

# **STRESS MANAGEMENT PROFILE OF FILIPINO SEAFARERS EXECUTIVE SUMMARY**

## **BACKGROUND**

The ship is a unique environment in that it is not only a place of work but at the same time a home to seafarers working on board. Working on ships entails seafarers' absence for a long period away from home. This situation and other conditions on board such as the weather and the crewing arrangement may compound the situation of seafarers aboard ship. This results into various psychological experiences that could lead to psychosocial problems such as stress, alcohol, tobacco and drugs, HIV/Aids, and violence, consequently, affecting their health, well-being and effectiveness in work. Each of these factors is correlated with each other that one problem may either cause another or be the result or effect of another problem. The SOLVE programme of the ILO seeks to address these psychosocial problems in the workplace of other industries. The programme is still finding its way in the seafaring industry considering its unique workplace, the ship. While there is a program to take care of these issues, however, no concrete evidence has been made as to its extent. Focus of researches conducted on seafarers is on accidents and injuries and none or little have been done on the psychological or emotional well-being of seafarers.

The NMP being an advocate of the psychosocial aspect of seafarers was encouraged to investigate on the matter. However, NMP focused on stress which has been singled out to be the causal factor of other psychosocial problems. Moreover, stress has been a major cause of accidents, injuries and diseases at work. Stress could lead to fatigue which has been pointed out as a cause of and/or contributor to human error precisely because of its impact on performance (IMO, 2001). And human error resulting from fatigue is now widely perceived as the cause of numerous marine casualties, including one of the worst maritime environmental disasters in the last century, the Exxon Valdez. Thus, stress should be dealt with to prevent harm to the person, his environment and other people.

While it is said that work at sea is a predisposing factor to stress and its consequences, Filipino seafarers continue to dominate in the international seafaring community. They comprise about 28% share of the workforce serving on commercial ships. This would suggest that they are able to stand the pressures of life at sea. Towards this end, the NMP conducted this exploratory study to generate information on the sources of stress of Filipino seafarers on board ships and the coping mechanisms employed to minimize the impact of stress. This information will then be used to highlight the good practices/strategies in managing stress on board with the end view of boosting the quality of Filipino seafarers in the international labour market.

Specifically, the study pursued the following objectives:

1. determine the sources of stress of Filipino seafarers;
2. identify the different manifestations of stress among Filipino seafarers;

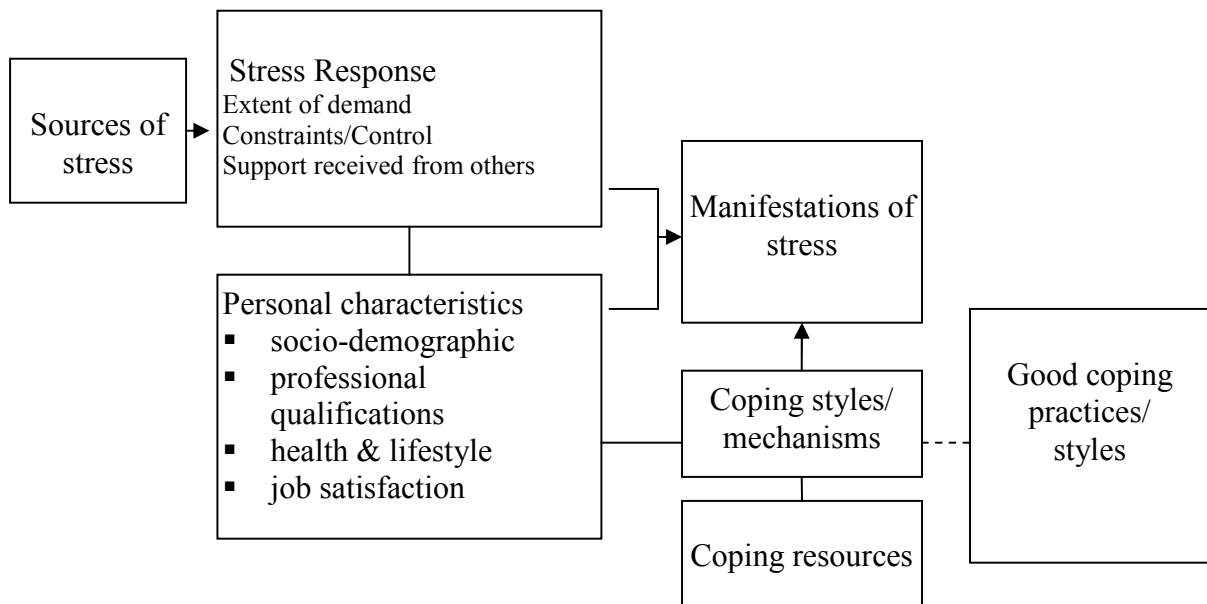
3. identify the coping styles/mechanisms employed to manage and/or minimize stress;
4. determine the different coping resources on board;
5. establish the relationship of the different variables; and
6. propose program interventions addressing stress based on the findings.

## METHODOLOGY

Data for the study were gathered through a survey questionnaire administered to Filipino seafarers in shipping/manning companies and maritime training centers from August to September 2005.

A total of 1,988 valid questionnaires were retrieved representing 1.04% of the total population of the study (190,569 Filipino seafarers in the deck, engine and catering categories deployed for 2004). The respondents came from 61 (18% of 338) shipping and manning companies and 15 (94% of 16) maritime training centers.

### Study Framework



The study adopted the Job Demand-Control-Support Model of stress which proposed that psychological strain is a product of the combination of the work situation an individual is exposed to, the amount of freedom available to make decisions at work and the amount of support received from other people (Smith et al., 2005). This research is anchored on the premise that when people are confronted with demands from others or his environment to which they feel unable to adequately respond, a stress reaction is activated. The nature of the stress response would depend upon a combination of different factors including the personal characteristics of the person. To maintain a

balance between these factors, a coping mechanism or strategy is employed which could be dependent on the personal characteristics of the person and the resources available. These factors may intervene to strengthen or weaken the impact to the person. The stress response will be demonstrated in terms of the manifestations of stress that could have both negative and positive effect on the person.

With this, the study is expected to provide information on the good coping practices/strategies employed by Filipino seafarers that make them endure the pressures on board which could be used to boost their quality of employment in the international labour market to make them more competitive with seafarers from other countries.

## **HIGHLIGHTS OF THE STUDY**

### **Personal Characteristics/Profile of the Respondents**

#### *A. Socio-Demographic Profile*

Of the respondents, 645 or 32% are officers while 1,343 or 68% are ratings. A majority of the respondents are under 40 years of age, married (71%), and have dependents. Respondents are serving on board bulk carrier (35%), tanker (26%), and general cargo (25%) vessels. Majority of the respondents (52%) are earning P50,000.00 and below per month.

#### *B. Professional Profile*

In terms of the respondents' professional profile, they have the appropriate education for their profession, being graduates of maritime courses (86%). As to license, most of the respondents have merchant marine officer's license and were currently holding positions either equivalent to or lower than the license they held. They have attended trainings and have served at sea for one to ten years (71%).

#### *C. Health and Lifestyle*

##### Health

In terms of health status, the study's findings showed that respondents were in good health condition with almost all of them did not have any illness and have not been hospitalized for the last five years. However, for those who have certain illness, problems with the eyes/vision and hypertension were common. Elevated blood pressure, diabetes and heart ailment were likewise identified by respondents as the illnesses contracted by their immediate family. The respondents described their overall state of health as good to very good.

## Lifestyle

As to their lifestyle, respondents were practicing a healthy lifestyle on board – they do not smoke, drink in moderation, do exercise, have fair to good sleep, and spend some time for relaxation.

## **Sources of Stress of Filipino Seafarers**

The four most identified clusters of stressors are the following: Combination of stressors (27%), Home and work interface (20%), factors intrinsic to the job (14%), career development and job status (9%). The results confirm that stress, indeed, have multi-causal origins.

### 1) *Combinations of the clusters of stressors (26% or 458)*

At least a **combination** of two stressors was putting pressure on seafarers as indicated by 26% of the respondents. However, there was no discernable pattern as to the combination of these stressors since they highly varied. These findings suggest the need to analyze stress not by looking at each single stressor but by a holistic approach. *This picture or scenario of having a combination of stressors is quite true in the sense that a person's stressor does not come from a single factor alone.* It is usually a combination of stressors which further compound the effect on the person.

### 2) *Home and Work Interface (20%)*

Situations relating to **home and work interface** were the source of stress for 20% of the respondents. This cluster is more of a stressor to the ratings (21%) than to officer-respondents.

The need to adapt from life at sea to life on shore at the end of each period of service was cited by maritime health experts as probably the most significant psychological load that seafarers put up with.

In looking into the details in terms of the degree of pressure experienced by respondents, data revealed that both officers and ratings have high level of stress from being *concerned with their loved ones ashore and stability or dependability of home life.* Several literatures underscore that the stability and dependability of home life are, to a large extent, associated with the economic nature of seafarers' employment. This is especially true with Filipino seafarers, where the terms of employment, being contractual, lack the desired security of tenure, hence the burden about the next contract and future income, considering the many dependents they have to support. Comparatively, these pressures affect senior officers less, being more permanently employed than the junior officers and ratings who have no such security.

Officer-respondents alone have high level of stress from *not having enough time with their family/children/ spouse*.

Reasons for anxieties in home and familial concerns may include: 1) not being able to participate in rearing the children and not seeing the rapid changes that take place during the children's growing up years, where in some cases, these seafarers come home to children who do not recognize them and even regard them as "strangers" (Thomas, 2000). 2) They often miss out significant family events such as birthdays, graduations, first communions, and other special days, and 3) not being able to do anything with the practical and emotional problems of their partners.

### 3) *Factors Intrinsic to the Job* (14%)

**Factors intrinsic to the job** were identified by 14% of the respondents as another cluster of stressors. More officers (18%) than rating-respondents (12%) indicated their perceived stress to come from this group, more likely because of the fact that while the master and other officers may have greater control of situations on board, they are themselves also isolated and subjected to the direct pressure of the owners, port operators and authorities. In addition, systems of management and audit, increasingly introduced from shore as results of international regulations, have to be followed by officers and any incidents or damage are viewed as their personal responsibility, irrespective of whether the imposed workload is a tolerable one.

A more detailed analysis of the survey results, in terms of the extent of pressure, showed that both groups of respondents perceived a high degree of strain coming from *having too much work to do* and *doing routinary works* on board. The result confirms the *high workload* of seafarers which previous studies have already identified as a source of stress to seafarers. Other factors include crew shortage and dual work or assignments especially in automated ships. Additional paper works and the additional roles/responsibilities brought about by new regulations like the ISM and ISPS Codes that seafarers have to deal with may be contributory factor to the high workload of seafarers.

The high demand and low control features of work at sea were seen to be classic predisposing factors to stress and its consequences. The conflicts between their perceived role as seafarers who navigate and sustain a vessel in often difficult circumstances and the demands from shore for paper work and excessive accountability were seen as potent stressors. They are expected to protect owners and insurers against liability that often even extends beyond the ship.

*Having to keep up with new technologies, innovations and techniques in performing their job* was a major stressor to ratings (2.50) than to officer-respondents. The plethora of information from a variety of systems on board brought by modern technology has caused information overload and confusion to seafarers such that if

they are not properly trained or acquainted with the operational parameters of any one of these systems. Hence, there is a need for seafarers to be trained on new technology and equipment before they join a vessel. Rating-respondents who are less experienced and have less exposure to these technologies suffer more from this situation. Nonetheless, officers or ratings alike have to be trained on these new technologies on board to be able to efficiently and effectively carry out their duties and to be at par with seafarers from other nations.

The pattern of constant or intermittent time pressure, usually dependent on the vessels' type of trade and the frequency of docking, are other important stressors intrinsic to the job.

#### 4) *Environmental Conditions*

More of the ratings (12%) than officer-respondents (10%) reported their perceived stress as coming from environmental conditions on board.

Both respondents identified *experiencing bad weather, rough seas, and exposure to vapors, fumes, dusts, or other dangerous substances and radiation* as putting high level of stress on them. In addition, the pressure of *working in a hot environment* was also high for rating-respondents only.

### **MANIFESTATIONS of STRESS AMONG FILIPINO SEAFARERS**

Stress among seafarers, the survey results revealed, is manifested through the following symptoms:

1. **Physical symptoms** such as *feeling tired or exhausted (fatigue)*, which may be induced by factors such as prolonged period of mental or physical activity, inadequate rest, adverse environmental conditions, stress or other psychological factors. In this present study, *fatigue* could be the result of the high workload of respondents on board. In addition, the lack of sleep due to sleep disruptions and inability to go to sleep contribute to the existing fatigue suffered by the respondents.

Another physical symptom is *sleeping with disruptions*. This could be attributable to factors such as environmental like the ship's violent movement, weather, heavy vibration, noise or poor accommodation, food and consumption of chemicals, such as alcohol intake and coffee, stress, and on-duty responsibilities that result to disturbed circadian rhythms. Research has shown that the irregular and extended working hours and the need to sleep light in order to listen out for alarms (Thomas, 2000) also contribute to difficulty in sleeping.

Other physical overt reactions common to both officer- and rating-respondents include: being unable to go to sleep, sweating or perspiring, headaches and back pains and loss of appetite. Indigestion was manifested by officers alone.

2. **Relational Symptoms**, which are anti-social behaviors displayed by a person in stressful situations that can affect their relationships with family, friends or co-workers, were likewise manifested by 19% of the respondents.

Both officer- and rating-respondents (20%-officers and 18%-ratings) indicated having relational reactions to stress (sometimes). Symptoms under this cluster include *withdrawal from socializing with other crew, becoming very angry, and losing interest in normal activities.*

- 3) **Emotional Symptoms** is the third group of symptoms manifested by 13% of the respondents.

*Smoking more than the usual* was the emotional reaction of officer-respondents that garnered the highest mean score, while *feeling of anxiety* had the highest mean score for rating-respondents. Increased smoking of officers could be related to the stress from the job that the position demands especially for senior officers who make majority of decisions on board. The feeling of anxiety of rating-respondents is caused or exacerbated by situations of work overload that is characterized by the lack of means to respond and lack of support from senior officers and other workers.

The *tendency to make mistakes, depression, frustration, and poor concentration* were among the other manifestations by respondents when faced with stressful events.

## **COPING STYLES/MECHANISMS Employed to Manage and/or Minimize Stress.**

### **Coping Mechanisms/Strategies**

There is a range of constraints at sea which may influence the ability of people to adopt coping strategies to reduce or remedy pressures. When respondents were asked on the coping mechanisms employed to manage or minimize stress, their responses were categorized into task-oriented, emotion-oriented and diversion-oriented. Majority of the respondents (58%) identified **emotional or spiritual coping strategies**. Specifically, both group of respondents *always* resorted to *talking to friends* when confronted with stressful situations. The friends referred to here are their crewmates whom the respondents have established relationships on board. Respondents likewise resorted to *praying*, and *talking to family over the phone* where they find solace in talking about problems over with their families. They also “sometimes” *seek support and advice from superiors and other crews, and control their emotions so as not to let the stress show.*

Emotional/spiritual coping activities were employed more by rating- (62%) than officer-respondents (48%).

**Focusing on work** activities is the second cluster of coping mechanisms utilized by 37% of the respondents and these coping strategies were employed more by officers (47%) than rating-respondents (33%). Topping the list in this second cluster of are coping behaviors that include: *Planning activities in advance, managing time effectively, and looking for ways to make work more interesting.*

### **COPING RESOURCES On BOARD**

When asked about coping resources available on board and how frequent they have availed of or used by them, respondents identified the following:

**Activities/services**, which included: **Regular meeting** (Mean Frequency = 2.52) conducted on board as identified by 95% of respondents; **Parties** held on board on **occasional** basis engaged in by 93%; **occasionally** (2.24) engaging in **sending text messages** (90%); **visits to ship by family members** (55%), which was **seldom** (1.54) availed of by them; **occasional voyages with families**, as identified by 43%, which respondents indicated, however, that they **never** availed of this privilege/opportunity given to them.

*Facilities* were likewise provided on board. However, respondents **occasionally** use them for lack of time to do so. Respondents have identified:

- **Entertainment and educational facilities** such as *television, movie video, magazines/ books.*
- **Sports and games facilities/equipment** which included a *basketball court, table tennis, board games, play cards* and a *gym.*
- **Communication facilities** such as *satellite phone, internet and email facilities.* However, access to these facilities is usually accorded to officers only.

### Stressors, Signs/Symptoms, Coping Mechanisms

This study also looked into the specific signs/symptoms, and coping mechanisms the respondents employ for each cluster of stressors. The correlation analysis revealed a significant relationship between **symptoms of stress and coping mechanisms.** (to determine the relationship of coping mechanisms utilized by respondents exhibiting certain symptoms of stress)

### Coping Mechanisms and Resources on Board

Likewise, the correlation analysis revealed that *coping mechanisms of respondents* and the *resources on board* are correlated.

### Profile Variables and Sources of Stress

The relationship between the profile variables and the stressors was established to determine if certain characteristics of respondents are related to the stressors. From among the profile variables, *age*, *rank/position*, and *exercise* have a significant relationship to the stressors of respondents.

#### Profile Variables and Symptoms of Stress

The relationship between the *profile variables* and the *symptoms/signs of stress* was established to determine which certain characteristics of respondents are related to the symptoms/signs of stress manifested them. Profile variables such as *vessel category*, *alcohol drinking*, *sleep*, and *relaxation* were found to be associated with the symptoms/signs manifested by respondents.

#### Profile Variables and Coping Mechanisms

The correlation analysis between profile variables and coping mechanisms revealed that *education* had a relationship with the coping mechanisms employed by respondents in reducing their stress at sea.

## CONCLUSIONS

Data from this research gave insights into the lives of seafarers while at sea - what aspects of their job are putting pressure on them and how they cope with these situations on board.

Respondents have multiple stressors and these stressors operate in combination with others which can adversely affect the seafarer's health and well-being. The study identified *home and work interface* as the major stressor to respondents. The nature of the seafaring job that takes seafarers away from home for long period of time causes anxieties to seafarers. Showing concern to their loved ones ashore such as not having enough time with them illustrate how much Filipinos value their families. The importance of the father as head of the family is also emphasized in the study where the stability of the home is put at risk while the head of the family is not around. These home and work anxieties could have severe impact on the emotional health of seafarers. Another major source of their stress on board is the cluster on *factors intrinsic to their job* as seafarers such as *having too much work to do*, *doing routinary works*, and *having to keep up with new technologies, innovations and techniques in performing my job*.

Despite of these stressors, life at sea continued for the respondents. The study found that positive ways to reduce stress were employed by respondents. Basically, their *support networks* such as their friends and families proved very helpful in coping with stressful situations. The friends referred to here are the crewmates whom the respondents have established relationships on board. Though on board relationships are mere acquaintances yet respondents seemed to depend on them for emotional support.

Respondents also find solace in talking their problems over with their families. Research has shown that seafarers reported turning to their partner exclusively for support and often relied on them for assistance, be it personal or emotional problems. However, the drawback of calling the family ashore is the high cost of communication. Activities *focusing on work* also helped the respondents cope with stressful situations on board. These coping strategies employed by the respondents enabled them to stand all the pressures at sea. Despite of the pressures from home and work, respondents managed to focus on their job primarily because their purpose of being onboard is to work and not for anything else. These coping strategies employed by the respondents enabled them to stand all the pressures at sea.

The issue of stress at work needs to be addressed by the maritime industry not just because of lost man-hours and potential tribunal actions but these could be source of personal injury claims in the future. Prevention of stress-related illnesses is not the sole responsibility of seafarers. There are conditions in the workplace that are beyond the control of seafarers which would need the intervention of employers. There is therefore a need to have education and preventive measures in place in the work condition.

## RECOMMENDATIONS

The findings of the study suggest that a number of interventions have to be taken to address the issues raised.

### Employers

#### 1. **Institute appropriate changes in the work condition.**

- a) Employers should consider how overload could be reduced by simplifying procedures and ensuring that crewing levels are adequate to perform the tasks that are required.
- b) Improve security of employment of seafarers through a mechanism by which they could secure a fulfilling career at sea. In tandem with this recommendation, employers need to review the periods of maximum continuous service at sea at any given tour of duty or voyage, to mitigate the negative effects of stress and other psychosocial problems associated with long periods of separation from home and family.
- c) Provide programmes that raise the awareness of and provide advice to all seafarers on the ill-effects of stress and other psychosocial factors to health and performance as well as support to individuals who are identified as at risk of developing psychosocial health problems.
- d) Provide adequate hand-over time for seafarers to get familiarized with new technology or equipment each time one is fitted on board, preferably as an understudy at first under an expert, and giving him/her full responsibility to operate the equipment or use the technology only when he/she has mustered confidence to do the task alone.

- e) Implement strict compliance to rules/regulations on the wearing of safety gears/gadgets to protect seafarers from the risks associated with exposure to vapors, fumes, dusts or other dangerous substances and radiation.
- 2) In view of the important role that support networks play in helping seafarers cope with stress on board, it is recommended that such **support networks of seafarers be strengthened** by/through:
- a) Providing access to **inexpensive communication facilities** such as internet and email and/or subsidized or free ship-shore communication to maintain regular communication of seafarers and their families, not only to officers but to the whole crew, regardless of their position on board.
  - b) Employers of Filipino seafarers could follow the example of China in establishing websites and discussion forums dedicated for seafaring communities, which could provide opportunities for seafarers and partners as well as their families to discuss their everyday concerns or problem. Being involved in the websites or discussion forums become a leisure activity that could help seafarers kill lonely time (Tang, L., 2007), as well as provide emotional comfort and informational support to each other.
  - c) Development of family centered programs, to attract more seafarers as well as to retain them in the profession, such as :
    - ✚ **Organization of wives or families** to provide opportunity to make acquaintances and socialize with other seafaring families;
    - ✚ **Company support** in terms of repatriation of seafarers to deal with family problems/crisis;
    - ✚ Increased opportunities for **occasional voyages with families and visits to ship** to provide more opportunities for families to be with the seafarers. This allows couples to spend quality time together and promotes greater understanding of the seafarers' life at sea.
    - ✚ Development of **stress awareness program** for seafarers and their families (possible sources, manifestations and stress-reduction techniques especially that medical personnel are not on board. They should be made aware of the consequences of the manifestations/signs of stress that can adversely affect the health and well-being of seafarers.)
  - d) Allow seafarers to sail with the same crew to enable them to establish close relationships where they get support especially when faced with emotional problems.
  - e) Provide and/or strengthen activities (such as *parties, group activities* - be it recreational or work-related) that offer opportunities for social interaction on board, in view of findings that social interaction with co-worker is a way of getting rid of their stress.
  - f) Provide facilities for mental, social and physical stimulation on board in order to lessen the passivating effects of institutional living.
- 3) Incorporate in the PDOS information on possible stressful conditions on board, how stress is manifested and the remedial measures that have to be taken. Likewise,

introduce the resources in place on board so seafarers may be able to utilize/avail them.

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#### Seafarers

- 4) maintain a healthy lifestyle on board to minimize the risk of developing diseases especially that life on board exposes them to multiple stressful conditions.
  - Minimize smoking
  - Minimize drinking
  - Eat healthy foods and maintain a balanced diet
  - Get enough rest
  - Have a deep and uninterrupted sleep

#### Maritime Institutions

- 5) Incorporate in the existing curriculum awareness on or familiarization with current technologies used on board to prepare the cadets for their shipboard training.

#### The Government (OSHC)

- 6) Provide assistance to employers in terms of the development of programs or the conduct of trainers' training focusing on the prevention of work-related illnesses and diseases.
- 7) Develop and disseminate information materials intended for seafarers to enhance their knowledge skills and attitudes on occupational safety and health matters.

#### Future Researches

- 8) Considering that this is just an exploratory study, the results could serve as a springboard for a more in-depth study on the stress of seafarers such as one focusing on specific cluster of stressor of seafarers boarding a specific vessel.
- 9) The correlations generated between the different variables could be validated in future researches.
- 10) Impact on the seafarers and their families of the transition from home to work, and work to home could be another area of research in the future.