

An Exploratory Study of the Effects of Mobile Phone Dependency on Maritime Safety

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Abstract : Safety at sea continues to be an important topic for research. The factors that contribute to safety issues are often complex and unclear. Lack of non-technical skills in such areas as communication, team-working, situational awareness, decision making etc. are well documented as directly affecting safety in high risk work settings such as on board merchant vessels. Competence in non-technical skills can be affected by various habits and circumstances that influence a worker and result in either positive thinking and behaviour or negative thinking and behaviour. Negative thinking can cause stress, anger, frustration; loneliness etc. and this can possibly result in behaviour or actions that undermine the safety of crew and ship. Factors that may contribute to these negative thoughts and behaviours are many and varied and this paper will be looking at one aspect: mobile phone use.

In the Republic of Korea, dependency on mobile phones is uniquely high. Maritime students are also susceptible to such dependency and this paper will demonstrate that the symptoms associated with mobile phone addiction and dependency, and in particular the symptoms of withdrawal, are important factors that need to be mitigated in order to improve safety at sea. Although the benefits of mobile phones are many it will be suggested that over-reliance, dependency or addiction can result in negative thinking or behaviour that may directly or indirectly contribute to the factors that cause incidents and accidents at sea. It will be suggested that the most appropriate method of dealing with this problem is twofold: firstly, through training at the educational level and secondly, by encouraging the shipping industry and government to invest more into providing seafarers with better access to the communication methods that they are used to on shore in order to improve work conditions.

Key words: Maritime Safety, Mobile phone, Dependency, Personality

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Introduction

Problem Statement

Safety at sea continues to be of major concern. The purpose of this study is to determine the extent that current mobile phone use may have on causing safety issues on board.

Research Questions

1. How reliant / dependent are future shipping employees on their mobile phones?
2. Are there differences between the younger and older generation of seafarers in relationship to technology and social networking?
3. How do future seafarers react when they are not able to use the mobile phones freely?
4. Has technology, such as the mobile phone, helped to improve a seafarers communication skills or not?
5. How do future seafarers feel about not being able to connect using their mobile phones when at sea?
6. Is there a correlation between the emotional / mental reaction to being without a mobile phone to the stress etc. that could be a catalyst for causing an accident or mistake while at work?

Context

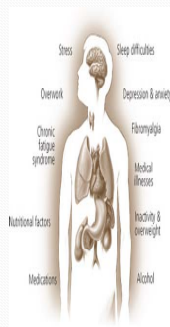


Context:

The maritime industry considers safety at sea to be paramount. There are many possible factors affecting safety and it has often been assumed that advancing technology should improve safety. While this may be true in terms of onboard equipment this paper looks at whether a reliance on technology (mobile phones) or over-reliance can in fact contribute to safety issues.

Maritime safety has recently been focused on Human Factor. The importance of crew learning Non-technical Skills (Author: Rhona Flin.) to complement their theoretical and practical knowledge is slowly being realized. At the same time, there is evidence to show that people, especially the younger generation, see mobile phone use as essential and not optional. If the young person is deprived of this technology, sometimes for just a short period of time, their stress levels and other psychosomatic symptoms have been shown to develop. This study hopes to show a possible correlation between accidents at sea that may be caused by stress, distraction etc. that may have their roots partly in the withdrawal symptoms of mobile phone dependency.

Context Continued: Although research has been done on the social and emotional wellbeing of seafarers and the need to develop non-technical skills, there is at present little or no research that has aimed to discover possible reasons for the emotional states that cause stress, distraction, short temper etc. of those on board ships other than the immediate environment, the stress of the job, separation from family and friends etc. Prior to boarding a person or a ship master may have no idea the extent of MP dependency and the possible effects that not having access may result in.



If the research reveals that dependency on mobile phone use can cause withdrawal symptoms when unavailable and that in turn contribute to safety issues, then the results would provide the industry with valuable knowledge about the mental and emotional states of their ship operators. This is essential when working in such a high value and high risk industry. Personal assessments of potential employees could then include such knowledge in the hiring process. Also, at the educational level future seafarers could be taught coping mechanisms through environmental / stress training that would allow for self-awareness about the mobile phone dependency and the effects that this could have when at sea for long periods of time where no personal communications are as yet possible.