Professional Commitment Levels of Officer Class Y Generation Seafarers

Aziz Muslu

Abstract

The employees' level of commitment to their profession has been decreased due to the challenging conditions in seafarers' profession. Many factors exist affecting professional commitment. The most important factors are age, hometown, and personality characteristics. Regarding the literature, Generation Y employees lack such emotions as commitment, a sense of belonging, and team spirit. Therefore, this research focuses on seafarers who recently started the profession of seafarers as a member of Generation Y. The relationship between personality characteristics and professional commitment was measured through several variables. The professional commitment scale developed in the health sector was applied to seafarers from Generation Y who are employed in the maritime sector after reliability and validity studies were performed. The relationship between personality characteristics and professional commitment was measured through several variables. As a result of the research, it has been suggested that Generation Y has highly committed to the profession.

Keywords
professional commitment, maritime management, Generation Y, seafarers

Introduction

Considering the literature of work psychology, there are three commitments, including job satisfaction, organizational commitment, and job commitment. There is confusion regarding job commitment and professional commitment. Professional commitment involves occupations that are formed as a result of education, specialization, and career planning. For this reason, the professional commitment levels of the officer class, whom we may describe as white-collar seafarers, were examined in the study. In various research conducted in many sectors, it has been found that Generation Y employees have low commitments and are difficult to be motivated (Gürbüz, 2015; Rajput et al., 2012). “Generation Y” describes people born in the early 80’s to the early 90’s (Estimo et al., 2020). The occupation of seafarers is difficult and toilsome (Johansson & Naslund, 2009). The ship is considered as an isolated and confined medium, a safety-sensitive craft, and a combination of stress factors specific to maritime (McVeigh et al., 2018). Working at sea is very burdensome, dangerous, and stressful. Environmental, physical, and psychosocial dimensions substantially affect life and work quality of seafarers (Jeżewska et al., 2015). Leaving the job in the early years of the profession is a frequently observed phenomenon. Hult (2012) stated that there is a clear difference compared to the youngest seafarers (aged 19–30), a large proportion of whom believe it will likely leave the occupation within the next few years. In this respect, not only in the Generation Y leave the job early age but also study in 2010 possible to say that with Generation X seafarer less professional commitment. An important reason for leaving a job is a lack of professional commitment. Managers of maritime companies state that with the arrival of Generation Y, leaving the profession has started to occur at much younger ages. One of the most important research questions is the low level of professional commitment of Generation Y officers? This question was examined by the difference tests between various variables with a professional commitment scale. The maritime profession is known to be a challenging job. The difficulty and toilsome characteristic of seafarers is significant factor in this phenomenon. The seafarers maritime life may be a possibly perilous one. In addition to the risk associated with loading and unloading or carrying out repairs, accidents can be caused by weather, wind, and the sea itself or by human, organizational, and technical factors. In certain waters, there is moreover a crucial risk of pirate attacks and of facing criminal charges when incidents happen in international ports (Hult, 2012). Studies regarding reducing ship accidents and human resources for
quality ship management have increased at an institutional level. According to the research conducted on 150 accidents by the IMO sub-committee based on Flag State audits, 80% of accidents are caused by human error while only a few accidents resulted from technical problems (IMO Sub-Committee on Flag State Implementation, 2008). Even though more advanced technology and more advanced engineering solutions significantly reduce maritime field accidents, the accidents that occur due to human errors have not been eliminated (Asyalı, 2015). Management’s total commitment to making both health and safety a priority is of the essence for an accomplished occupational health and safety program in the workplace (Alli, 2008). The level of professional commitment will reduce the example of leaving to be seafarer and ship. More often personnel change is the most negative factor in safety management (Muslu, 2018). To prevent ship accidents and to eliminate human errors, it is necessary to manage seafarers appropriately and to ensure their commitment to the profession. Many factors affect professional commitment, the most important of which are personality characteristics, followed by age, demographic properties, and social relations. There has recently been much emphasis on and complaint about the negative characteristics of Generation Y, especially about their low levels of commitment. Many research results also confirm their low level of organizational and professional commitment. Research and interest in Generations Y have increased in the academic and social fields. The most important reason for this is that, because it is different from other generations, problems related to management in business life are encountered. Generation Y covers most of the working life today, which is also seen in the maritime sector. Seafarers generally work on a partial term contract. Frequent staff turnover brings both cost and managerial difficulties for the ship owners. Because of factors such as social isolation, the danger of the sea, abundant issues, accident risk, and all of them may decrease professional commitment level may decrease. Therefore, this research questions the professional commitment levels of the Generation Y seafarers, and the factors affecting it was sought in this study. Accordingly, the study aimed to examine the effect of personality characteristics of Generation Y seafarers and other variables on professional commitment.

The Purpose of the Research

The question of generations, which has caused much debate in a number of fields and triggered research, draws the attention of academics and the business world as well. In general, research conducted on this issue has concluded that Generation Y employees have low levels of motivation and workplace commitment. In addition to the high turnover rate of staff in the maritime sector, the rate of leaving the job is also high. Family-related and social issues and challenging conditions of the profession constitute the most significant causes of this situation. In the interviews with maritime professionals, it has been revealed that leaving the job earlier compared to previous years and working on the land at maritime-related businesses occur in the early stages of the profession. In the study carried out by Kuram (2018) about Generation Y, it indicates that Gen-Y sets an international career goal before they start work life, and they set a private life balance after 3 years of experience. It can be considered that Generation Y display intention to leave working at sea early since they attach importance to work-life balance. It is known that Generation Y seafarers are in search of work on the land, career change, and a second career due to work-life balance. Due to these reasons, in order to measure the level of commitment of Generation Y who just entered the occupation of seafarers to the profession, professional commitment scale for nurses developed by Lu et al. (2007) was revised and adapted in line with the professional views of experts working in management positions in institutional maritime companies in the maritime sector. Reliability and validity of the scale were ensured, and professional commitment levels of Generation Y Turkish officer seafarers were measured together with the three sub-dimensions of showing effort, professional membership, and target value.

Theoretical Background: Generation Y and Their Characteristics

Understanding the differentiations between generations in the business world, it is necessary to figure out the group of people who are named Generation Y and who have quite different characteristics from other generations and thus are difficult to manage. In today’s world, a significant portion of the labor force consists of Generation Y members who were born between 1980 and 2000. Generation Y is a name attributed to individuals born between the years of 1980 and 2000. This generation is also called the Internet generation, echo-boomers, millennials, and nexters. Such definitions are used in order to emphasize the difference in Generation Y from previous generations (Broadbridge et al., 2007).

The most negative characteristics attributed to this generation are little sense of belonging and low work motivation (Lub et al., 2012; Twenge et al., 2010). In their study conducted on 124 people working in the electric and electronic industry in Malaysia, Rajput et al. (2012) found that Generation Y members are intrinsically and extrinsically less motivated and had less organizational commitment compared to Generation X members. In another study, it was determined that Generation X nurses had lower intentions to leave the profession and higher job satisfaction and professional commitment in comparison to Generation Y nurses (Esengan & Özdil, 2017). In the study carried out by Gürbüz (2015) titled “Generational Differences: A Myth or A Fact?” an analysis was performed on a set of data on 731 employees employed in seven different work branches in Ankara, Turkey. As a result of the analysis, Generation Y, which was
the youngest generation in the sample group, was found to have the lowest level of commitment. Flexible working, appreciation education opportunities were more satisfying than increased salary (Muslu, 2017). On the other hand, Pyörä et al. (2017) results indicate that neither younger nor older people are a homogeneous staff. Job commitment varies by work substance and educational level both among young ages and old ages wage earners.

In studies conducted on generations, however, Generation Y was especially claimed to be “the generation that received the best education” despite all their negative characteristics (Brown et al., 2009). Even though they get paid for it, extra working hours and additional tasks decrease their motivation and already low organizational commitment (Muslu, 2017). Although such reasons as being a profession with limited-time contract, not working at a fixed location, and opportun- 

ty to earn a lot of money motivate Generation Y members to prefer the profession in the first place and work at sea, the fact that they do not like hierarchy and classical management style, that they do not see working as a goal, and that they demand the workplace to be an entertaining place may cause them to leave the profession in early years. Material rewards can be used to increase employees’ motivation and commitment to the company; however, Generation Y has different expectations such as personal development, opportunity to socialize, and autonomy as well (Özaydin, 2019). Considering these expectations, it can be said that maritime business life and culture is not suitable for the Generation Y. Expectations of Gen-Y is to be considered by businesses through all processes of human resources management.

Theoretical Background: Professional Commitment

Commitment is a significant portion of an employee’s psychological conditions (Albdour & Altarawneh, 2014). One of the important commitments attitudes in work life is professional commitment. One of the constructs that are gaining importance in research carried out on types of commitment in work life is professional commitment (Goswami et al., 2007). Morrow (1983) also has defined professional commitment as the profession turning into an important element in an individual’s life.

According to Lanchman and Aranya (1986), the employees should spend effort and time to improve themselves technically to perform their job better. Therefore, professional commitment refers to committing oneself to his/her occupation and professional career, believing in professional ethics and goals, and adopting them (Aslan, 2008; Lanchman & Aranya, 1986).

Tiwari and Singh (2014) stated that organizational commitment is deemed as a function of several factors such as physical factors, situational factors, and individual/attitudi-

nal factors. It has been determined that when physical and situational factors are held constant, the variable called job satisfaction can be a significant causal variable that affects employee’s commitment in an industrial organization. Therefore, it can be said that the more satisfied an employee is, the more committed he/she will be to the organization. That is why the management team needs to pay due attention to this fact and try to provide such a work culture and environment and create jobs, that is, “job enrichment,” in a way that satisfies and motivates and therefore keeps employees engaged. According to Abasiliim et al. (2019), the business leaders and HR managers will notice the leadership style that is important and positively associated with the engagement of employees in organizations.

Professional commitment is a psychological bond that an individual develops between himself/herself and his/her occupation based on the emotional reaction toward an occupation (Meyer et al., 1993). It is “foregrounding professional identity, making efforts for the occupation owned, committing oneself to the occupation and commitment to ethical principles” (Lanchman & Aranya, 1986; Sorensen & Sorensen, 1974).

Professional commitment consists of three dimensions: the affective dimension, the normative dimension, and the continuance dimension (Meyer et al., 1993).

Different perspectives exist in defining professional commitment. Cohen (2003) states that there has been confusion as regards the meaning of the concept as concepts such as occupation, career, and profession are used interchangeably. Because of this, he offers to express all of them with one single term. Therefore, labor, experience, examinations, and training are required to become a seafarer in the officer class. Looking from this perspective, as opposed to Cohen’s (2003) approach, we used the term “professional commitment” based on the explanations made by Meyer et al. (1993). Meyer stated that if there is a need to use a general term, it has to be the concept of “occupation” and that the concept of “profession” is separate. Thus, the present study includes officer class, it would be more appropriate to use professional commitment rather than occupational commitment.

Attitudes, Emotions, and Behaviors Related to Professional Commitment

Professional commitment affects many positive job attitudes and behaviors. The individual’s emotions regarding the organization and profession could be more effective in his/her decisions about a profession. In this context, it can be argued that other types of commitments may have an effect on the formation of professional commitment (Blau & Lunz, 1998). At one end of the professionalization process is the job, while the profession is located on the other end. It has been stated that one of the eight criteria for a job to be defined as a profession is professional commitment (Çetinkaya et al., 2015). Job or organizational commitment is an important psychological concept that can help explain the work behavior
of employees. Occupational commitment or organizational commitment is a significant psychological element that can help explain the work behavior of employees (Meyer & Herscovitch, 2001). Many factors affecting the success of management in workplaces also have an impact on professional commitment attitude. Individuals act and are mostly oriented by professional expectations rather than organizational expectations (Cohen, 2000). Benligiray and Sönmez (2011) emphasized that an increase in professional commitment will lead to job commitment. Bagram (2003) addressed commitment with a professional focus, described the concept as a psychological condition that shaped the relationship of the employee with his/her profession and emphasized that it had powerful effects on whether the individual will maintain his/her profession.

Although professional and organizational commitment seems to be separate concepts, many studies concluded that both commitment types are in interaction with each other in their effects on work behaviors such as job satisfaction and intention to leave (Lanchman & Aranya, 1986; Tınaz, 2017). In their study, they conducted on academics, Dorenkamp and Weiß (2018) determined that one important factor in job satisfaction in the context of academics is professional commitment. It can be stated that employees whose job and organizational commitment levels are both high is are the group of employees with the highest motivation (Solmuş, 2004). The assumption that senior employees usually have higher levels of job commitment is supported by research findings (Tınaz, 2017).

Profession as a commitment goal can transcend engagement with the employing organization; that is, in comparison with organizational commitment, engagement with the profession has a distinct and potentially stronger impact on attitudes and behavior, especially in relation to professional activity (Becker et al., 2015; Hoff, 2000; Meyer et al., 1993). The organizational commitment of employees is just as important as their Professional commitment since it affects their motivation for work in a given profession (task) (Carson & Bedian, 1994). Job commitment is strongly related to motivation and job satisfaction (Tınaz, 2017).

Sawhney et al. (2020) investigated the relationship between both positive and negative events and work engagement and burnout among nursing staff, along with the moderating effect of occupational commitment in work engagement and burnout relationship. The findings pointed out that positive and negative events, in addition to their multiplicative effect, predicted both the work engagement and burnout. Besides, occupational commitment moderated the negative events and burnout relationship.

Unlike organizational commitment, professional commitment is related to the employee’s understanding of the importance of his/her profession in his/her life as a result of the skills and expertise he/she acquires. In this sense, professional commitment can be defined as the employee’s perception of the importance degree of his/her profession in his/her life after all the efforts he/she has made to gain skills and expertise in a certain field (Baysal & Paksoy, 1999). The definition of job commitment, on the other hand, may show similarity to the definition of professional commitment; however, when conditions of the workplace and the job are in question, its definition may vary. Çakır (2001) defined job commitment as an employee’s degree of identifying, integrating, and involving himself/herself with the job he/she has. Although many factors affect job commitment, it is a type of commitment that occurs as a result of the interaction between occupational commitment and professional commitment.

Besides, it has been argued that professionally committed individuals do more research to improve their profession and that they usually experience work-family conflicts (Balay, 2000). Tınaz (2017) stated that the effect of professional commitment on performance could not be identified. Personal and other organizational variables, especially work-life balance, can have an impact on performance.

Dorenkamp and Ruhle (2019) noted that as normative professional commitment increases with socialization in the academic profession, the internalized normative pressure to pursue an academic career will result in a strong association with the profession and positive feelings of being a piece of it. Individuals with high job commitment have higher job satisfaction and show more successful performance. As a result of high job commitment, intention to leave decreases, and the amount of working time increases (Tınaz, 2017).

When an individual spends years for his/her profession, and his/her profession gradually becomes important for him/her, he/she starts to internalize the values and ideology of his/her profession. The professional commitment that develops in this way is classified under three sub-dimensions (Morrow, 1983):

1. The general attitude toward the profession: It involves value judgments related to the profession. In this case, the individual identifies work with life. For example, he/she develops discourses such as “one cannot get joy from life without satisfaction with his/her job or profession.”

2. Professional planning thought: At this level, the individual makes investments related to his/her profession in the future. The individual develops long-term plans and ideas to improve himself/herself and advance in his/her career. According to Blau (1985), such efforts of individuals can be measured through their utilization of various media bodies, professional and educational institutions and other opportunities, and their participation in meetings associated with their profession.

3. The relative importance of the profession: It is the revealing of the preferences between the profession and non-professional activities.
The Research Method

The study was conducted on seafarers who newly started the profession of the seafarer. The sample of the study included the graduates of Maritime programs of Ordu University, which admits students from Turkey, currently working in the maritime sector. Scala was send via email and social media. The sample was chosen by a random sampling method in the study. By selecting each case solely on the basis of chance, where all cases have an equal chance of being selected into the sample, this creates a simple random sample (Wagner & Gillespie, 2019).

There is no professional commitment scale applied in the maritime sector. For this reason, studies conducted in this field were surveyed.

Profession Commitment Scale in Nursing: The level of commitment of nurses to the profession for the determination (Lu et al., 2000), To Profession in Nursing developed by Engagement Scale (Nursing Professional Commitment Scale—NPCS) was used and adapted Turkey by Çetinkaya et al. (2015). The Cronbach Alpha coefficient was .90 in the adaptation of Çetinkaya et al. (2015) for the whole scale. The original form of the scale has 26 items and three sub-dimensions (willingness to make an effort, professional membership continuation, belief in goals, and values). Nine items of the Likert scale are inverted It contains expression (14, 15, 16, 17, 18, 19, 20, 21, and 25 substances). Internal consistency of the scale in the original study 94 (Lu et al., 2000, 2002). The lowest and the lowest to be taken from the whole scale, the highest score is between 26 and 104. Lower the lowest and highest of the dimensions The scores are “Eagerness to show effort” 13 to 52, “Professional membership (maintaining and preserving),” 8 to 32, and “believing in goals and values” is between 5 and 20 points. Of a scale of all and sub-dimensions of the score increase in individuals’ commitment to the profession (Lu et al., 2007).

Maritime executive opinions have been taken regarding the suitability of the scale for the officer class seafarers for those who have worked at sea for more than 25 years and currently work as a human resources manager training manager and deck and engine inspector in the maritime industry.

Similarly, the first three factors were used in the study. The Turkish version of the “Nursing Professional Commitment Scale,” which was developed by Lu et al. (2000) and which was adopted to Turkish in 2015 by Çetinkaya et al. (2015) along with reliability and validity studies for the maritime sector upon the opinions of experts. The reliability and validity of the scale were ensured by applying it to active seafarers working in the maritime sector. Finally, differences between groups were examined through several variables.

Field Research and Data Collection Process

The research was conducted on active seafarers from Generation Y. In the research, newly graduated seafarers from all regions of Turkey and also from Ordu University were chosen through the graduate information system. The scale was applied to 248 actively working seafarers. In this sense, the research was carried on a sample covering the most part of Turkey (Table 1).

Internal consistency was evaluated using Cronbach’s alpha. The minimum acceptable value for Cronbach’s alpha was .70; the internal consistency of the range below this value was considered low. Alpha values between .80 and .90 were generally preferred (Table 2).

According to the Table 3, the total variance explained by the three factors was 53%. According to the principal
Table 2. Reliability Table for Showing Effort, Professional Membership, Goals, and Values.

| Dimension          | Cronbach’s α | M ± SD       | Median (minimum–maximum) |
|--------------------|--------------|-------------|-------------------------|
| Factor 1 showing effort |              |             |                         |
| Total              | .9           |             |                         |
| D1                 | .89          | 4.29 ± 0.97 | 5.0 (1.0–5.0)           |
| D2                 | .89          | 4.29 ± 0.9  | 4.0 (1.0–5.0)           |
| D3                 | .89          | 4.05 ± 1.01 | 4.0 (1.0–5.0)           |
| D4                 | .89          | 3.85 ± 1.1  | 4.0 (1.0–5.0)           |
| D5                 | .89          | 3.71 ± 1.15 | 4.0 (1.0–5.0)           |
| D6                 | .89          | 4.17 ± 1.01 | 4.0 (1.0–5.0)           |
| D7                 | .89          | 3.98 ± 1.01 | 4.0 (1.0–5.0)           |
| D8                 | .89          | 3.7 ± 1.1   | 4.0 (1.0–5.0)           |
| D9                 | .91          | 3.22 ± 1.29 | 3.0 (1.0–5.0)           |
| D10                | .89          | 4.22 ± 1.01 | 4.0 (1.0–5.0)           |
| D11                | .89          | 3.99 ± 1.03 | 4.0 (1.0–5.0)           |
| D12                | .91          | 3.81 ± 1.13 | 4.0 (1.0–5.0)           |
| D13                | .9           | 4.02 ± 1.17 | 4.0 (1.0–5.0)           |
| Factor 2 professional membership |              |             |                         |
| Total              | .91          |             |                         |
| D14                | .92          | 3.33 ± 1.41 | 3.0 (1.0–5.0)           |
| D15                | .91          | 3.92 ± 1.35 | 4.0 (1.0–5.0)           |
| D16                | .9           | 4.29 ± 1.15 | 5.0 (1.0–5.0)           |
| D17                | .89          | 3.96 ± 1.25 | 4.0 (1.0–5.0)           |
| D18                | .89          | 4.02 ± 1.26 | 5.0 (1.0–5.0)           |
| D19                | .89          | 4.12 ± 1.17 | 5.0 (1.0–5.0)           |
| D20                | .9           | 3.83 ± 1.33 | 4.0 (1.0–5.0)           |
| D21                | .91          | 3.76 ± 1.33 | 4.0 (1.0–5.0)           |
| Factor 3 goals and values |              |             |                         |
| Total              | .69          |             |                         |
| B22                | .66          | 3.56 ± 1.08 | 4.0 (1.0–5.0)           |
| B23                | .56          | 4.23 ± 1.0  | 5.0 (1.0–5.0)           |
| B24                | .57          | 3.95 ± 1.07 | 4.0 (1.0–5.0)           |
| B25                | .79          | 3.15 ± 1.21 | 3.0 (1.0–5.0)           |
| B26                | .58          | 3.95 ± 1.07 | 4.0 (1.0–5.0)           |

Table 3. Exploratory Factor Analysis.

| Question | Factor 1 | Factor 2 | Factor 3 |
|----------|----------|----------|----------|
| 1        | 0.78     |          |          |
| 2        | 0.77     |          |          |
| 3        | 0.67     |          |          |
| 4        | 0.78     |          |          |
| 5        | 0.71     |          |          |
| 6        | 0.78     |          |          |
| 7        | 0.67     |          |          |
| 8        | 0.72     |          |          |
| 9        | 0.55     |          |          |
| 10       | 0.74     |          |          |
| 11       | 0.64     |          |          |
| 12       | 0.34     |          |          |
| 13       | 0.39     |          |          |
| 14       |          | 0.47     |          |
| 15       |          | 0.62     |          |

Table 4. Confirmatory Factor Analysis.

| Question | Estimate | SE   | z-Value | p-Value |
|----------|----------|------|---------|---------|
| 16       | 0.84     |      |         |         |
| 17       | 0.83     |      |         |         |
| 18       | 0.87     |      |         |         |
| 19       | 0.89     |      |         |         |
| 20       | 0.75     |      |         |         |
| 21       | 0.72     |      |         |         |
| 22       |          |      |         | 0.46    |
| 23       |          |      |         | 0.33    |
| 24       |          |      |         | 0.36    |
| 25       |          |      |         | 0.10    |
| 26       |          |      |         | 0.31    |
| Variance explained | 0.28 | 0.19 | 0.06 |     |

The reliability coefficient is low before excluding items from the scale in Table 4 Cronbach alpha coefficient and components analysis, the variance explained by the first factor was 28%, the second factor was 19%, and the third factor was 6%. The only problem was that the 25th question was under the 0.3-factor load. For this reason, the 25th question was removed from the scale.
average must. If the item is removed from the scale, Cronbach alpha coefficient increases, that item decreases the reliability and should be removed from the scale. Reliability items that do not change are items that support the scale and it should not be excluded from the scale (Özdamar, 2002; Tavşancıl, 2005).

Confirmatory factor analysis was performed. In the confirmatory factor analysis, it was determined that there was only 1-factor loading below 0.30, where the fit indexes were acceptable. The exclusion of this item from the survey may be considered an option. We used correlation analysis to examine the interrelation of numerical data. In the Table 5 below, correlation coefficients and p-value of less than .05 and .01 were indicated.

Correlation coefficients express the magnitude of the effect, while p values test the presence of these observed effects. Generally accepted comments for effect sizes are as follows: 0 to 0.199: Very weak, 0.2 to 0.399: Weak, 0.4 to 0.499: Medium, 0.5 to 0.799: Strong, 0.8 to 1: Very Strong.

Profile Variables Section

Expert opinions about the appropriateness of the scale expressions were received. Since the statements are general statements about adherence to the issue, there are no specific statements about the health sector, so the scale has been found suitable for application in the maritime sector. Minor spelling changes were made, using maritime or seafarer expressions instead of nursing statements. The most important determinant variable related to professional commitment is age. Since it is a study for the Generation Y, we did not add it because it would be meaningless for generation studies to add an age-related variable. The variables that will affect the seafarer’s attitudes toward the job were evaluated. As a result of the expert opinions received and the evaluation of the literature’s research, the following variables were used for the research, considering that the following variables will affect the professional commitment. Therefore, in the following seven different profile variables for Generation Y, seafarers use research.

1. Planned years for working at sea, 2. Place of birth (region), 3. Type of ship employed at 4. High school graduated from, 5. Reason for preferring to be seafarers, 6. Department graduated from, 7. Gender

| Table 5. Evaluation of Correlations Between the Sub-Dimensions of Professional Commitment. |
|---------------------------------|----------------|----------------|
|                                 | 1              | 2              | 3              |
| Showing effort                  | 1              |                |                |
| professional membership         | .46**          | 1              |                |
| Goals/values                    | .53**          | .1             | 1              |

*p < .05, **p < .01.

Reliability Analysis

Internal consistency was evaluated using Cronbach’s alpha. The minimum acceptable value for Cronbach’s alpha was .70; the internal consistency of the range below this value is considered low. Alpha values between .80 and .90 are generally preferred.

In Table 2, the mean Cronbach’s Alpha coefficient for the sub-dimension of Showing Effort is .9, which indicates that it is reliable. Table 2 shows that the mean Cronbach’s Alpha coefficient for the sub-dimension of Professional Membership is reliable at the value of .91. The mean Cronbach’s Alpha coefficient for the sub-dimension of Goals and Values was found to be .69, as presented in Table 2.

Exploratory Factor Analysis

According to Table 3, the total variance explained by three factors is 53%. According to the principal components analysis, the variance explained by the first, second, and third factor was 28%, 19%, and 6%, respectively. The only problem was that the 25th question was under factor load 0.3.

Considering the results of the confirmatory factor analysis, Question 25 was removed from the scale. According to model fit indexes, the results are acceptable.

In the confirmatory factor analysis, it was determined that there was only 1-factor loading below 0.30, where the fit indexes were acceptable. The exclusion of this item from the survey may be considered an option.

Correlation coefficients express the magnitude of the effect, while p values test the presence of these observed effects. Generally accepted comments for effect sizes are as follows:

0 to 0.199: Very weak, 0.2 to 0.399: Weak, 0.4 to 0.499: Medium, 0.5 to 0.799: Strong, 0.8 to 1: Very Strong.

According to Table 6, the participants’ professional commitment levels differ significantly in high schools they have graduated from. To determine the difference between the groups, the Mann-Whitney test was employed. As a result of the analysis, it was found that 0.01 significance level total professional commitment p-value at the level of significance 0.001 was found to be below and a significant difference magnitude of the measured differences observed between the high school groups below. There is a significant difference in high school groups found with a p-value of .001 in the professional membership sub-dimension. There is a significant difference in high school groups found with a p-value of .002 in the sub-dimension of showing effort. According to result, no significant difference was identified in terms of seafarers’ statements according to gender and also, no significant difference was observed in terms of the statements of seafarers according to their birth regions. In Table 7, it is seen that the participants’ levels of professional commitment differ significantly in terms of the departments they have graduated. To determine the difference between the groups, the Mann-Whitney U test was
As a result of the analysis, it was found that in the seafarers’ professional membership sub-dimension, the graduates of Marine Transportation and Management Engineering had a higher professional commitment in comparison to the graduates of the Maritime Engineering Department. In other words, the graduates of the deck department felt a higher level of professional membership.

In all the statements regarding professional commitment, graduates had higher scores when compared to the graduates of Naval Architecture and Marine Engineering departments. The professional commitment levels of deck department graduates were higher than those of the graduates of Naval Architecture and Marine Engineering departments.

In Table 8, the participants’ levels of professional commitment differ significantly in terms of the number of years they are planning to work. To identify the difference between the groups, the Mann-Whitney U test was used. As a result of the analysis, the participants’ levels of professional commitment in the sub-dimension of showing effort were found to be higher in the 1 to 2 years of the working period compared to the period of 2 to 5 years. Furthermore, the seafarers who were planning to work 7 to 10 years were observed to have higher professional commitment in the sub-dimension of showing effort compared to those planning to work less than that period.

Regarding the professional membership sub-dimension, there was a significant difference between the seafarers who were planning to work more than 10 years and those planning to work 1 to 2 and 2 to 5 years. Besides, Significant differences were identified between those planning to work 5 to 7 and 2 to 5 years as well as those planning to work 7 to 10 and 2 to 5 years. In relation to the sub-dimension of goals/values, significant differences were found between the seafarers planning to work 1 to 2 years and those planning to work more than 10 years in addition to the differences between 1 and 2 year group, and 1 to 2 year group and 5 to 7 and 7 to 10 year group.

Table 6. Difference Tests Between the Sub-Dimensions of Professional Commitment According to the High Schools the Seafarers Graduated From.

| School                        | Median (minimum–maximum) | M ± SD          |
|-------------------------------|--------------------------|-----------------|
| Anatolian high school (88)   | 54.13 ± 7.66             |
| Military high school (34)     | 52.13 ± 7.37             |
| General high school (15)      | 49.93 ± 8.82             |
| Religious high school (9)     | 48.11 ± 20.15            |
| Vocational high school (93)   | 49.05 ± 10.04            |
| **Showing effort**            | 56 (13–65)               |
| **Profess. memb.**            | 33.87 ± 6.97             |
| **Goals/values**              | 19.51 ± 2.86             |
| **Total**                     | 108.04 ± 13.86           |

Note. k = Kruskal Wallis Test.

Table 7. Difference Tests Between the Sub-Dimensions of Professional Commitment in Terms of Departments.

| Department                  | Median (minimum–max)   | M ± SD          |
|-----------------------------|------------------------|-----------------|
| Deck (105)                  | 52.86 ± 8.55           |
| Naval architecture (19)     | 52.57 ± 7.76           |
| Maritime engineering (104)  | 50.79 ± 10.15          |
| **Showing effort**          | 55 (13–65)             |
| **Profess. memb.**          | 33.9 ± 6.25            |
| **Goals/values**            | 18.95 ± 3.02           |
| **Total**                   | 105.82 ± 15.41         |

Note. k = Kruskal Wallis Test.

utilized. As a result of the analysis, it was found that in the seafarers’ professional membership sub-dimension, the graduates of Marine Transportation and Management Engineering had a higher professional commitment in comparison to the graduates of the Maritime Engineering Department. In other words, the graduates of the deck department felt a higher level of professional membership.

In all the statements regarding professional commitment, graduates had higher scores when compared to the graduates of Naval Architecture and Marine Engineering departments. The professional commitment levels of deck department graduates were higher than those of the graduates of Naval Architecture and Marine Engineering departments.

In Table 8, the participants’ levels of professional commitment differ significantly in terms of the number of years they are planning to work. To identify the difference between the groups, the Mann-Whitney U test was used. As a result of the analysis, the participants’ levels of professional commitment in the sub-dimension of showing effort were found to be higher in the 1 to 2 years of the working period compared to the period of 2 to 5 years. Furthermore, the seafarers who were planning to work 7 to 10 years were observed to have higher professional commitment in the sub-dimension of showing effort compared to those planning to work less than that period.

Regarding the professional membership sub-dimension, there was a significant difference between the seafarers who were planning to work more than 10 years and those planning to work 1 to 2 and 2 to 5 years. Besides, Significant differences were identified between those planning to work 5 to 7 and 2 to 5 years as well as those planning to work 7 to 10 and 2 to 5 years. In relation to the sub-dimension of goals/values, significant differences were found between the seafarers planning to work 1 to 2 years and those planning to work more than 10 years in addition to the differences between 1 and 2 year group, and 1 to 2 year group and 5 to 7 and 7 to 10 year group.
In all the dimensions of professional commitment, significant differences existed between the seafarers planning to work more than 10 years and those planning to work 1 to 2 and 2 to 5 years. In the same vein, the differences between those planning to work 5 to 7 years and 1 to 2 year group, 2 to 7 year and 5 to 7 years group, 7 to 10 year and 1 to 2 year group, 7 to 10 year and 2 to 5 year group were found to be significant. Briefly, the professional commitment of those who plan to work at sea more is different from that of the seafarers planning to work less. According to the result, no significant differences were found in the statements of the seafarers in terms of the type of ship they work and also, no significant difference was identified in the statements of the seafarers in terms of their reasons for preferring the profession (Table 9).

### Table 8. Difference Tests Between the Sub-Dimensions of Professional Commitment in Terms of the Planned Period of Working at Sea.

| Working year | Median (minimum–maximum) | showing effort | Profess. memb. | Goals/values | Total |
|--------------|--------------------------|----------------|----------------|--------------|-------|
| 1–2 (19)     | 45.06 ± 14.47            | 47.16 ± 10.64  | 52.17 ± 6.36   | 53.2 ± 7.75  | 54.67 ± 7.08 |
| 2–5 (33)     | 52 (13–58)               | 48 (13–63)     | 52 (37–65)     | 54.5 (26–65) | 55 (21–65)  |
| 5–7 (40)     | 27.06 ± 9.46             | 26.85 ± 7.53   | 31.78 ± 8.18   | 32.6 ± 7.12  | 33.77 ± 7.14 |
| 7–10 (59)    | 27.5 (10–40)             | 28 (10–40)     | 35 (8–40)      | 34 (8–40)    | 36 (9–40)   |
| >10 (80)     | 17 (5–23)                | 19 (5–25)      | 20 (15–24)     | 20 (14–25)   | 20 (5–25)   |
|              | 89.0 ± 17.07             | 93.26 ± 14.71  | 104.38 ± 11.2  | 105.96 ± 13.51 | 107.22 ± 13.56 |

Note. *k* = Kruskal Wallis Test.

### Table 9. Applied Seafarers’ Professional Commitment Scale.

**Showing effort**

1. By working as a member of the maritime profession, I think I can fulfill my goals in my life.
2. By working as a member of the maritime profession, I think I can make it happen.
3. Discussing what I have learned in the maritime industry with my friends I like.
4. I believe maritime is the best profession for me.
5. Telling my relatives it is an excellent job.
6. I see myself as a member of the maritime profession.
7. I will make my effort and involvement effects for the future development of maritime.
8. Most of my time will be spent on my future maritime career.
9. I will be a seafarer in my life.
10. I think maritime is a valuable profession.
11. I like discussing maritime with other seafarer and maritime professionals.
12. I will try to get a higher education in the future.
13. I will work as a seafarer in the future or go abroad for my carrier.

**Professional membership**

14. Deciding to go to another country or to pursue further education. If I give, I will choose another profession.
15. I am not too fond of the maritime profession.
16. I am ashamed to tell people that my profession is a seafarer.
17. If I get the opportunity, I will change my maritime profession.
18. The decision I made while choosing to seafarer as a profession I think it was wrong.
19. I think the maritime job is meaningless.
20. I think members of the maritime profession have low social status.
21. I think development in nursing is limited.

**Goals and values**

22. Maritime profession is a holistic science and art statement. I agree.
23. Development of maritime as a professional profession, I think it will affect my future.
24. Helping people by practicing the maritime profession because I feel like an important person.
25. I think the maritime profession has essential contributions to the public.
Discussion

In the study, the differences between the level of professional commitment of Generation Y were measured by various variables. As a result of the research, it was seen that the professional commitment level of the Generation Y is at a high level. It was a valid, reliable, and useful scale for seafarers to be used after subtracting statement 25 from the scale form applied to healthcare workers. Although many studies have been done in the literature, it has been observed that the reviews on human resources management and organizational management are limited. The study is based on survey responses from a sample of 1,309 seafarers taken from the Swedish Register of Seafarers. The occupational commitment levels of young seafarers were found to be low in the long-term study. Many factors, such as cultural differences, nationality, conjectural developments, and status, can influence the professional commitment level. The fact that the study in Sweden was conducted in 2010 shows that the young population is a sample of the Generation X. Hult (2012) found that the occupational commitment otherwise increases with age, and seafarers in the oldest category appear to find the seafaring life unproblematic.

There may be many reasons for the high level of professional commitment among the Generation Y. In the findings of the research, significant differences were found according to the high school graduates, the undergraduate program graduated from, and the planned study years. It is seen that the education received can be determinant in the high level of professional commitment of Generation Y. The studies of Generation Y employees are a prestigious job and expressed that they preferred to be a free study (Kuram, 2018). Seafarers’ profession is a profession with prestige in the lucrative observed, and society in Turkey also offers flexibility than by other sectors according to work with partial contracts. The maritime job that Generation Y expects from a profession may overlap.

Concluding Remarks

In the studies conducted on professional commitment in the literature, it has been stated that a lack of professional commitment in employees has negative effects on work life. No research is carried out on professional commitment in the maritime sector in the literature. Particularly, individuals from Generation Y, who are known to have low levels of job commitment, started to work in the maritime sector as in other sectors. Therefore, the Generation Y workforce constituted the sample of the study. The scale developed to measure professional commitment levels of new graduates in the health sector was used in the study. Developed by Lu et al. (2000), the scale which consisted of three sub-dimensions of Showing Effort, Professional Membership, and Goals/Values and measured the level of professional commitment which develops as a result of education, effort, and experience were applied to Generation Y employees in the maritime sector. Cronbach’s Alpha values total factor loads were found to be .90 for the sub-dimension of Showing Effort, .91 for Professional Membership, and .69 for goals and/or values. Cronbach’s Alpha values show that the scale is reliable. As a result of the reliability, validity, and exploratory factor analysis, Question 25 was removed from the scale because it had load factors below 0.10 in the reliability analysis and .30 in confirmatory factor analysis. Following the reliability and validity analyses, the scale was tested with the Kruskal Wallis Test in terms of profile variables. According to the results of this test, significant differences were determined in the dimension of total professional commitment and all sub-dimensions in terms of high schools and departments the participants graduated from and planned years of working at sea. It was found that professional commitment levels differ significantly in high schools they have graduated from. It was also determined that the graduates of Maritime Transportation Management Engineering (Deck Department) had higher levels of professional commitment compared to the graduates of other departments. One reason for the high level of professional commitment of the graduates of this department could be that graduates of other departments have lower levels of professional commitment resulting from the fact that they can find employment on the land and career opportunities in other sectors. And, the high level of professional commitment of deck department graduates can be explained by the fact that these graduates have the chance to be the captain of the ship at later stages of their careers and that being a captain is prestigious in the society. The shipmasters are the absolute authorities on the ships, which makes it all the more prestigious to study in deck department. No significant differences were found in the profile variables of gender, place of birth, type of ship they work on, and reasons for choosing the profession. Professional commitment has positive effects on many work-related attitudes and behaviors. For this reason, it is highly crucial for the management of ships. In recent years, managing the ships safely and preventing ship accidents have been on the agenda of the professionals of the maritime sector. In the research conducted by IMO, it was found that 80% of ship accidents are due to human error. Despite technological advancements, the importance of human factors in the maritime sector has been on the increase. Especially, seafarers in officer class play a significant role in the management of ships and fleets. Safe and quality ship management can be ensured with officers who have high levels of professional commitment. Research shows that professional commitment positively affects job satisfaction, motivation, well-being, and organizational commitment. In the study, it was determined that Generation Y seafarers had higher levels of professional commitment than expected.

Recommendations for Future Studies

Further studies can be conducted on the factors affecting Professional commitment and variables affected by Professional commitment. In studies carried out on seafarers, a variety of issues can be clarified such as commitment,
motivation, individual well-being, communication, team management, and leadership, which predict professional commitment or predicted by professional commitment. Thus, healthy career planning can be achieved. Management of human resources appropriately is directly related to correct career planning. Issues related to human factors are important for safety and quality management in the maritime sector. Research on the factors affecting the career development of new generations will enable individuals and institutions to make suitable career planning.

Declaration of Conflicting Interests

The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author received no financial support for the research, authorship, and/or publication of this article.

ORCID iD

Aziz Muslu ID https://orcid.org/0000-0002-3496-1374

References

Abasilim, U. D., Gberevbie, D. E., & Osibanjo, O. A. (2019). Leadership styles and employees’ commitment: Empirical evidence from Nigeria. SAGE Open, 9(3). https://doi.org/10.1177/215824401986628

Albdour, A. A., & Altarawneh, I. I. (2014). Employee engagement and organizational commitment: Evidence from Jordan. International Journal of Business, 19(2), 193–212.

Alli, B. O. (2008). Fundamental principles of occupational health-carrier and safety. International Labour Office.

Aslan, Ş. (2008). Investigation of the relationship between organizational citizenship behavior and commitment to organization and profession. Journal of Management and Economics, 15(2), 163–178.

Asyalı, E. (2015). Bridge and engine room resources management. Beta Publications.

Bagraim, J. J. (2003). The dimensionality of professional commitment. Journal of Industrial Psychology, 29(2), 6–9.

Balay, R. (2000). Organizational commitment in Manager and teachers. Nobel Publication Distribution, Publication No: 206.

Baysal, A. C., & Paksoy, M. (1999). Meyer-Allen model in a multi-sector. Research on the factors affecting the career development. Issues related to human factors are important for safety and quality management in the maritime sector. Hacettepe University School of Health Sciences Journal of Nursing, 18(1), 28–40.

Blau, G. J. (1985). The measurement and prediction of career commitment. Journal of Occupational Psychology, 58(4), 277–288. https://doi.org/10.1111/j.2044-8325.1985.tb00201.xC

Blau, G. J., & Lunz, M. (1998). Testing the incremental effect of professional commitment on intent to leave one’s profession beyond the effects of external, personal, and work-related variables. Journal of Vocational Behavior, 52, 260–269. https://doi.org/10.1006/jvbe.1997.1601

Broadbridge, A. M., Maxwell, G. A., & Ogden, S. M. (2007). Experiences, perceptions and expectations of retail employment for generation Y. Career Development International, 12(6), 523–544.

Brown, S., Carter, B., Collins, M., Gallese, M., Giffin, G., Greer, J., Griffith, R., Johnson, E., & Richardson, K. (2009). Generation Y in the workplace. The Bush School of Government and Public Service Texas A&M University. http://nslw.org/generation_y_pdf

Çakır, Ö. (2001). Affecting factors of work commitment. Seçkin Publishing.

Carson, K. D., & Bedian, A. G. (1994). Career commitment: Construction of a measure and examination of its psychometric properties. Journal of Vocational Behavior, 44, 237–262.

Çatinkaya, A., Özmen, D., & Temel, A. B. (2015). Investigation of professional commitment of the newly graduated nurses. DEUHFED, 8(2), 54–60.

Cohen, A. (2000). The relationship between commitment forms and work outcomes: A comparison of three models. Human Relations, 53(3), 387–417.

Cohen, A. (2003). Multiple commitments in the workplace: An integrative approach. Lawrence Erlbaum Associates.

Dorenkamp, I., & Ruhle, S. (2019). Work–life conflict, professional commitment, and job satisfaction among academics. The Journal of Higher Education, 90(1), 56–84. https://doi.org/10.1080/00221546.2018.1484644

Dorenkamp, I., & Weiß, E.-E. (2018). What makes them leave? A path model of postdocs’ intentions to leave academia. Higher Education, 75, 747–767. https://doi.org/10.1007/s10734-017-0164-7

Esencan, T. Y., & Özdı, H. (2017). Evaluation of professional commitment of nurses in generation X and Y. Ege University Journal of Faculty of Nursing, 33(3), 91–104.

Estimo, E. T., Garcia, E. V., Araya, Z. B., Flores, K. M., Estrabo, S. V. P., & Lacson, J. B. (2020). Millennial seafarers as today and tomorrow’s generation of marine officers: Implications and future directions. Journal of Shipping and Ocean Engineering, 10, 18–28. https://doi.org/10.17265/2159-5879/2020.02.002

Goswami, S., Mathew, M., & Chadha, N. K. (2007). Differences in occupational commitment amongst scientists in indian defense, academic, and commercial R & D organizations. Vikalpa, 32(4), 13–27.

Gürbüz, S. (2015). Generation differences: Myth or reality? Work and Human Magazine, 2(1), 39–57.

Hoff, T. J. (2000). Professional commitment among US physician executives in managed care. Social Science & Medicine, 50(10), 1433–1444. https://doi.org/10.1016/S0277-9536(99)00410-4

Hult, C. (2012). Work, motivation, and commitment. In C. Hult (Ed.), Swedish seafarers ands eafaring occupation 2010: A study of work-related attitudes during different stages of life at sea (pp. 31–50). Kalmar Maritime Academy.

IMO Sub-Committee on Flag State Implementation. (2008). Responsibilities of governments and measures to encourage flag state compliance. Author.
