The Relationship Between the Big Five Personality Traits and Job Satisfaction – A Pilot Study on a Sample of Croatian Seafarers

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Over the past decade, research on seafarers' health, well-being, stress, and job satisfaction has increased. Previous studies on other work populations have shown the relationship between the Big Five personality traits and job satisfaction, but the significance of each trait of the Big Five model, as well as the size of the correlations, vary according to the characteristics of the samples, such as gender, age, and occupation. With a view of the lack of addressing this research topic in seafarers, this study aimed to examine the relationships between the five basic personality dimensions and seafarers' job satisfaction. The convenient sample consisted of 286 Croatian male seafarers aged between 18 and 65. Participants completed a questionnaire that included questions on sociodemographic characteristics, IPIP-50 inventory measuring five personality traits, Job Satisfaction Scale, and Seafarers' Job Satisfaction Scale. The results showed that both measures of job satisfaction correlated positively with emotional stability, conscientiousness, and extraversion. However, the general measure of job satisfaction additionally correlated positively with intellect/imagination, while the measure of maritime job satisfaction additionally correlated positively with agreeableness. Among the five personality traits, emotional stability proved to be the highest correlate for both measures of job satisfaction. This pilot study reveals significant correlations between the Big Five personality traits and seafarers' job satisfaction. The paper brings theoretical and practical discussions on the relationships between the Big Five personality traits and seafarers' general and specific job satisfaction. The study represents a call for further researchers to verify the obtained results on more representative samples of the seafarer population and to test the predictive validity of personality traits in explaining job satisfaction through longitudinal studies.

1. INTRODUCTION

1.1. Stress and Well-being in Seafarers

Long-term separation from home, isolated work environment, multinational work teams, deprivation of physical and psychosocial needs on board, high work demands combined with low autonomy at work, environmental stressors on board such as noise, vibrations and heat, risks of accidents, piracy and lack of medical care on board - these are just some of the sources of stress that seafarers face and that characterize seafaring as an extremely stressful profession (Carotenuto et al.; 2012; Oldenburg et al, 2009; Slišković, 2017; Slišković and Penezić, 2015a). Despite advances in the modern maritime sector (higher safety standards, shorter contracted stay times on board, better communication with the mainland, etc.), the impact of the COVID-19 pandemic related to seafarers' work shifts has further jeopardized seafarers' well-being (Lucas et al., 2021; Slišković, 2020).

The short- and long-term effects of work stress on physical health have been recognized in the general literature (Sulsky and Smith, 2005). Research among seafarers, despite the methodological problem of the 'healthy worker', has pointed to negative health outcomes among seafarers (Aikaterini et al., 2019; MacLachlan et al., 2012; Oldenburg et al., 2010; Oldenburg, 2014; Slišković, 2017), among which the most prominent are cardiovascular disease and metabolic syndrome. In the past decade, there has also been an increasing number of studies indicating impaired psychological well-being and mental health in seafarers (Sampson and Ellis, 2019; Iversen, 2012). Researchers in this field have also highlighted the problem of occupational burnout in seafarers (Chung et al., 2017; Oldenburg et al., 2012). The number of studies focusing on factors that may explain stress, job (dis)satisfaction, and well-being among seafarers is also increasing (McVeigh et al., 2019a; Slišković and Penezić, 2015b). As this research focuses on seafarers' job satisfaction as an important aspect of well-being, the following text briefly defines the construct and explains the importance of research on job satisfaction in this population.

1.2. Seafarers' Job Satisfaction - Consequences and Antecedents

Job satisfaction, which can be broadly defined as a positive emotional state resulting from the evaluation of work experiences (Judge and Klinger, 2008; Locke, 1976), is generally an important determinant of a person's well-being (Sironi, 2019). Given the fact that seafarers spend at least half a year on board (Alderton et al., 2004), which depends on the ratio of contracted onboard and leave time (Slišković and Penezić, 2016), it is safe to say that their job satisfaction plays a more important role in their lives than it does for land-based workers. Besides the fact that job satisfaction plays an important role in explaining a person's psychophysical health, job satisfaction is significantly related to workers' work motivation (Kian et al., 2014). Previous studies on seafarers have also confirmed the significant role of job satisfaction in determining seafarers' subjective well-being (McVeigh et al., 2017; McVeigh et al., 2019a; McVeigh et al., 2019b), turnover, and work efficiency (An et al., 2020; Yuen et al., 2018).

Previous research on antecedents of seafarers' job satisfaction has largely focused on factors related to the work environment, such as income, length of stay on board and leave time spent at home, nature and dynamics of work, availability of the Internet, and opportunities for recreation on board, etc. (Slišković and Penezić, 2015b; Slišković and Penezić, 2016). Of the individual protective factors, seafarers' psychological capital (Hystad and Eid, 2016), personal hardiness (Doyle et al., 2016), and resilience (McVeigh et al., 2019a) have previously been studied in this context. However, there is a lack of research in the literature addressing the role of more basic or fundamental personality traits in explaining seafarer job satisfaction. According to the transactional approach to occupational stress in seafaring (Slišković, 2017), personality traits have moderating or mediating role in the links between sources of stressors in seafaring and seafarers' work-related well-being. Therefore, this study focused on relations between each of the Big Five personality traits and job satisfaction in seafarers.

1.3. The Big-Five Personality Traits as Possible Antecedents of Seafarers' Job Satisfaction

The Big Five model (Goldberg, 1993; McCrae and Costa, 1987) is considered the most empirically accepted model for describing individual differences in personality (Johnson, 2017). According to this model, the five basic personality traits of extraversion, agreeableness, conscientiousness, emotional stability (or the opposite pole: neuroticism), and openness to experience (also called intellect/imagination) reflect relatively stable individual differences in behavioral patterns, emotions, and cognition. Each of the Big Five traits represents individual differences in a set of interrelated characteristics (Soto et al, 2016; Soto, 2018), which are described in the following text. The main characteristics of extraversion are social engagement, assertiveness, and energy level or activity, with highly extraverted individuals liking to socialize and frequently expressing positive emotions. Agreeableness refers to individual differences in compassion, respectfulness, and acceptance of others. Agreeable individuals care about well-being of others, treat them with respect, and have generally positive attitudes toward others. The main characteristics of conscientiousness are organization, productivity, and responsibility; this personality trait describes a person's general tendency to work and complete tasks. Emotional stability captures individual differences in the frequency and intensity of negative emotions. While emotionally stable individuals remain calm and optimistic in difficult situations and can regulate their emotions more easily, highly neurotic individuals tend to experience anxiety, sadness, and mood swings. Openness to experience represents individual differences in intellectual curiosity, esthetic sensitivity, and imagination. Highly open people have a wide range of intellectual and creative interests, enjoy thinking and learning, are receptive to art and beauty, and develop original ideas.

The theoretical starting point for focusing on the Big Five personality traits as possible antecedents of job satisfaction among seafarers stems from research showing that the Big Five personality traits generally predict subjective well-being (Soto et al., 2016; Strickhouser et al., 2017; Sulsky and Smith, 2005) and that job satisfaction is an important determinant of well-being (Sironi, 2019). For a long time, research conducted outside the maritime

sector has pointed to the importance of the Big Five model for job satisfaction (Judge et al., 2002; Ilies and Judge, 2003), with emotional stability, extraversion, and conscientiousness found to be the most consistent predictors of job satisfaction. However, recent studies in this area (Bui, 2017) have shown that the importance of the Big Five personality traits, as well as the size of their correlations with job satisfaction, vary depending on sample characteristics, such as worker gender and age. In addition, the potential role of some of the Big Five personality traits (extraversion, agreeableness, and openness to experience) may also depend on the characteristics of the work environment (Bui, 2017). The described findings on the relationship between personality and job satisfaction in the general workforce, as well as the lack of similar studies in seafarers, indicate that it is theoretically and practically important to investigate the relationship between basic personality traits and job satisfaction in the maritime work environment.

The theoretical mechanisms of the relationships between each of the Big Five personality traits and job satisfaction are presented in the separate sections below. It should be noted, however, that the general theoretical explanation for the assumption that the Big Five personality traits are a dispositional source of seafarers' job satisfaction stems from the conceptualization of the basic personality traits as relatively stable characteristics that reflect cognition, emotions, and behavior patterns (Goldberg, 1993). Therefore, according to dispositional approach to job satisfaction (Judge et al., 2002), and transactional approach to occupational stress in seafaring (Slišković, 2017), there are three processes through which personality can influence job satisfaction:

• Cognitive - personality traits play a role in interpreting job characteristics, which may influence job satisfaction;

• Affective - personality traits may influence job satisfaction through their effect on mood;

• Behavioral - personality traits influence work behaviors (e.g., work engagement, job performance), leading to satisfactory work outcomes, including job satisfaction.

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1.3.1. Extraversion

Extraverts tend to experience positive emotions (Goldberg, 1993; McCrae and Costa, 1987), and this positive effect likely generalizes to job satisfaction (Judge et al., 2002). In addition, extraverts' tendency to socialize leads to more positive interpersonal relationships in the workplace, which plays a protective role in coping with job stress (Sulsky & Smith, 2005). Finally, extraverts are more likely to take on leadership roles in the workplace, which may further contribute to their job satisfaction (Soto, 2018).

1.3.2. Agreeableness

Agreeableness is widely recognized as a significant predictor of social outcomes and better performance in collaborative work environments (Soto et al., 2016; Strickhouser et al., 2017; Sulsky and Smith, 2005). The higher life and job satisfaction of individuals with high levels of agreeableness can be explained by their greater motivation to achieve good interpersonal relationships (Goldberg, 1993; McCrae and Costa, 1987).

1.3.3. Conscientiousness

Conscientiousness describes a person's general tendencies toward work and task performance and is generally associated with higher work productivity and the use of problem-focused coping in stressful work situations (Sulsky and Smith, 2005). An individual with higher levels of conscientiousness is generally motivated to perform work tasks better, resulting in higher work engagement and job satisfaction. Therefore, a greater likelihood of receiving formal and informal rewards at work (Judge et al., 2002) has been proposed as a mechanism explaining the relationship between conscientiousness and job satisfaction.

1.3.4. Emotional Stability

Emotional stability is positively related to overall well-being and mental health (Soto, 2018). According to the results of meta-analysis (Judge et al., 2002), emotional stability/neuroticism is the strongest predictor of job satisfaction. Emotionally stable individuals remain calm and optimistic in difficult situations and can regulate their emotions more easily. On the other hand, highly neurotic individuals tend to interpret work situations as more stressful, react more strongly to workplace stressors, and use less adaptive coping strategies (Sulsky and Smith, 2005).

1.3.5. Intellect/Imagination (Openness to Experience)

The main characteristics of intellect/imagination may predispose individuals to either positive or negative emotions, why its relationship with well-being is unclear (Judge et al., 2002). Although openness to experience has not been shown to predict job satisfaction in previous studies (Judge et al., 2002) or even predict it in a negative direction in younger workers (Bui, 2017), it can still be hypothesized that this trait may be a dispositional source of job satisfaction in some work contexts. Since individuals with higher levels of intellect/imagination like to learn new things and prefer novelty and variety (Goldberg, 1993; McCrae and Costa, 1987), they should feel comfortable in novel and challenging situations in a demanding work context.

Therefore, this trait can be viewed as a possible antecedent of job performance and career advancement, which is a behavioral mechanism that contributes to job satisfaction.

1.4. Aim and Hypothesis

The main aim of this quantitative study was to examine the relationship between the Big Five personality traits (extraversion, agreeableness, conscientiousness, emotional stability, and intellect/imagination) and two conceptually distinct aspects of job satisfaction: general job satisfaction and satisfaction with specific aspects of work in maritime. General job satisfaction, which has been used in a variety of occupational settings, is defined as overall positive effect that results from evaluating the work experience (Judge and Klinger, 2008). The specific measure of seafarers' job satisfaction refers to overall satisfaction with the current job and captures specific working conditions in the maritime industry (Slišković, 2022).

Based on the dispositional approach to job satisfaction (Judge et al., 2002), and the transactional approach to occupational stress in seafaring (Slišković, 2017), positive correlations of the positive poles of each of the Big Five personality traits with both measures of job satisfaction were hypothesized (H1-H5).

H1: Seafarers with higher levels of extraversion will report higher levels of general and specific maritime job satisfaction.

H2: Seafarers with higher levels of agreeableness will report higher levels of general and specific maritime job satisfaction.

H3: Seafarers with higher levels of conscientiousness will report higher levels of general and specific maritime job satisfaction.

H4: Seafarers with higher levels of emotional stability will report higher levels of general and specific maritime job satisfaction.

H5: Seafarers with higher levels of intellect/imagination will report higher levels of general and specific maritime job satisfaction.

2. METHODS

2.1. Sample

Prior to conducting this correlational study, the minimum sample size was determined. Based on the analyses for the two-tailed test of correlation (Faul et al., 2007; Faul et al., 2009), with the following parameters: p(alpha)=0.05, power=0.80, r(H0)=0.00, r(H1)=0.20, the minimum sample size was set at N=193.

A convenient sample of a total of 286 Croatian male seafarers aged 18 to 65 (M=37.39, SD=10.28) participated in the study. The average length of service of the studied sample in the maritime sector was 12.46 years (SD=9.94). The majority of the participants surveyed (88.8 %) were engaged in international shipping (the remaining 11.2 % of the participants were engaged in domestic shipping). The surveyed participants were mostly (81.1 %) employees of foreign shipping companies (18.9 % of the sample were employees of Croatian shipping companies).

Regarding the type of vessel, the majority of the sample seafarers (60.7 %) served on cargo vessels (e.g. oil and petroleum tankers, liquefied gas tankers, chemical tankers, container ships, general cargo vessels). About one-fifth of the sample (20.4 %) served on passenger ships, such as cruise ships, ferries, yachts, etc. Working on specialized vessels (e.g. tugs, dredgers, research vessels) was reported by 13.7 % of participants, while the rest of the participants (5.2 %) reported other types of work environments, such as oil rigs.

The sample of participants was heterogeneous in terms of shipboard professional positions although it mostly consisted of ranked positions. Specifically, the sample consisted of masters (12.2 %), chief engineers (6.6 %), deck officers (33.6 %), engineers (21.0 %), electricians (4.2 %), deck and engine cadets (10.8 %), deck ratings (4.9 %), engine ratings (2.2 %), catering personnel, and other positions (4.5 %).

2.2. Procedure

Before conducting the study, an approval was obtained from the Ethics Committee of the Department of Psychology, University of Zadar. In order to obtain the largest possible sample from the population of the Croatian seafarers, two forms of participation in the survey were used: the classic paper-pencil form and the online form of a questionnaire with the same content. The survey was conducted in the period from April to July 2019. About half of the participants (N=145, 50.7 %) completed the paper form of the questionnaire, while 141 participants (49.3 %) completed the online form of the questionnaire. No difference was found between the levels of used measures concerning the two forms of the questionnaire.

Paper questionnaires were completed in several Croatian maritime educational institutions whose heads had previously agreed to cooperate (Faculty of Maritime Studies in Split, Faculty of Maritime Studies in Rijeka, Maritime Department of the University of Zadar, Maritime Department of the University of Dubrovnik, Bakar Maritime School, Adria Libar d.o.o., Diverso Impex Maritime Training and Crew Centre, Advanced Maritime Venture Ltd). For this purpose, a total of 995 questionnaires were sent to these institutions. The number of questionnaires sent to a particular institution was determined based on the institution management's estimate of the approximate number of seafarers who will attend the teaching and/or training courses offered by the institution during the study period. The questionnaires were completed during and/or after classes with the assistance of an instructor whose role was to briefly introduce the survey and offer participation to the potential participants. Participation in the

survey was completely voluntary and anonymous (participants were not asked for their first and last names). Of the total number of paper questionnaires sent to these institutions, a total of 145 fully completed questionnaires were returned (14.6 %).

Recruitment of seafarers for online participation in the study was carried out with the help of the Croatian maritime educational institutions mentioned above and several Croatian seafarer employment agencies (mostly members of CROSMA), which promoted the study through their websites and/or social networks. The study was additionally advertised on other social networks that bring seafarers together (e.g. Pomorac.net, LinkedIn, Facebook groups), and a snowball system was used in recruitment (forwarding of the invitation to participate with a link to the questionnaire by the study participants to other potential participants). This form of research also involved only volunteers, and they answered the questions in the questionnaire in Google Docs format by accessing the link in the research invitation without providing their first and last names. All questions related to the scales presented in this paper were mandatory. Due to the sampling method, it is not possible to provide response data for online survey participants.

For both forms of participation in the study, potential participants were provided with the researcher's contact to allow them to ask questions, make comments, and/or ask for feedback on the research findings.

2.3. Instruments

The first part of the questionnaire comprised several questions on the basic socio-demographic and occupational characteristics. The main part of the questionnaire consisted of the IPIP Big-Five Personality Inventory (Mlačić and Goldberg, 2007), Job Satisfaction Scale (Judge and Klinger, 2008), and Seafarer's Job Satisfaction Scale (SJS; Slišković, 2022).

The IPIP Big Five factor markers (Mlačić and Goldberg, 2007) have 50 items and consist of five subscales measuring the Big Five personality traits: Extraversion, Agreeableness, Conscientiousness, Emotional Stability, and Intellect/Imagination. Each trait is represented by ten items, e.g.: I am the life of the party (extraversion); I sympathize with others' feelings (agreeableness); I get chores done right away (conscientiousness); I get irritated easily (emotional stability; the item is reverse scored); I am quick to understand things (intellect/imagination). The respondents' task is to rate themselves on each statement on a 5-point scale (from 1 = very inaccurate to 5 = very accurate). After applying a standardized scoring system for IPIP that includes reverse scoring of a portion of the items, the total score for each of the five subscales is formed by summing the scores of the items in that subscale. A higher score on the subscales reflects a higher level of self-rated personality dimensions. The Cronbach alpha coefficients obtained in this study are satisfactory (Table 1).

The Job Satisfaction Scale (Judge and Klinger, 2008) consists of five items to measure the overall job satisfaction. The participants' task was to rate their level of agreement with each of the five statements/items (example of the statement: I feel fairly well satisfied with my present job) on a 7-point scale (1 = strongly disagree; 7 = strongly agree). After reverse scoring, two opposing items (e.g. Each day of work seems like it will never end.), the score on the scale is formed as the sum of all the scores on the scale divided by the number of items. A higher score on the scale reflects a higher level of general job satisfaction. In the study conducted, the scale had a Cronbach's alpha of .80.

The Seafarer's Job Satisfaction Scale (SJS; Slišković, 2022) consists of 18 items and aims to capture certain aspects of seafarers' job satisfaction (e.g. Organization of work on board; Workload on board; Interpersonal relations on board; Fair treatment of employees by the company; Income; Opportunities for leisure time on board; Respect for the contracted periods on board/at home). The respondents' task was to rate their satisfaction with each aspect using a 7-point scale (from 1 = completely dissatisfied to 7 = completely satisfied), referring to their current or last employment contract. The results of a previous study (Slišković, 2022) indicated the one-factor structure of the scale (the proportion of variance explained was 48 %; the factor loadings of all items were satisfactory). Cronbach's alpha of this scale is .94.

3. RESULTS

Statistical analyses were performed using TIBCO Statistica software. Prior to the statistical analyses related to the main objectives of the study (correlation analyses between the Big Five traits and two satisfaction measures, and regression analyses with Big Five traits as predictors and two measures of job satisfaction as criterion variables), descriptive parameters of the used measures were calculated.

The descriptive parameters of the applied measures are presented in Table 1. The Kolmogorov-Smirnov tests (KS d-values in Table 1) showed that hypothesis of normal distribution is accepted for the five of seven variables used (the exceptions are: intellect/imagination and general job satisfaction). Visual inspections of the results obtained (histograms, Q-Q plots, boxplots) showed that all distributions are symmetrical and unimodal, i.e., close to normal distribution. Furthermore, as skewness and kurtosis values showed that distributions do not substantially depart from normality (Kline, 2005), all variables were considered appropriate for the use of further parametric statistical procedures.

Considering the theoretical ranges for the Big Five personality traits (from 10 to 50), the results (M, SD, range) show that participants' self-ratings on most traits are, on average, moderate or slightly higher than moderate. An exception is the

Table 1.
Descriptive parameters of used measures (N=286).

	Range	r_{it}	Cronbach α	M	SD	K-S d	Skewness	Kurtosis
Extraversion	18-48	.31	.78	33.39	5.60	0.07	0.11	0.05
Agreeableness	33-50	.29	.77	45.04	4.65	0.06	0.12	-0.19
Conscientiousness	19-50	.32	.80	38.63	5.56	0.07	-0.35	-0.11
Emotional Stability	14-49	.39	.86	36.53	6.58	0.06	-0.35	-0.01
Intellect/Imagination	23-50	.27	.75	35.50	5.09	0.10**	0.36	0.10
General job satisfaction	1-7	.44	.80	4.75	1.23	0.08*	-0.52	0.05
Seafarers' job satisfaction	1-7	.47	.94	4.86	1.16	0.07	-0.65	0.31

*p<.05; **p<.01

trait of agreeableness with a higher average value. As for the average values of the two measures of job satisfaction, both general and specific job satisfaction of seafarers can be described as slightly higher than average, considering the theoretical ranges (1-7).

Table 2.
Pearson coefficients of correlation among all measures used (N= 286).

	A	C	ES	I	JS-g	JS-s
Extraversion (E)	.36**	.26**	.36**	.40**	.23**	.16*
Agreeableness (A)	1	.37**	.26**	.39**	.10	.12*
Conscientiousness (C)		1	.49**	.35**	.26**	.18**
Emotional Stability (ES)			1	.22**	.39**	.21**
Intellect/Imagination (I)				1	.19**	.01
General job satisfaction (JS-g)					1	.50**
Seafarers' job satisfaction (JS-s)						1

*p<.05; **p<.01

The bivariate correlations between the Big Five traits and two measures of job satisfaction, as well as their inter-correlations, are presented in Table 2. Two measures of satisfaction are logically positively related, and the magnitude (r =.50) can be described as moderate. The fact that two measures of job satisfaction share 25 % of the variance demonstrates the importance of using an additional measure of seafarers' job satisfaction. The low to moderate positive correlations found between the five personality traits are also to be expected.

As for the correlations between the personality traits and job satisfaction measures, which are the focus of this paper, the results show that the five personality traits generally have higher correlation values with general job satisfaction than with the specific measure of maritime job satisfaction. Significant correlates of general job satisfaction include emotional stability, conscientiousness, extraversion, and intellect/imagination. On the other hand, the measure of satisfaction with seafaring correlates with emotional stability, conscientiousness, extraversion, and agreeableness.

Table 3.

. Results of ten simple linear regression analyses with Big Five traits as single predictors and general job satisfaction and seafarers' job satisfaction as criterion variables (N= 286).

	General job satisfaction	Seafarers' job satisfaction
Extraversion		
Standardized β	.23**	.15*
$F_{(1, 285)}$	15.62**	6.69*
Adjusted R^2	.05	.02
Agreeableness		
Standardized β	.09	.12*
$F_{(1, 285)}$	2.84	4.46*
Adjusted R^2	.00	.01
Conscientiousness		
Standardized β	.26**	.16**
$F_{(1, 285)}$	19.67**	7.58**
Adjusted R^2	.06	.02
Emotional Stability		
Standardized β	.39**	.21**
$F_{(1, 285)}$	51.90**	13.25**
Adjusted R^2	.15	.04
Intellect/Imagination		
Standardized β	.19**	.01
$F_{(1, 285)}$	10.22**	0.02
Adjusted R^2	.03	.00
*p<.05; **p<.01		

The results of simple linear regression analyses with the Big Five traits as single predictors and general job satisfaction and seafarers' job satisfaction as criterion variables (Table 3) indicate that emotional stability, conscientiousness, extraversion, and intellect/imagination are significant predictors of general job satisfaction. On the other hand, significant predictors of seafarers' job satisfaction are emotional stability, conscientiousness, extraversion, and agreeableness. However, comparisons of the explained variances of job satisfaction measures show that, among the five personality traits, emotional stability has the highest contribution (15 % for general job satisfaction, and 4 % for job satisfaction in seafaring).

4. DISCUSSION

This study was driven by the lack of studies focused on relations between the Big Five personality traits and job satisfaction in seafarers. The obtained results show that all five personality traits from the Big Five model are related to job satisfaction although a somewhat different pattern was found for two measures of job satisfaction which were used. The general measure of job satisfaction positively correlates with emotional stability (.39), conscientiousness (.26), extraversion (.23), and intellect/imagination/openness (.19). On the other hand, the measure of satisfaction with maritime work positively correlates

with emotional stability (.21), conscientiousness (.18), extraversion (.16), and agreeableness (.12). The range of correlations shows that, generally, personality traits more strongly correlate with the overall job satisfaction than with the satisfaction by maritime job characteristics. This difference can apparently be explained by differences in the content between the two job satisfaction scales. The general measure of job satisfaction reflects a general positive affect related to the evaluation of the experience at work, while the specific measure of job satisfaction in the maritime sector is related to the satisfaction with job characteristics at the current workplace (e.g. workload, working conditions, organizational justice, living conditions on board, etc.).

Regarding the general job satisfaction measure, the obtained results can be compared with the results of the meta-analysis on the working population (Judge et al., 2002), which revealed the following correlation coefficients with the general job satisfaction: -.29 for neuroticism, .26 for conscientiousness, .25 for extraversion, .17 for agreeableness and .02 for openness to experience. It can be concluded that the correlation patterns are very similar to those found in the literature, i.e., emotional stability, conscientiousness, and extraversion have the highest correlations with both measures of job satisfaction.

In short, the hypotheses regarding emotional stability (H4), conscientiousness (H3), and extraversion (H1) are confirmed for both measures of job satisfaction. The hypotheses related to agreeableness (H2) and intellect/imagination (H5) are partially confirmed, as the significance of the correlation was found for one of the two applied measures. The obtained results show that intellect/imagination correlates with the overall job satisfaction, which is in contrast with the study mentioned (Judge et al., 2002), but is consistent with our hypothesis (H5) that this trait is important for seafarers' confrontation with novel and challenging situations in the work context as a possible mechanism which relates to job satisfaction. A recent study (Niess and Zacher, 2015) has shown the importance of this trait as openness to experience predicts career advancement in managerial and professional positions, which in turn contributes to job satisfaction. Agreeableness, while not shown as a significant correlate of the general job satisfaction, contrary to results of meta-analysis (Judge et al., 2002), was shown as a significant correlate of the specific job satisfaction in seafaring. These results justify the need to study the relationships between personality and job satisfaction in specific occupational groups (Bui, 2017).

Furthermore, the results related to the presented regression models show that emotional stability, among the five personality traits, has the highest contribution in the explanation of job satisfaction measures, which also confirms the findings of previous studies that have shown that emotional stability/neuroticism is the most important personality trait in explaining job satisfaction (Cohrs et al., 2006). The relatively high contribution of emotional stability in explaining general job satisfaction in seafarers (15 %) can be clearly explained by the importance of this trait in coping with job demands and stress in the maritime sector. Previous studies have shown the role of neuroticism in the perception of stressful events, maladaptive ways of coping with stress, and dissatisfaction with social support (Soto et al., 2016; Strickhouser et al., 2017; Sulsky and Smith, 2005).

Although other personality traits significantly relate to job satisfaction, their contributions to the explanation of job satisfaction are minor, especially when it comes to the specific measure of job satisfaction in seafaring. Based on the results obtained, it can be suggested that situational factors in the maritime sector (e.g. job characteristics such as ship type, income, contracted hours of work and time off, objective level of workload and control at work, etc.) are likely to be more important factors in explaining seafarers' job satisfaction than individual factors such as personality. This is consistent with findings from the general labor force showing that situational factors have a greater impact on satisfaction than dispositional factors (Jex and Britt, 2008). According to the results of a recent relative meta-analysis (Steel et al., 2019), the Big Five personality traits have accounted for only 10 % of the variance in job satisfaction. However, the role of personality, as well as other individual characteristics that were not considered in this study (e.g. motivation for working in the maritime sector, position on board, styles of coping with occupational stress) should not be ignored as job satisfaction is a function of both situational conditions and personal characteristics (Cohrs et al., 2006).

When considering the results obtained, the limitations of the study should be taken into account. The main limitation is the fact that the sample is not representative of the population of seafarers. This pilot study was performed on a conventional sample of Croatian male seafarers mainly working for foreign shipping companies and further studies featuring more representative and heterogeneous samples are needed. In addition, all measurements are based on self-report, where participants may consciously or unconsciously bias the responses by trying to portray themselves or the work environment in a different light. Finally, since all data were collected at a single point in time, this study cannot answer the question of whether personality traits predict long-term job satisfaction. In other words, this study shows only the relations between personality traits and job satisfaction in seafarers; therefore the causal relations between the predictors used and criterion variables cannot be established. Although it is logical to assume that personality traits as more stable characteristics influence job satisfaction, the opposite direction of influence may also be true; i.e., the level of job satisfaction influencing the self-assessment of specific personality traits. Therefore, longitudinally designed studies in this area are strongly recommended.

5. CONCLUSION

The results obtained by this pilot study showed the expected positive relationships between the Big Five personality traits and job satisfaction. Among the five personality traits, emotional stability has the highest contribution to the explanation of job satisfaction in seafarers. As the study was performed on a conventional sample of Croatian seafarers, the need for further testing of these findings featuring larger, more representative and international samples is evident. Furthermore, longitudinal studies that would test the predictive value of the Big Five personality traits for further job satisfaction in seafarers are also needed.

Despite the limitations noted, the theoretical contribution of this study is very clear as it is one of the first to establish the relationships between the Big Five personality traits and seafarers' job satisfaction. The results obtained by this pilot study indicate that personality traits should not be ignored as they make a significant contribution to explaining seafarers' job satisfaction. Given that emotional stability has been found to be the most important correlate of job satisfaction, which may also be important to work efficiency as well as health and well-being, the main implications would be secondary-level interventions, i.e., promoting emotional stability in seafarers through training in adaptive coping with stressors in the maritime sector. As the results show that personality traits explain only a relatively small proportion of the variance in job satisfaction, managers in this sector should be aware that situational factors are likely to have a greater role in explaining job satisfaction. Therefore, the obtained results do not diminish the need for primary-level intervention strategies in stress management (Slišković, 2017), i.e., preventing and minimizing stressors in seafaring through efforts to improve working and living conditions on board.

ACKNOWLEDGMENTS

CONFLICT OF INTEREST

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