G., ... & Gratz, K. L. (2016). Development and validation of a brief version of the Difficulties in Emotion Regulation Scale: The DERS-16. *Journal of Psychopathology and Behavioral Assessment*, 38(2), 284-296.
- Carlson, K. S., & Gjerde, P. F. (2009). Preschool personality antecedents of narcissism in adolescence and young adulthood: A 20-year longitudinal study. *Journal of Research in Personality*, 43(4), 570-578.
- Carotenuto, A., Molino, I., Fasanaro, A. M., & Amenta, F. (2012). Psychological stress in seafarers: A review. *International Maritime Health*, 63(4), 188-194.
- Cheshure, A., Zeigler-Hill, V., Sauls, D., Vrabel, J. K., & Lehtman, M. J. (2020). Narcissism and emotion dysregulation: Narcissistic admiration and narcissistic rivalry have divergent associations with emotion regulation difficulties. *Personality and Individual Differences*, 154, 109679. (Not: Makale metninde 2019 olarak geçmiş olabilir, dijital baskısı 2019 sonu, resmi basımı 2020'dir. APA 7'ye göre 2020 kullanımı daha yaygındır.)
- Connell, R. W. (2007). *Gender and power: Society, the person and sexual politics*. Polity Press.
- Demirtaş, A. S. (2018). Duygu düzenleme stratejileri ve benlik saygısının mutluluğu yordayıcılığı [Emotion regulation strategies and self-esteem as predictors of happiness]. *Turkish Studies*, 13(11), 1-15.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment*, 49(1), 71-75.
- Durak, M., Şenol-Durak, E., & Gençöz, T. (2011). Psychometric properties of the Satisfaction with Life Scale among Turkish university students, correctional officers, and elderly adults. *Social Indicators Research*, 99(3), 413-429.
- Goffman, E. (1961). *Asylums: Essays on the social situation of mental patients and other inmates*. Anchor Books.
- Grapsas, S., Brummelman, E., Back, M. D., & Denissen, J. J. A. (2020). The "why" and "how" of narcissism: A process model of narcissistic status pursuit. *Perspectives on Psychological Science*, 15(1), 150-172.
- Grijalva, E., Harms, P. D., Newman, D. A., Gaddis, B. H., & Fraley, R. C. (2015). Narcissism and leadership: A meta-analytic review of linear and nonlinear relationships. *Personnel Psychology*, 68(1), 1-47.
- James, S. M., Honn, K. A., Gaddameedhi, S., & Van Dongen, H. P. A. (2017). Shift work: Disrupted circadian rhythms and sleep—implications for health and well-being. *Current Sleep Medicine Reports*, 3(2), 104-112.



- Jauk, E., & Kaufman, S. B. (2018). The higher the flight, the deeper the fall: Narcissism and vulnerable forms of ego threat. *Journal of Personality*, 86(3), 481-496.
- Jensen, H. J., & Oldenburg, M. (2020). Training seafarers to deal with multicultural crew members and stress on board. *International Maritime Health*, 71(3), 174-180.
- Kaçmaz, S., Öztoprak, A., Tavacıoğlu, L., & Kızılsaç, B. B. (2024). Classification analysis of bullying expressions in maritime. In *Proceedings of the 29th International Maritime Lecturers Association Conference (IMLA 29)* (p. 631).
- Kampe, L., Bohn, J., Remmers, C., & Hörz-Sagstetter, S. (2021). It's not that great anymore: The central role of defense mechanisms in grandiose and vulnerable narcissism. *Frontiers in Psychiatry*, 12, 661948. <https://doi.org/10.3389/fpsy.2021.661948>
- Krizan, Z., & Herlache, A. D. (2018). The narcissism spectrum model: A synthetic view of narcissistic personality. *Personality and Social Psychology Review*, 22(1), 1-29.
- Mellbye, A., & Carter, T. (2017). Seafarers' mental health: Current knowledge and future research directions. *International Maritime Health*, 68(3), 203-212.
- Oldenburg, M., Baur, X., & Schlaich, C. (2010). Occupational risks and challenges of seafaring. *Journal of Occupational Health*, 52(5), 249-256.
- Ritter, K., Dziobek, I., Preissler, S., Rüter, A., Vater, A., Fydrich, T., ... & Roepke, S. (2011). Lack of empathy in patients with narcissistic personality disorder. *Psychiatry Research*, 187(1-2), 241-247.
- Rogošić, E. (2019). *Slobodno vrijeme splitskih pomoraca: Sociološko istraživanje* [Leisure time of Split seafarers: A sociological research] (Unpublished master's thesis). University of Split.
- Saraç, E. (2011). *İş ortamında psikolojik tacizin (yıldırma) çalışanlar üzerinde etkileri* [The effects of psychological harassment (mobbing) on employees in the workplace] (Unpublished master's thesis). Beykent University.
- Tavacıoğlu, L. (2024). *Gemi insanları için yıldırma (mobbing) ölçeği: Geçerlik ve güvenirlik çalışması* [Mobbing scale for seafarers: A validity and reliability study] (Unpublished master's thesis). Topkapı University.
- Wetzel, E., Robins, R. W., Grijalva, E., & Roberts, B. W. (2020). You're still so vain: Changes in narcissism from young adulthood to middle age. *Journal of Personality and Social Psychology*, 119(3), 479-496.
- Yiğit, İ., & Yiğit, M. G. (2017). Duygu Düzenleme Güçlüğü Ölçeği (DDGÖ) Kısa Formunun Türkçe uyarlaması: Geçerlik ve güvenirlik çalışması [Turkish adaptation of the Difficulties in Emotion Regulation Scale-Brief Form (DERS-16): Validity and reliability study]. *Psikiyatride Güncel Yaklaşımlar*, 9(3), 226-245.
- Zamora, A. A., Regencia, Z. J. G., Crisostomo, M. E., Van Hal, G., & Baja, E. S. (2021). Effect of daily social media exposure on anxiety and depression disorders among cargo seafarers: A cross-sectional study. *International Maritime Health*, 72(1), 55-63.