INTRODUCTION

Working at sea comes with some specific hardships, such as periodic separations from family and friends and a close coexistence with coworkers on a limited space around the clock. On passenger vessels, about 70 percent of the staff on board works in the service department. The frequent need to interact with customers is a well-known stressor in that it adds additional pressure to the work situation. This type of work is commonly referred to as ‘emotional labor’ (Hochschild, 1983), implying that the crew is not only involved in the daily ‘role play’ towards their coworkers, but also towards passengers on the vessels (Tracy, 2000).

Previous research has shown that the staff in the service department on passenger ships expresses a higher degree of exertion compared to the staff in other departments on board (Österman & Hult, 2016, Praetorius et al., 2018, Österman et al., 2020). Service staff also display higher levels of long sick leaves and work-related diagnosis (Hult et al., 2017, Österman et al., 2020). Given these circumstances and the potential risk of high turnover of staff, it is important to examine the level to which the crews on passenger vessels are satisfied with their work and committed to their workplace.

The present study focuses on the pattern of organizational commitment and job satisfaction among seafarers working on passenger vessels, compared to those working on board other types of ships. The dependent variable in the study is organizational commitment. Work position, age and job satisfaction are used as independent variables. The question posed in this study is whether the pattern of organizational commitment and job satisfaction differ depending on the proximity to passengers. The material is based on a survey sent to a random sample of seafarers in the Swedish Transport Agency’s register of seafarers. It has been analyzed with descriptive statistics and multivariate regressions comparing the two categories of vessels. The results show that organizational commitment is higher on passenger vessels, while the effect of job satisfaction on organizational commitment is slightly higher for ships that do not carry passengers. For managers in the service department, the level of commitment is to a higher extent dependent on job satisfaction. Development and communication of career options and opportunities for the service crew is suggested as a way to enhance organizational commitment and job satisfaction among this group.
The dependent variable in the study is organizational commitment, which refers to an employee’s degree of commitment and loyalty towards the employing company (Porter et al., 1974; Steers, 1977; Mottaz, 1987).

Job satisfaction is viewed, in line with earlier research (e.g., Mottaz 1987; Hult, 2005), as an independent variable and as an emotional response to a work situation (Steers, 1984). Organizational commitment and job satisfaction has been studied in numerous work settings within many different domains (Porter et al., 1974; Kalleberg, 1977, Kalleberg & Reve, 1992; Kallberg & Mastekaasa, 1993; Mottaz, 1987; Mathieu & Zajac, 1990).

Previous research in the maritime domain has either focused on organizational commitment in different departments on merchant ships (Hult & Snåbärg, 2014), or on job satisfaction in the cruise sector (Larsen et al., 2012; Testa, 2001; Testa et al., 2003; Testa & Mueller, 2009). There is to this date no systematic research on organizational commitment and job satisfaction focusing on passenger vessels in a comparison to other types of vessels. In fact, more research has focused on the situation for the passengers on passenger vessels than on the people who work in this environment (Dragin et al., 2014).

1.1 Aim and research question

The aim of this study is to compare the pattern of organizational commitment and job satisfaction experienced by crew working on passenger vessels, compared to crew working on other types of ships. The article will thus answer the following research question: does the pattern of organizational commitment and job satisfaction differ depending on the proximity to passengers?

2 THEORETICAL CONSIDERATIONS AND PREVIOUS RESEARCH

This section discusses organizational commitment and job satisfaction. First, as theoretical concepts, and second, how these concepts have been applied to research in the hospitality sector and the shipping domain.

2.1 Organizational commitment and job satisfaction

Organizational commitment has been studied in different settings over the years (Meyer & Allen, 2001, Mottaz, 1987; 1988; Porter et al., 1974; Steers, 1977, 1984). Briefly, displaying a strong organizational commitment would mean that an employee holds a positive attitude towards the organization where they are working (Mottaz, 1987; 1988). Porter et al. (1974) defines organizational commitment as the extent to which an employee accepts and believes in the organization’s goals, and to what extent they are willing to make efforts to pursue those goals (Porter et al, 1974: 604). More clearly speaking, organizational commitment means that the employee is willing to ‘go the extra mile’ for the company. Steers (1977) has defined the concept as “the relative strength of and individual’s identification with and involvement in a particular organization” (Steers, 1977: 46).

Organizational commitment relates closely to job satisfaction (Mottaz, 1987; Matieu & Zajac, 1990; Hult, 2005). The latter can be defined as whether the employee holds an emotional positive or negative response to work situations (Steers, 1984: 428 - 444). Organizational commitment is usually more stable over time and correlates with the degree of perceived intrinsic rewards, such as autonomy in work, and support from co-workers and managers. Job satisfaction, on the other hand, depends to a greater degree on ‘hard factors’, or extrinsic benefits, such as work environment, work tasks and wage level (Mottaz, 1987). It has been suggested that compared to organizational commitment, job satisfaction may oscillate quite rapidly depending on changes in the work environment (Mowday et al., 1979). In addition, it is generally viewed that job satisfaction causes organizational commitment (Mathieu & Zajac, 1990: 184). However, although job satisfaction is commonly viewed as a strong predictor of organizational commitment it is only one of many possible factors (Steers, 1984: 442; Hult, 2005).

2.2 Previous research on job satisfaction and organizational commitment in the hospitality sector

Job satisfaction has been widely studied in the hospitality sector, where a substantial part has dealt with the positive correlation between work satisfaction and customer satisfaction (Gazolli et al., 2010, Pantouvakis & Bouranta, 2013; Ugboro & Obeng, 2000; Wiley, 1991). Studies on job satisfaction within the hospitality sector has also shown the presence of role conflicts when working in a service occupation. Hospitality work can have a negative impact on job satisfaction, particularly for women workers (Kim et al., 2009).

On the other hand, research on organizational commitment in this sector is sparse. Kim et al. (2011) show that workplace empowerment and organizational trustworthiness are two variables that have an impact on organizational commitment among hotel restaurant workers (Kim et al., 2011). Another study among airline cabin crew focuses on what effect coworker support has on commitment with mixed results due to differences in company nationality (Limplanitgul et al., 2014).

Within the cruise industry, Larsen et al. (2012) have, through a factor analysis, identified three factors that have a positive impact on both job satisfaction and organizational commitment: respect and fair treatment from supervisors; the social atmosphere including guests and co-workers; and the standard of food and living quarters. In addition, organizational commitment was predicted by two other factors, the possibility to see the world, and flexibility from supervisors (Larsen et al., 2012: 595).

2.3 The study’s rationale

The present study aims to compare the pattern of organizational commitment and job satisfaction
depending on the type of ship. For this purpose, two categories of ships are used: (i) “passenger vessels” and (ii) “other types of vessels” (as merged category). The rationale for this is that previous research has shown that the service department is notable in some negative aspects regarding the work situation especially on passenger ships (Österman & Hult, 2016; Hult et al., 2017). For example, Hult & Österman (2016) present that female seafarers express less motivation to the seafaring occupation if they work in the service department, and that both men and women express more stress and exhaustion if they work on board passenger ships (Österman & Hult, 2016; Hult et al., 2017). Another study has shown some results with possible implications towards job satisfaction by using a qualitative metaphorical analysis. The findings showed, for instance, that the most common metaphor for waiters in the service department was to be either a “slave” or a “robot” (Denett et al., 2013: 489).

Results like these are alarming since other studies in the field indicate that the level of job satisfaction among service workers reflects on the customers’ perception of the service quality (Larsen et al., 2012; Testa, 2001; Testa et al., 2003; Testa & Mueller, 2009). It has also been demonstrated that both job satisfaction and organizational commitment have a positive impact on customer satisfaction (Larsen et al., 2012).

To conclude, most of the research within the hospitality sector has focused on job satisfaction, and to a lesser extent on organizational commitment. Perceived job satisfaction is of special importance in the service sector because it influences the costumers’ experience. Expressed organizational commitment is important because it indicates an employee connection to the organizational goals and efforts.

This study addresses this research gap with a comparative research on the pattern of organizational commitment and job satisfaction.

3 METHOD

3.1 Collection of data

Data was collected using a survey sent to crew in the deck, engineering and service department listed in the Swedish Register of Seafarers. The sample framework was restricted to those of age 18 or older who had worked onboard at least once during the previous 12 months. Individuals registered on barges without propulsion, road ferries, fishing vessels and unregistered vessels were excluded.

Because of inadequate register update of addresses, a postal survey using unrestricted random sample selection proved impossible. Instead, the collection of data was conducted via an online survey that was sent by e-mail to 5 652 seafarers. The number of respondents in the sample were limited to those seafarers in the register with existing e-mail addresses. The data collection took place in 2015 between June and December. The survey resulted in (N) 1 980replying respondents giving a response rate of 35%. This is lower than preferred but somewhat expected considering the general trend of survey fatigue (e.g. Hohwü et al., 2013). However, the N is sufficiently large and equals 14% of the total amount of registered seafarers in in 2015 (Hult et al., 2017).

The response rate analysis reveals that the age-structure corresponds well in comparison to the sample framework. There is a minor overrepresentation of men (79.5% respondents against 71.5% men in the sample framework).

Further, there is an overrepresentation of respondents working in the deck and engine departments. Consequently, the service department is underrepresented in the sample. This might be related to the underrepresentation of women and the underrepresentation of service personnel, as this profession on board ships has a higher percentage of women workers (Hult et al., 2017).

The reasons for these deviations are difficult to determine. However, one reason might be that seafaring is a profession dominated by men, and women might naturally feel reluctant to answer surveys on issues related to the seafaring occupation.

The questionnaire was partly based on items from a pre-existing questionnaire in the International Social Survey Programme (ISSP) - Work Orientations III study (2005). The items were translated and adjusted to fit the context of Swedish seafarers. The development of the questionnaire involved an iterative process of tests and retests to gain sufficient validity.

3.2 Processing of data and analysis

Throughout the analysis of this study, the Statistical Package Social Science (SPSS) was used. An index based on the dependent variable of organizational commitment was created by using Principal Component Analysis (PCA) and internal reliability control of Cronbach’s Alpha, see Table 1 and 2.

The dependent variable is organizational commitment phrased in the questionnaire as statements with answer alternatives on a five-point Likert Scale, i.e. strongly agree to strongly disagree.

Table 1. Indicators of organizational commitment for seafarers

| Statement                                                                 | Alpha  |
|--------------------------------------------------------------------------|--------|
| I am willing to work harder than I have to in order to help               |        |
| the shipping company I work for succeed                                 |        |
| I am proud to be working for my shipping company                         |        |
| I would turn down another job that offered quite a bit more pay           |        |

The lowest indication of each indicator of the index was recorded with 0 and highest indication was given the value of 4. The three indicators where summarized into the index of organizational commitment. The index was then coded to vary between 0 and 100.
The dependent variable organizational commitment is firstly analyzed with descriptive statistics and secondly with a comparative multivariate regression analysis on passenger vessels and other types of vessels.

### 4.1 Organizational commitment with regards to age and department

Table 2 shows Mean value, Standard deviation and Cronbach’s Alpha for the dependent variable, indicating a stable index where the respondents’ centers around a quite medium to high value of environmental commitment.

| Mean (0-100) | 56.44 |
|-------------|-------|
| Standard deviation | 21.21 |
| Cronbach’s Alpha | 0.76 |
| N | 1824 |

In Table 3, the levels of commitment are displayed by age groups. The group with the highest score is 55 and older. The level of commitment is lowest in the age group between 31 and 42 years old.

| Age 30 or younger | Age 31-42 | Age 43-54 | Age 55 and older |
|-------------------|-----------|-----------|------------------|
| Mean value        | 55.5      | 52.68     | 57.25            | 61.10            |
| Standard deviation| 21.14     | 22.95     | 19.83            | 20.13            |
| Number of respondents | 536 | 436 | 478 | 365 |

In Table 4, the mean values of organizational commitment and job satisfaction are presented for onboard departments. In all departments, work satisfaction is clearly higher than organizational commitment.

| Department | Deck | Engine | Service |
|------------|------|--------|---------|
| Org Job Com Sat | 67.4* | 6.75* | 8.08** |
| Mean value | 57.38 75.19 | 54.43 74.56 | 56.78 73.28 |
| Standard deviation | 20.78 15.57 | 21.33 15.38 | 21.92 16.60 |
| Number of respondents | 844 900 | 455 490 | 473 509 |

### 4.2 Organizational commitment on passenger vessels versus other types of vessels

In table 5 and table 6, the pattern of organizational commitment and job satisfaction is analyzed by using an OLS (ordinary least square) method. The dependent variable is organizational commitment.

The independent variables are (i) onboard position, (ii) age and (iii) job satisfaction, which are introduced in three steps, first for passenger vessels in table 5 and later for other types of vessels in table 6.

In step I officers in the engine, deck and service departments, as well as the ratings in the service and deck departments, are compared to ratings in the engine department, which is held constant in the regression. The main finding here is that onboard position only display significant result on passenger vessels (Table 5), where service officers score highest, followed by senior deck officers and service ratings.

In step 2, age is introduced to the model. The effect of age on organizational commitment is somewhat higher on other types of vessels (Table 5 and 6). For the onboard positions, the effects are now only statistically significant for the service department on passenger vessels. This indicates that senior deck officers’ commitment to a substantial part can be explained by seniority in age.

In step 3, perceived job satisfaction is introduced. When comparing vessel categories, the effect of job satisfaction is slightly lower on passenger vessels. The positive effect for senior deck officers on passenger ships regains some strength and significance as the effect of age decrease when perceived job satisfaction is controlled for. This increase may solely depend on that, the reference group (engineering ratings) plunges when job satisfaction is controlled for. The effect for service ratings on passenger vessels becomes higher. On the other hand, the effect for service officers on passenger vessels decreases when job satisfaction is introduced. This pattern indicates that the level of organizational commitment is less dependent on job satisfaction for service ratings. It also indicates that the commitment for service officers and engineering ratings is more dependent on job satisfaction. We can also see that the effect of age is somewhat decreasing when job satisfaction is controlled for.

In summary, the results show that significant effects on organizational commitment related to onboard position only appear on passenger ships. On this type of vessels, the level of commitment for service officers reaches over 62 on the scale 0-100, while no position on other types of vessels significantly reach over the constant (56,33).
Table 6. Organizational commitment for other types of vessels. Multiple analysis, OLS

|                        | I     | II    | III   |
|------------------------|-------|-------|-------|
| Senior engineering officers | 2.62  | -0.31 | -0.86 |
| Junior engineering officers | 0.87  | 0.54  | -0.35 |
| Senior deck officers    | 4.86  | 2.36  | 1.92  |
| Junior deck officers    | -0.14 | -0.66 | -0.97 |
| Deck ratings            | 3.69  | 3.10  | 2.70  |
| Service officers        | 0.61  | -2.11 | -0.93 |
| Service ratings         | 0.67  | -1.82 | -2.35 |
| Age                    | -     | 0.18**| 0.17***|
| Perceived job satisfaction | -    | -     | 23.32***|
| Constant               | 56.33***| 50.44***| 30.12***|
| Explained variance (%)  | 0.9   | 2.1   | 14.00 |
| Number of respondents   | 853   | 848   | 847   |

Significance levels: ** = 0.001 level. * = 0.01 level. * = 0.05 level.

5 CONCLUDING REMARKS

The question addressed in this study was whether the pattern of organizational commitment and job satisfaction differs if the ship carries passengers or not. As the results show, the proximity to passengers makes a difference. On passenger vessels, organizational commitment is significantly higher for service ratings and senior deck officers, and especially so for service officers. This may result from a sense of extra responsibility towards the passengers on board. For the service crew, especially so in combination with the awareness of representing the core activity on a passenger ship, which is to cater for the passengers’ needs. On other types of ships, there are no significant differences at all in commitment between job positions. On the other hand, the effect of job satisfaction on organizational commitment is slightly higher on ships that do not carry passengers.

Overall, the results show that within the service department, the onboard position has a clear positive effect on organizational commitment. Age, on the other hand, has some impact on service officers, but none for the service ratings, which may be due to that the officers overall are older than the ratings.

It has also been shown that, on passenger ships, the level of commitment for officers is to some degree dependent on job satisfaction, while less so for service ratings. This difference may indicate that service officers’ commitment is driven by the combination of having responsibility for the core activity onboard passenger ships and an independent satisfaction of being officers. Service ratings’ commitment, on the other hand, is driven by having responsibility for the core activity alone.

Previous research on the cruise industry (Larsen et al., 2012) suggest that the proximity to passengers have a positive impact on both job satisfaction and organizational commitment. For organizational commitment, our results support this notion. However, in the present study, organizational commitment is generally high for passenger vessels, while the effect of perceived job satisfaction on organizational commitment is higher on ships that do not carry passengers.

For service officers, age explains some of the effect on organizational commitment. However, this is not the case for the service ratings. If we assume that service officers have been longer in the service profession, this suggests that the determination to resign from work decreases when career opportunities for future management positions on board are available.

Given the high rates of turnover in the hospitality sector (Hinkin & Tracey, 2000; Kang et al., 2015; Tews et al., 2013; Tews et al., 2014; Tracey & Hinkin, 2008), the high levels of exertion (Osterman & Hult, 2016) and reported ill-health in the service department (Hult et al., 2017), this study has revised surprisingly high levels of organizational commitment among the service departments of passenger ships. However, we have noticed that the service officers are more committed to their work organizations than are the service ratings. This may argue for the benefit of promoting career options for the ratings in the service department. Such a possibility could counteract a feeling of having a ‘dead end job’, which in turn could mitigate turnover among the service ratings.

This study provides an overview of how organizational commitment differs depending on ship and job position. Future research needs to delve deeper into the explanatory variables that may strengthen organizational commitment. A possibility would be to test the effects of different internal rewards, such as support from management and/or coworkers, and its impact on organizational commitment.

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