

Swedish Seafarers' Commitment to Work in Times of Flagging out

C. Hult & J. Snöberg

Kalmar Maritime Academy, Linnaeus University, Sweden

ABSTRACT: This study takes its departure in the difficulties to recruit and retain qualified senior seafarers in the Swedish shipping sector. The study focus is on seafarers' motivation at work for the specific shipping company (organizational commitment), and seafarers' motivation towards their occupation (occupational commitment), in times of flagging out. It was hypothesized that the youngest seafarers and the oldest may be most sensitive to foreign registration of ships. Statistical analyses were employed, using a survey material of 1,309 Swedish seafarers randomly collected in 2010 from a national register of seafarers. The results of the analyses show that flagging-out imposes a significant decline in organizational commitment for all seafarers. This decline is related to the perception of the social composition of crew. In addition, the oldest seafarers (age 55+) demonstrate diminished occupational commitment under a foreign flag. This decline is related to the degree of satisfaction with the social security structure. Occupational commitment among the youngest seafarers (age 19-30) is not affected by the nationality of flag. However, this type of commitment is decreasing by the time served on the same ship. This effect is partly related to a decline in satisfaction with the work content. In the concluding discussion, the findings are discussed in more details and recommendations are put forward.

1 INTRODUCTION

1.1 *The objective*

This study aims to investigate Swedish seafarer's attitudes to their work and occupation. The study is undertaken in response to the needs of the shipping industry to recruit and to improve retention of qualified onboard crew. The two main areas of enquiry are seafarers' motivation at work for the specific shipping company (organizational commitment), and seafarers' motivation for working in their particular occupation (occupational commitment). The study is based on a sample of 1,309 seafarers taken year 2010 from the Swedish Register of Seafarers.

2 BACKGROUND

2.1 *In times of flagging out*

In 2010, the year of the seafarer, the shipping industry had been hit hard by the ongoing financial crisis. In Sweden, worries were exacerbated by a wave of foreign registration of ships. Compared to 2009, the Swedish-registered merchant navy had declined by 12,5 percent, calculated as ships of 300 gross tonnes and above (Lighthouse, 2010). Most likely the situation was felt most keenly by Swedish ratings because the opportunities to compete with other nationalities were further constrained by the wave of flagging out. It was argued that among Swedish seafarers only senior officers could feel relatively

secure in light of current developments. (Swedish Employment Service Maritime 2010: 21). However, the situation has most likely had a dampening effect on the enthusiasm of all Swedish seafarers regardless of rank.

2.2 Difficulties with recruitment and retention of seafarers

One lingering problem for the Swedish shipping sector has to do with the recruiting and retaining of qualified and experienced onboard personnel (Swedish Maritime Administration, 2010: 4). A common estimate has been that the average time a Swedish ship's officer remains in the occupation is only eight years (Swedish Employment Service Maritime, 2010: 10; Swedish Maritime Administration, 2010: 17).

Another problem is that the sector suffers with a large proportion of employees who are approaching the end of their active careers in the Swedish shipping sector. The average age of onboard personnel rose by 11 percent between 2006 and 2009 (Swedish Employment Service Maritime, 2010: 8).

Thus, we find two rather disparate trends in the Swedish shipping sector; one that is gradually making the labour market for Swedish seafarers smaller, and one that makes it more difficult for ship-owners to recruit and retain educated seafarers. The question we need to ask is how the seafarers' commitment to their work and occupation is affected in this development?

3 RESEARCH AND THEORETICAL CONSIDERATIONS

3.1 Research on attitudes to work

Quantitative studies on seafarers' attitudes to work are sparsely occurring. However, taking a broad look around we find a number of studies from different parts of the world (e.g. Guo et al., 2005; Turker & Er, 2007; Guo et al., 2010; Sencila et al., 2010; Pan et al., 2011). We also find that there has been some particular interest in the cruise sector, depending on the belief that happy service staff tend to produce happy customers (e.g. Larsen et al., 2012; Testa, 2001; Testa et al., 2003; Testa & Mueller, 2009).

In Sweden, studies on seafarers and their occupation have been mainly based on interviews and observations, with focus on subjects like seafaring life, culture, stress, fatigue, and safety. There are, however, three Swedish studies with quantitative approaches. Two Swedish studies are focusing on job satisfaction onboard merchant ships (Werthén, 1976; Olofsson, 1995). Only one study are focusing on commitment to work and occupation (Hult, 2012).

Of course, job satisfaction and commitment to work are related phenomena, but the terms are far from synonymous. By definition, commitment to work encompasses a certain measure of motivation and dedication from the individual, which is not necessarily the case with job satisfaction (c.f. Steers & Porter, 1987: 29; Steers, 1984: 132). Job satisfaction is customarily regarded as an emotional response to a

work situation (Steers, 1984: 428-444). Accordingly, job satisfaction may be more correctly regarded as one underlying factor for the development of work-related commitments (Steers, 1984: 442; Hult, 2005).

3.2 Organizational commitment

Organizational commitment has to do with loyalty and dedication in the specific job and to the specific work organization. Research has indicated an important relationship between this type of commitment and employee turnover (e.g. Steers, 1977). Organizational commitment is driven mainly by what people feel they get out of the job and how far this aligns with individual preferences. If work-related preferences and perceived conditions agree, the individual is expected to express a high level of dedication and loyalty (Hult, 2005).

Earlier research has shown that perceived non-financial gains have a stronger positive impact on loyalty and dedication at work than perceived financial gains (Hult, 2005). But rather than differentiating between financial and non-financial factors, the distinction in this research tradition is between *internal* and *external* factors. With internal factors we refer to rewards one receives *within* the work – such as a sense of well-being and pride from the feeling that one is doing good and important work. With external factors we refer to rewards one receives *for* work performed – such as pay and other benefits (Hackman and Lawler, 1971; Lincoln & Kalleberg, 1990: 98). This does not mean that external factors are less important, but their positive effects on commitment tend to be relatively short-lived (Herzberg et al., 1993: 70-83).

3.3 Occupational commitment

If organizational commitment has to do with the specifics of working life, occupational commitment has to do with the generalities for an occupation. Like in organizational commitment there is a more qualitative and emotional driver, which is the aspect that has been given the most attention in earlier research (c.f. Lee et al., 2000). It is, for example, primarily within an occupation that people can develop a sense of status and identity. Earlier research shows that the duration of education, age, and years invested in the occupation have positive effect on occupational commitment (Nogueras, 2006).

It has been reported that perceptions of social quality and of leadership quality in the work organization influence occupational commitment (Van der Heijden et al., 2009). A positive correlation between occupational commitment and perceived autonomy at work has also been reported (Giffords, 2009). There are also reports of a strong correlation between commitment to the occupation and commitment to the organization (Lee et al., 2000). In other words, if people have a long, thorough professional education, are motivated in their day-to-day work and happy with their specific jobs, they can be expected to demonstrate a strong emotional relationship to their occupations.

However, occupational commitment differs from organizational commitment in that satisfaction with a specific workplace may be low even while identification with the occupation is high. It is more difficult to imagine that the opposite situation would be particularly common, although it is entirely possible that higher satisfaction with the occupation also strengthens commitment to the specific workplace. In most cases it is probably also much easier to switch workplace and remain in the same occupation than the reverse, which might contribute to a tendency to direct dissatisfaction towards the particular job rather than the occupation. Research has in any case shown that strong occupational commitment restrains decisions to leave a job (Nogueras, 2006).

3.4 *Expectations of the study*

In this study we may expect to find differences in commitment depending on age. It has been shown that older people generally express greater loyalty towards their work than do younger people (Mathieu & Zajac, 1990; Guo et al., 2005; Hult, 2012). Here we need to consider that age is intertwined with the time accumulated in certain work situations which theoretically can have both positive and negative effects on attitudes depending on individual experiences in the job.

With respect to the Swedish situation of foreign registration of ships, it has been argued that seafarers are “vulnerable to exploitation and abuse” as they are employees in what is called “the world’s first genuinely global industry” (ILO, 2012). Seafarers have been advised to always be aware of what flag the ship is flying and “where necessary, ask for assistance to find out what are the laws of that flag State” (ITF, 2012). It has been indicated that flagging-out can pose significant damage to seafarers’ commitment to their work (Hult 2012), but the mechanisms at work here has not yet been studied in detail.

Hypothetically, the youngest seafarers and the oldest may be most sensitive to foreign registration. When it comes to the youngest age group, it has been questioned whether we could expect young people to put their faith in a sector that continuously seeking the most convenient flag (SBF, 2010). When it comes to the oldest age group, it has been pointed out that social security and especially the forthcoming retirement income can become a disappointment under foreign flag (Sjömannen, 2011: 12-17).

Thus, we may expect that the flag state have the greatest effect on organizational and occupational commitment in the youngest and oldest age groups. Based on earlier research we may expect that effects of flag state are independent of other indicators of nationality, such as working in a nationally mixed crew (Guo et al., 2005).

4 METHOD

4.1 *Collection of data*

This study is based on a sample taken from the Swedish Register of Seafarers using unrestricted random selection of deck and engineering personnel for the men, and of catering personnel for both men and women. Because women still are strongly underrepresented among deck and engineering personnel, all women from these departments were drawn into the framework.

The data were collected via postal surveys during the period of 8 March to 8 September 2010. The questionnaire was based on pre-existing questionnaires from the International Social Survey Programme, Work Orientations III study (ISSP, 2005). Additional items were all developed with theoretical connections to earlier research on work related commitment. When appropriate, the items were adapted to the specifics of the seafaring occupation.

The final material consists of 1,309 respondents with an answering rate of 54%. After control of different aspects, such as gender, age, onboard position, trade area, and type of ship, the material was found representative for Swedish seafarers on Swedish-controlled ships.

Although sufficient demographic and work-related representativity, it is (as always) difficult to estimate the likeliness of non-response effects on the *attitudinal* representativity. An educated guess would be that people who take great interest in their work may be more likely than others to complete this type of questionnaire and therefore be over-represented in the sample. If so, the attitudinal patterns found in the analysis would still be correct, but the levels of commitment would be slightly overestimated (i.e. Hult & Svallfors, 2002).

4.2 *Processing of data and analysis*

The Statistical Package Social Science (SPSS) were used throughout the analysis. The dependent and explanatory indices were constructed using Principal Component Analysis (PCA) and control for internal reliability. In order to control for the influence of different and competing variables, multiple regression analysis (OLS regression), allowing adjusted effects, were used in several steps of the analysis.

The dependent variables are all based on attitude questions expressed as statements on which respondents were asked to take a position by selecting a fixed option on a five-point Likert Scale, from *strongly agree* to *strongly disagree*. After mapping the pattern of latent factors underlying a number of different indicators, using PCA, the appropriate indicators for occupational and organizational commitment came out as shown in Table 1.

All indicators above were recoded so that 0 denotes the option that entails the lowest commitment and 4 the highest. The indicators were then summarized within two separate indices; one representing organizational commitment and one representing occupational commitment. To facilitate

interpretation of the results, each index is then divided by its maximum values and multiplied by 100. Each index is thus permitted to vary between 0 and 100.

Table 1. Dimensions of commitment

Occupational Commitment, indicators:

There are qualities to the seafaring occupation that I would miss in another occupation.
 The seafaring occupation is part of my identity.
 The seafaring occupation is not just a job, it is a lifestyle.
 I feel proud of my occupation as a seafarer.
 I would prefer to remain in the seafaring occupation even if I were offered a job with higher pay on land.

Organizational Commitment, indicators:

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 in order to stay with this shipping company.

Table 2 presents the mean value and standard deviation for each index. The high mean value and the low standard deviation for occupational commitment indicates that seafarers are quite united in their high commitment to, and identification with, the seafaring occupation. Cronbach's Alpha is a test of the internal correlation among the indicators in each index – the higher the value (between 0 and 1), the more reliable the index. Both indices turn out sufficiently stable.

Table 2: Work attitudes index – Swedish seafarers in 2010

	Occupational commitment	Organizational commitment
Mean value (0-100)	71.7	50.3
Standard deviation	16.78	20.81
Cronbach's Alpha	0.82	0.73

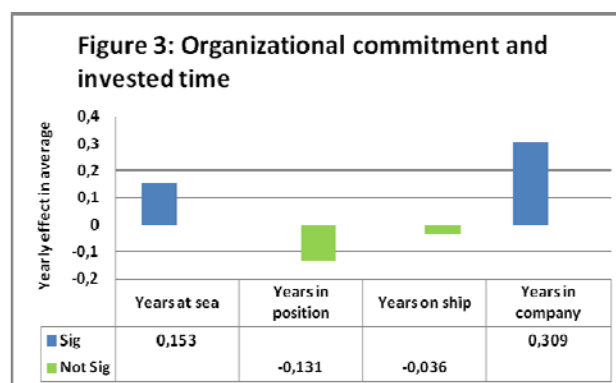
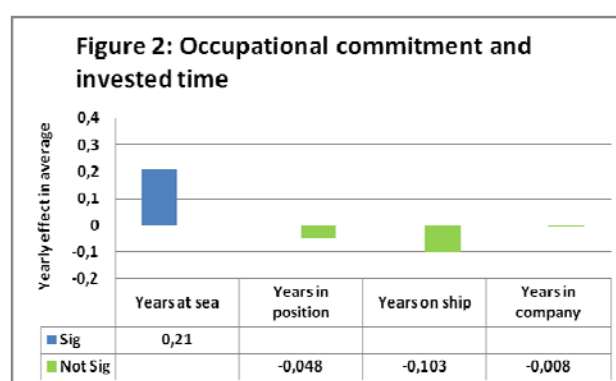
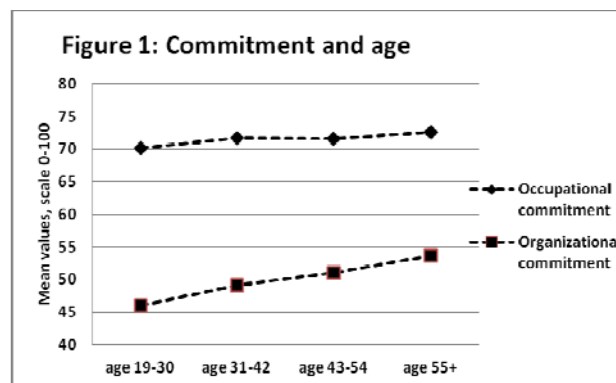
5 RESULTS

5.1 Age, time and commitment

In Figure 1 we can see how organizational and occupational commitments are distributed among four age categories: age 19-30, 31-42, 43-54, and 55+. There is a weak increase in occupational commitment between the two youngest categories and between the two oldest. Moving to organizational commitment, we find a considerably stronger and pronounced linear increase by age category. However, this type of commitment is consistently weaker than occupational commitment.

For obvious reasons, the measure of age is often intertwined with different aspects of investment in time. In our case this is illustrated with the number of years seafarers have worked at sea, how long they have worked in their present positions, how long they have served on their present ships, and how long they

have been working for their specific shipping companies. In order to control for undesired levels of collinearity between these variables, a Variance Inflation Factor (VIF) test was made for models in Figures 2-4. In no case the VIF value reached over 2,7 indicating fully acceptable levels of collinearity.



In Figures 2-3 the effects of all types of invested time on occupational and organizational commitment are displayed. Dark bars indicate statistical significance. Positive effects ascend from the 0 line and negative effects descend. Each bar shows the average effect for one year. The chart's 0-line thus represents the average position at one year's less invested time. Because the effects represented by the chart refer to an average value change per year, the effects are also small – but even small effects become significant if the tendency is sufficiently stable.

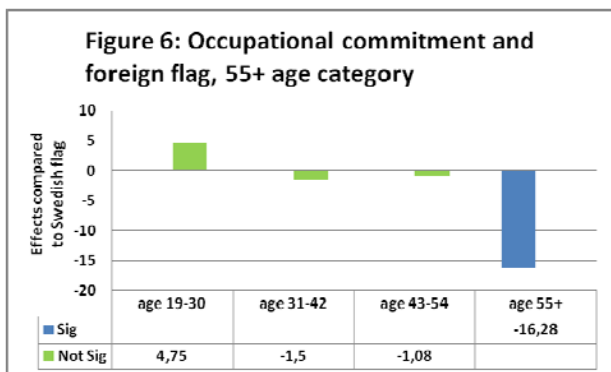
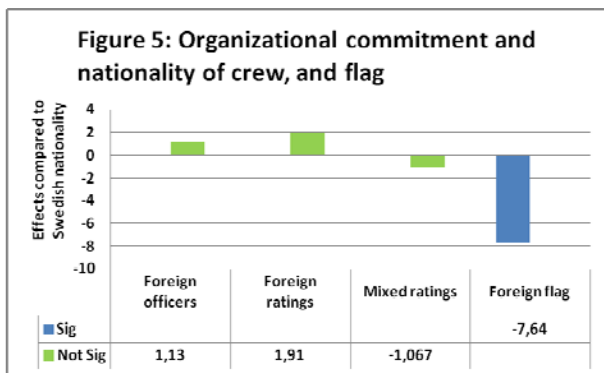
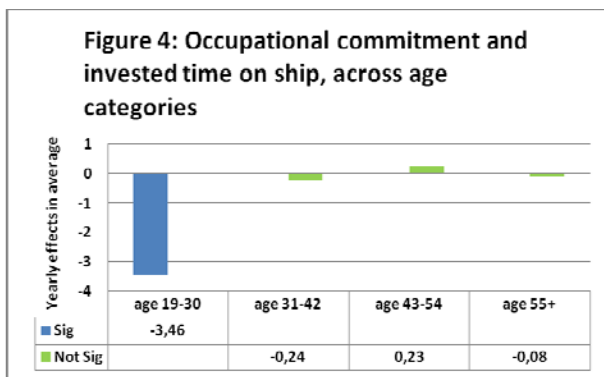
For both types of commitment it becomes clear that significant effects are positive in direction. Invested years at sea show a positive effect on both occupational and organizational commitment. The latter type of commitment is also positively affected by years in company.

After examination of each age group (not shown here) it became clear that only occupational

commitment is vitiated by a negative and significant age-related effect from invested time. Figure 4 reveals the surprisingly strong negative effect per year invested on the ship in the 19-30 age group (other aspects of time are controlled for, not shown).

5.2 Age, nationality and commitment

As touched upon in the introduction, there is a strong international element to shipping. This element may or may not be a source of misunderstandings and conflicts. When it comes to the nationality of the flag, it may also, for the Swedish seafarers, be a case of dissatisfaction with unfamiliar organizational features if the flag is not Swedish. Accordingly, the motivational effect of factors such as the nationality of crew and flag need to be investigated with mutually control.

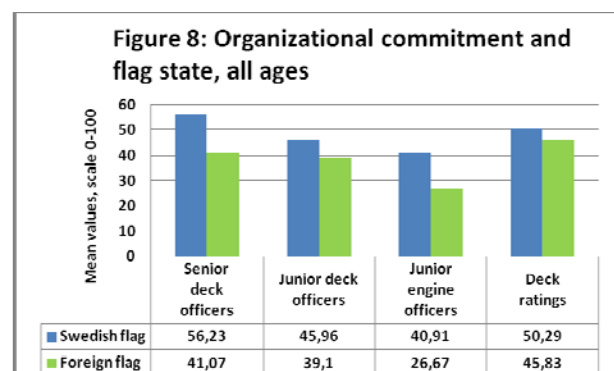
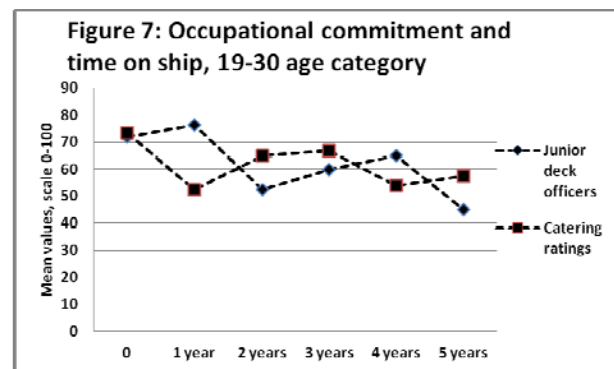


In Figure 5 it can be seen that seafarers' organizational commitment is strongly and negatively affected when the ship is flying a foreign flag. This is true even when nationality of crew is controlled for. Thus, loyalty and commitment to the employer are considerably higher among seafarers on Swedish-flagged ships. No effects of nationality, other than that of flag, reach significance.

When it comes to occupational commitment, on the other hand, it became clear that the nationality of crew and flag lack general impact (not shown here). However, investigation of each age group revealed interesting figures for the oldest age group. This is displayed in Figure 6, where we find a large negative effect of foreign flag in the 55+ age category. Clearly, older seafarers demonstrate less interest in the seafaring occupation if their ship is flagged-out.

5.3 Explaining the results

When trying to explain differences in commitment, it is a good idea to start with controlling for respondents' workplace position. This is because positions often entail differences in perception of the work content. Figure 7 shows those onboard-positions, for the age category 19-30, where the decline in occupational commitment due to invested time on ship is most pronounced. Here we can see that it is junior deck officers and catering ratings that display the most pronounced decline related to time invested on ship. However, multivariate statistical tests (not shown here) revealed that time on ship impose a significant effect on occupational commitment in its own right, i. e. independently of onboard-position, and also of type of ship and trade-area.



The same procedure was conducted concerning the finding that foreign flag pose a significant and negative effect on organisational commitment for all ages. Figure 8 shows that senior deck officers, junior deck officers, junior engine officers, and deck ratings are those onboard positions that display the most pronounced decline in commitment due to foreign flag. However, multivariate tests (not shown) made clear that also the effect of flag state remain significant and independently of onboard position.

The finding that foreign flag has a significant and negative effect on occupational commitment for the age category 55+, was also tested with onboard position. Figure 9 tells us that the strongest effects are found among senior deck officers, junior engine officers and deck ratings. Multivariate tests (not shown) made clear that the initial effect of flag state remain significant and independent of onboard position concerning the age category 55+.

Thus, in order to properly explain the observed impediments for organizational and occupational commitment, we need to turn our attention to differences in the degree to which seafarers value different aspects of their job related to the extent to which the aspects are perceived satisfied at work.

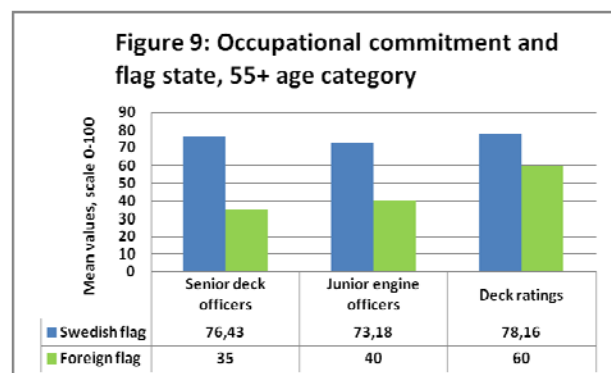


Table 3. Cronbach's Alpha, Explanatory dimensions

	Importance of the aspects	How well the aspects are satisfied
<i>Social security structure:</i>	0.65	0.59
Job security		
Being useful to society		
Good leadership		
A union that looks out for members' interests		
Good relations with the land organization		
<i>Social composition onboard :</i>	0.81	0.71
Carefully considered gender composition		
Carefully considered age composition		
Carefully considered ethnic composition		
<i>Job content onboard:</i>	0.70	0.75
Good career opportunity		
Interesting tasks		
Autonomy		
Skills development		

The material contains several statements concerning the importance and perceived satisfaction with various aspects of the job. After mapping the pattern of latent factors three appropriate dimensions (each containing importance of and satisfaction with the aspects) came out as presented in Table 3.

All indicators were summarized within separate indices and divided by their maximum values and multiplied by 20 so that the explanatory variables can vary between 0 *not important* (valuations) and *not satisfied* (perceptions), to 20 *very important* (valuations) and *completely satisfied* (perceptions). In Table 4-6 these variables are used as control on those previous results where they each show the strongest explanatory effects.

In Table 4, Step I, the initial effect of foreign flag on organizational commitment is, as expected, negative and significant. Moving from Step I to Step II, the variables of social composition are entered, both showing positive and significant effects while the effect of flag is declining and becomes insignificant. The flag effect is thus explained by the valuation and perception of the *social composition onboard*. We can see that organizational commitment is increasing with 1,84 (on the scale of 0-100) for every positive change in perception of the social composition (on the scale 0-20). Thus, the result tells us that the perception of ill considered social composition onboard flagged-out ships impairs organizational commitment among Swedish seafarers.

Table 4. Organizational commitment, flag state and main explanatory dimension, all ages

	Organizational commitment	
	Step I	Step II
Foreign flag (comp. with Swedish)	-7.16*	-4.27
Carefully considered social composition is important (0-20)	-	0.54***
Having a carefully considered social composition (0-20)	-	1.84***
<i>Proportion of explained variance (%)</i>	0.6	9.7
<i>Number of respondents</i>	1121	1063

Significance levels: bold and *** = 0.001 level, ** = 0.01 level, * = 0.05 level.

In Table 5 we get a similar result using the same analytical principles as in Table 4. The impaired occupational commitment under a foreign flag for the oldest age group is explained by the degree of satisfaction with the *social security structure*.

Table 5. Occupational commitment, flag state and main explanatory dimension, 55+ age category

	Occupational commitment	
	Step I	Step II
Foreign flag (comp. with Swedish)	-15.86**	-9.49
Social security structure is important (0-20)	-	1.12**
Having a good social security structure (0-20)	-	1.70***
<i>Proportion of explained variance (%)</i>	2,1	16,2
<i>Number of respondents</i>	350	298

Significance levels: bold and *** = 0.001 level, ** = 0.01 level, * = 0.05 level.

Table 6. Occupational commitment, time on ship and main explanatory dimension, 19-30 age category

	Occupational commitment	
	Step I	Step II
Years on ship	-2.21***	-1.99***
Job content is important (0-20)	-	0.21
Having a good job content (0-20)	-	1.42***
<i>Proportion of explained variance (%)</i>	6,5	17,8
<i>Number of respondents</i>	220	210

Significance levels: bold and *** = 0.001 level, ** = 0.01 level, * = 0.05 level.

In Table 6 we find less success trying to explain the decline in occupational commitment related to time

served on the same ship for the youngest age group. This finding is difficult to explain statistically although the negative effect is diminishing in size in step II. Thus, *perceived job content* is at least part of the explanation, indicating that the perceived value of job content declines somewhat with time on ship. It is worth noting that the initial effect of time on ship is smaller here than in Figure 4, due to no time collinearity in Table 6.

6 CONCLUSIONS

6.1 *The results*

The initial questions in this study concerned Swedish seafarers' motivation at work for the specific shipping company (organizational commitment) and their motivation to work in their particular occupation (occupational commitment). It was hypothesised that the youngest and the oldest seafarers would be the most sensitive for the current development of foreign registration of ships, and that this would lead to a decline in their organizational and occupational commitment. The hypothesis has only partly been supported by this study.

The result shows that the main negative effects on seafarers' commitment at work primarily have to do with invested time and flag state. The youngest age category (19-30 years of age) display a decline in occupational commitment related to time served on the same ship, partly due to a decline in satisfaction with work content for each year on the same ship. It was also shown that the oldest seafarers (age 55+) demonstrate a significantly diminished occupational commitment under foreign flag compared to a Swedish. This effect was explained by satisfaction with the social security structure in current employment.

Another important finding from this study is that flagging-out impairs seafarers' organizational commitment in general, independently of age. This effect was explained by the degree to which the social composition onboard is perceived as carefully considered.

6.2 *Discussion and recommendations*

The results show that young seafarers' drop in their occupational commitment by invested time on ship. This finding can only partly be explained by a decline in satisfaction with work content. We may therefore ask for the remaining reason for this loss in commitment. A contributing part of an explanation might possibly have to do with a mismatch between the idea about the adventure and freedom of the seafaring life and the reality for young seafarers walking the same deck for too long.

From the individuals' perspective the time spent as a seafarer may therefore be felt like a poor investment described as *wasted* time rather than invested. For a young officer who has spent several years in maritime education and training prior to the introduction to the first ship, the waste becomes

substantial, covering the perhaps most important period in life.

Based on these findings we strongly recommend the shipping companies to incorporate sincere career coaching in their HRM-activities directed to their young employees. The results also call for a development of individual rotating systems for young employees with regards to trade area and ships. For small companies with one or only few vessels, it may be of mutual advantage to make cross-company arrangements to share and lend young employees within some sort of informal crew pool system.

The older seafarers, on the other hand, demonstrate diminished occupational commitment under a foreign flag due to dissatisfaction with the social security structure. The oldest category of seafarers are thus more committed to the seafaring occupation if they sail under a Swedish flag because they perceive better leadership, better relations with the land organization, a strong Swedish union, better job security and feel they have ties to, and can contribute to, home society.

Based on these findings we strongly recommend the shipping companies to uphold a certain sense of homeland belongingness for onboard employees on flagged-out ships. It is important to keep management policies and routines close to expectations related to important motherland institutions. It is also important to retain a dialogue with the union, and to facilitate the development of sufficient social security agreements for employees under foreign flag.

Flagging-out also impairs seafarers' organizational commitment in general, independently of age, due to a dissatisfaction with the degree to which the social composition onboard is perceived as carefully considered. Here it is important to underline that this has nothing to do with national/cultural conflicts onboard since crew nationalities has been controlled for in this study (Figure 5). Instead, it only has to do with the degree to which the social composition onboard is believed to be *carefully considered*. The finding tells us, however, that the social composition onboard is something very important for the seafarers.

Based on these findings we strongly recommend the shipping companies to carefully consider the social composition onboard their ships. Other than that, we can only conclude that flag state is important for the seafarers and that flag state and seafarers' perception of the social composition onboard are indeed correlated phenomena. Intensified research on the question of exactly why a change of flag comes with a change of the degree to which seafarers view the social composition onboard to be *carefully considered* is definitely needed.

Finally, if the current difficulties to recruit and retain experienced and qualified seafarers would be settled within a lasting trend, then the shipping companies will face a gigantic challenge trying to crew their future vessels. Most likely, this challenge does not apply only for Swedish controlled shipping. Therefore, internationally comparative research on organizational and occupational commitment is needed. Everyone with interests in the shipping sector

should welcome initiatives to find means to keep seafarers' commitment at a high level. For now, prudent recommendations from this study can hopefully eliminate flag state worries and make the invested time to a success for seafarers.

ACKNOWLEDGEMENT

We like to thank the Swedish Mercantile Marine Foundation for funding the data collection and for in many ways being helpful throughout the whole procedure. We also like to thank one anonymous reviewer for valuable comments.

REFERENCES

- Giffords, E. D. (2009). 'An Examination of Organizational Commitment and Professional Commitment and the Relationship to Work Environment, Demographic and Organizational Factors' *Journal of Social Work*, Vol. 9. 386-404.
- Guo, J. L., Liang, G. S. & Ye, K. D. (2005). 'Impacts of Seafaring Diversity: Taiwanese Ship-Officers' Perception' *Journal of the Eastern Asia Society for Transportation Studies*. Vol. 6, 4176-4191.
- Guo, J. L., Ting, S. C. & Lirn, T. C. (2010). 'The Impacts of Internship at Sea on Navigation Students' Seafaring Commitment' *Maritime Quarterly*. Vol. 19(4). 77-107.
- Hackman, J. R. & Lawler III, E. E. (1971). 'Employee reactions to job characteristics' *Journal of Applied Psychology Monograph*. Vol. 55. 259-286.
- Herzberg, F., Mausner, B. & Snyderman, B. B. (1993). *The motivation to work* (New ed.). New Brunswick, New Jersey: Transaction.
- Hult, C. (2005). 'Organizational Commitment and Person-Environment Fit in Six Western Countries' *Organization Studies*, Vol. 26(2). 249-270.
- Hult, C. (2012) 'Seafarers' commitment to work and occupation' in Hult, C. (2012) (ed) *Swedish Seafarers and the Seafaring Occupation 2010 – A study of work-related attitudes during different stages of life at sea*. Kalmar Maritime Academy, Linnaeus University. pp. 73-119.
- Hult, C., & Svallfors, S. (2002). 'Production Regimes and Work Orientations: A Comparison of six Western Countries' *European Sociological Review*, Vol. 18. 315-331.
- ILO (2012). International Labour Organization. Seafarers. Retrieved 2013-01-06: <http://www.ilo.org/global/standards/subjects-covered-by-international-labour-standards/seafarers/lang-en/index.htm>
- ISSP (2005). International Social Survey Programme 2005: Work Orientation III. GESIS Data Archive, Cologne, Germany, ZA4350, NSDstat. Retrieved 2010-01-29: <http://zacat.gesis.org/webview/index.jsp?object=http://zacat.gesis.org/obj/tStudy/ZA4350>
- ITF (2012). International Transport Workers' Federation, Seafarers. Retrieved 2013-01-06: http://www.itfseafarers.org/your_legal_rights.cfm
- Larsen S., Marnburg, E., & Øgaard, T. (2012). 'Working onboard – Job perception, organizational commitment and job satisfaction in the cruise sector' *Tourism Management*, Vol. 33, 592-597.
- Lee, K., Carswell, J. J., & Allen, N. J. (2000). 'A Meta-Analytic Review of Occupational Commitment: Relations with Person- and Work-Related Variables' *Journal of Applied Psychology*, Vol. 85(5), 799-811.
- Lighthouse (2010). Svensk Sjöfart: Nyckeltal januari 2010. Gothenburg. Retrieved 2010-05-10: <http://www.sweship.se/Files/100608Nyckeltal2010.pdf>
- Lincoln, J. & Kalleberg, A. L. (1990). *Culture, Control and Commitment - A Study of Work Organization and Work Attitudes in the United States and Japan*. Cambridge: Cambridge University Press.
- Mathieu, J. E. & Zajac, D. M. (1990). 'A Review and Meta-Analysis of the Antecedents, Correlates, and Consequences of Organizational Commitment' *Psychological Bulletin*, Vol. 108. 171-94.
- Nogueras, D. J. (2006). 'Occupational Commitment, Education, and Experience as a Predictor of Intent to Leave the Nursing Profession' *Nursing Economics*, Vol. 24. 86-93.
- Olofsson, M. (1995). *The work situation for seamen on merchant ships in a Swedish environment*. Gothenburg. Chalmers University of Technology.
- Pan, Y. H., Lin, C.C. & Yang, C. S. (2011). 'The Effects of Perceived Organizational Support, Job Satisfaction and Organizational Commitment on Job Performance in Bulk Shipping' *Maritime Quarterly*. Vol 20(4), 83-110.
- SBF (2010) Sjöbefälsföreningen. Retrieved 2013-01-06: <http://www.sjobefalsforeningen.se/index.php/hem/information/arkivet/tidskriften-sjoebefael/10-information-information/137-sjoebefael-32010>
- Sencila, V., Bartuseviciene, I., Rupsiene, L. & Kalvaitiene, G. (2010). 'The Economical Emigration Aspect of East and Central European Seafarers: Motivation for Employment in Foreign Fleet' *TransNav, the International Journal on Marine Navigation and Safety of Sea Transportation*. Vol 4(3). 337-342.
- Sjömannen (2011). 'Utflaggning' SEKO sjöfolk, Breakwater Publishing, Sweden. Retrieved 2013-01-06: http://www.sjomannen.se/tidningar/2011_3/files/assets/downloads/publication.pdf
- Steers, R. M. (1977). 'Antecedents and Outcomes of Organizational Commitment' *Administrative Science Quarterly*. Vol. 22, 46-56.
- Steers, R. M. (1984). *Introduction to Organizational Behavior* (2nd ed.). Glenview, Illinois: Scott, Foresman and Company.
- Steers, R. M. & Porter, L. W. (1987). *Motivation and Behavior*. New York: McGraw-Hill Book Company.
- Swedish Employment Service Maritime (2010). Prognos Arbetsmarknad Sjöfart 2010 och 2011. Stockholm. Retrieved 2010-09-15: http://www2.hik.se/dokument/%5CSjo/prognos_sjofart_2011_v10.pdf
- Swedish Maritime Administration (2010). Handlingsplan för ökad rekrytering av personal till sjöfartssektorn. Norrköping, Sweden. Retrieved 2011-02-24: <http://sjofartsverket.se/pages/25929/08-3114Rekryteringsuppdraget.pdf>
- Testa, M. R., (2001) 'Organizational Commitment, Job Satisfaction, and Effort in the Service Environment' *The Journal of Psychology*. Vol. 135(2), 226-236.
- Testa, M. R., Mueller S. L. & Thomas A. S. (2003). 'Cultural Fit and Job Satisfaction in a Global Service Environment' *Management International Review*. Vol. 43, 129-148.
- Testa, M. R. & Mueller S. L. (2009). 'Demographic and cultural predictors of international service worker job satisfaction' *Managing Service Quality*. Vol. 19, 195-210.
- Turker, F. & Er, I. D. (2007). 'Investigation the Root Causes of Seafarers' Turnover and its Impact on the Safe Operation of the Ship' *TransNav, the International Journal on Marine Navigation and Safety of Sea Transportation*. Vol 1(4), 435-440.
- Van der Heijden, B., van Dam, K., & Hasselhorn, H. M. (2009). 'Intention to leave nursing - The importance of interpersonal work context, work-home interface, and job satisfaction beyond the effect of occupational commitment' *Career Development International*, Vol.14. 616-635.
- Werthen, H.-E. (1976). *Sjömannen och hans yrke: en socialpsykologisk undersökning av trivsel och arbetsförhållanden på svenska handelsfartyg*. Doctoral thesis, Gothenburg: University of Gothenburg.