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Mental health interventions for international seafarers during the COVID-19 Pandemic : a pilot study

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EXECUTIVE SUMMARY

The ongoing COVID-19 pandemic has highlighted the key role that seafarers play in the global supply chain. As the pandemic took hold in early 2020 a significant crew change crisis unfolded globally due to border closures, strict quarantine requirements and a faltering vaccination rollout. In normal times the mental health of seafarers has been recognised as crucial to their wellbeing and safety at sea. Stranded aboard their vessels and with an unclear pathway out of the pandemic the mental health of seafarers deteriorated significantly driving some to suicide.

With 400,000 seafarers stranded at sea at one point, the issue was framed as an ongoing humanitarian crisis. Stakeholders within the maritime industry including companies and non-governmental organisations (NGOs) responded by providing mental health and psychosocial support typical of crisis intervention aiming 'to protect or promote psychosocial wellbeing and/or prevent or treat mental disorder' as defined by the IASC Guidelines on Mental Health and Psychosocial Support in Emergency Settings.

However, it is unknown which of these measures are available to seafarers, and perhaps more importantly, which interventions they believe are most beneficial to their mental health and wellbeing. These are the questions our study explored. In this report, we present our findings and analyse the psychosocial or mental health interventions that seafarers have experienced, as well as how these measures are perceived in the context of the ongoing pandemic. We can evaluate individual intervention measures and provide policy recommendations based on this data.

The study used a mixed methods approach, beginning with a qualitative in-depth interview of various key stakeholders to identify what psychosocial or mental health interventions were provided to seafarers. From these interviews, the team used thematic analysis to draw out a list of interventions provided to or used by seafarers. The list was used as the basis for the development of an online survey. The final questionnaire ran online for two and half months from early-July to mid-September 2021, and was available in four languages (English, Chinese, Tagalog, and Japanese).

For the in-depth interview, 26 interviewees participated from various countries. Interviewees were either seafarers, spouses of seafarers, chaplains, representatives of maritime administration, representatives of shipping or crewing companies, and representatives of maritime schools. There were 1,412 responses to the online survey from seafarers. The majority of the respondents were Filipinos (66.9%), the average age of respondents was 30 years old, and most were male (96.2%). Less than a fifth of the respondents have permanent contracts (19.9%), with a sizeable proportion of seafarers (91.8%) having short-term contracts of 10 months or fewer.

The in-depth interviews yielded 22 different types of support (or interventions). These were divided into two categories: support provided by companies, and support provided to or utilised by other stakeholders (e.g., self, family, colleagues on board, charities or NGOs, and government).

From the online survey, the following results show that:

- All 22 types of psychosocial support were perceived positively by seafarers.
- The most commonly experienced company interventions provided were updates on crew change and COVID-19 (72%), facilitating timely crew change (57%), and providing sufficient and high-quality personal protective equipment (PPE) (53.1%).
- Provisions of family support (21.9%) and increases in recreational allowances (26.2%) were the least experienced company interventions.

- The most common psychosocial support provided by other stakeholders were positive collegial atmosphere on board (76.7%), physical exercise (70.4%), casual counselling amongst crew members (70.3%), and group recreational activities (67.3%).
- Among the psychosocial interventions provided by other stakeholders, meditation (30.5%) and being vaccinated (30.1%) were the least utilised or experienced.
- Overall, only 30.1% of all respondents were vaccinated at the time of sampling. Filipinos, who comprised the majority of the study participants, had a lower vaccination rate (23.7%) than their Chinese counterparts (81.6%).
- Among the interventions provided by companies, the following interventions were perceived to have the most positive impact by seafarers: facilitating timely crew changes (79.8%), the provision of immediate family support (67.7%), increase in Wi-Fi data allowance (63.5%), and provision of sufficient and high-quality PPE (63.3%).
- Interventions that were most positively perceived by seafarers and provided by other stakeholders were communicating with family (87.7%), being prioritised for vaccination (77.6%), being vaccinated (74.1%), and a positive and collegial atmosphere on board (73.7%).
- The results confirm the importance of family life among many seafarers. Company support of seafarers' family, as well as adequate data allowances to enable frequent communication are seen as extremely valuable for seafarers' mental health and wellbeing.

As a result of the study's use of a support-impact matrix to assist key maritime stakeholders in prioritising interventions, we recommend the following to companies:

- Improve efforts to support seafarers' mental health and wellbeing on board such as but not limited to videos, books, or other materials on psychological resilience, self-support, peer counselling, or good mental health.
- Flexibility in adapting to the needs of seafarers during crisis situations.
- Prioritise 'facilitating timely crew changes', the 'provision of immediate family support', an 'increase in Wi-Fi data allowance', and the 'reduction of overtime hours'.
- Ensure that seafarers have access to adequate, high-quality PPE, and promote a safe working and living environment.

We propose the following recommendations to other stakeholders:

- Governments should ensure that seafarers are fully vaccinated against COVID-19.
- Seafarers should be classed as essential, or front line, workers by governments to encourage vaccine uptake.
- NGOs and other seafarer organisations should review and update how they provide spiritual, pastoral and guidance counselling services, prioritising the usage of virtual platforms to effectively deliver support.
- NGOs should find creative and robust strategies to improve the awareness of, access to, and use of mobile mental health apps.
- Stakeholders should support companies to make, implement and strengthen policies to encourage the creation of 'a positive and collegial atmosphere on board' and 'casual counselling or support among crewmembers'.
- Companies should better facilitate 'communication with family' for seafarers.

INTRODUCTION

Researchers and the maritime industry are becoming increasingly alert to the importance of mental health to seafarers' well-being and safety at sea (Pauksztat et al., 2022; Abila & Acejo, 2021; Lucas et al., 2021; Lefkowitz et al., 2019; Sampson & Ellis, 2019). The current COVID-19 pandemic has resulted in a crew change crisis globally due to border closures and other restrictions, which have inevitably exacerbated mental health issues among seafarers. Uncertainties associated with crew changes such as the lack of shore-leave, failure to classify seafarers as front-line workers in some countries (Doumbia-Henry, 2020), and social distancing or quarantine measures at ports (Hebbar & Mukesh, 2020; Stokes & Arslan, 2020) have negatively contributed to the mental health of seafarers (Lucas et al., 2021) and have been identified as drivers of suicide (Marine Insight News Network, 2020; Ramos, 2020).

The issues faced by seafarers due to COVID-19 have been collectively framed as part of a humanitarian crisis. During December 2020, when restrictions were at their most stringent, it was estimated that over 400,000 seafarers were reported to be stranded on ships and were therefore forced to extend their contracts due to crew change problems (Bailey et al., 2021; De Beukelaer, 2021). In other words, the pandemic appears to remind us of the old saying among seafarers that 'the ship is (their) prison'.

As this study is contextualised within the current pandemic, mental health interventions during this crisis could be referred to broadly as part of a crisis or emergency intervention. In crisis intervention, the use of mental health or psychosocial support during, or after, crisis situations has been adopted by various stakeholders (see for example IASC, 2011). The literature describes numerous types of interventions, such as self-help interventions, clinical mental health interventions, and family system interventions. In the context of crisis intervention literature, mental health, and psychosocial support (MHPSS) are meant to 'describe any type of local or outside support that aims to protect or promote psychosocial wellbeing and/or prevent or treat mental disorder' (IASC, 2011: 1). Individuals and communities are affected differently in crisis or emergency situations, so the types of interventions required to support individuals and communities (e.g., cruise ship or cargo vessel crews) must be appropriate and sensitive to their needs.

Previous research and recent reports have made a number of policy recommendations regarding seafarers' mental health issues (IMO, 2021; LRF, 2021; Blackburn, 2020; Sampson & Ellis, 2020). As a reaction to the COVID-19 pandemic and the consequent crew change crisis, stakeholders in the industry have taken various measures to help seafarers combat mental health concerns. Yet, the uptake of these measures by seafarers, and their experiences of them, have not been explored. In this context, this report presents and analyses any psychosocial or mental health interventions seafarers have experienced and how they perceive these measures in the context of the ongoing pandemic. This allows for evaluation of the intervention measures from the perspective of seafarers which can therefore inform policy recommendations.

METHOD

RESEARCH AND DESIGN

This study used mixed methods of qualitative and quantitative approaches. The study began with qualitative in-depth interviews of various key stakeholders (e.g., seafarers, shipping companies, crewing agencies, government representatives, non-governmental organisations, or NGOs, and the families of seafarers) to identify what psychosocial or mental health interventions were provided to seafarers. From these interviews, the team used thematic analysis to define a list of interventions provided to or used by seafarers. These interventions were used to develop an online survey, which was pre-tested. The final questionnaire contained 63 questions available in four languages (English, Chinese, Tagalog, and Japanese) and was hosted online using a paid licensed version of QuestionPro, a web-based software for online surveys. The online survey was designed to be simple to navigate and took approximately 10-15 minutes to complete. Data collection lasted for two and half months from early-July to mid-September 2021.

The study participants were recruited using convenience sampling and snowballing techniques. The survey was promoted in various countries by maritime schools, training centres, seafarers' unions, and other organisations. The study also used social media platforms (such as Facebook, Messenger, and Twitter) to disseminate information and recruit participants; informed consent of participants was required before participation. All responses were completely anonymous to ensure confidentiality and reliability of data.

The final survey data were exported to IBM SPSS Statistics 28.0.0 for analysis. SPSS was used to produce frequency tables, calculation of mean values, and conduct Chi-square tests.

Psychosocial Interventions and Perceptions of their Impact

There were 22 distinct psychosocial interventions identified (presented below). In the survey, questions focused on the availability of interventions provided by companies or other stakeholders were answerable by either 'yes' or 'no' or frequencies. The perceptions of seafarers regarding the impact these psychosocial interventions had on their mental health and wellbeing were also collected. The possible answers to the perception questions were (a) a great deal, (b) some (c) not much, (d) not at all (e) don't know/cannot say.

Participants' Socio-Demographic Profile

For the in-depth interview, 26 interviewees from Brazil, China, India, Jamaica, Japan, Nigeria, Philippines, and the UK participated. Interviewees were either seafarers (14), spouses of seafarers (2), chaplains (2), a representative of maritime administration (1), representatives of shipping or crewing companies (5), or representatives of maritime schools (2). An overview of the socio-demographic characteristics of participants is provided in Table 1.

Table 1. Socio-demographic profiles of in-depth interviews

Characteristics	Description (Frequency)
Nationalities	Brazilian (1)
	Chinese (9)
	Indian (1)
	Jamaican (1)
	Japanese (2)
	Nigerian (1)
	Filipino (10)
	British (1)
Gender	Male (21)
	Female (5)
Role or social status in the industry	Seafarers (both ratings and officers) (14)
	NGOs (e.g., chaplains) (2)
	Representatives of crewing or shipping companies (5)
	Representative of maritime administration (1)
	Representatives of maritime schools (2)
	Family of seafarers (e.g., spouses) (2)

For the survey, 1,412 seafarer respondents participated and returned their questionnaires. From this total, 877 respondents (62%) answered all the questions in the survey, while the remaining 535 (38%) provided some answers but not to all questions. However, the 535 uncompleted answers but returned questionnaires also contained some useful information, such as types of support received, we included them in the analysis, with missing data being excluded. Filipinos represented the majority of the respondents (66.9%), followed by those opting not to declare their nationalities (20.5%). The remaining nationalities are detailed in Table 2.

The average age was 30 with an age range of 18 - 69 years and most respondents (96.1%) identified as male. Officers constituted the majority of respondents (64.1%) followed by those claiming other ranks (19.9%), with ratings making up the remainder (16%). A complete overview of the socio-demographic profile of respondents is presented in Table 2.

Table 2. Socio-demographic profiles of survey respondents

Characteristics	Descriptions	Frequency (%)
Age	In years	Average age: 30
	In years	Age range: 18-69
Nationality	Filipino	944 (66.9%)
	Undeclared nationality	290 (20.5%)
	Chinese	114 (8.1%)
	Indian	28 (2.0%)
	Bangladeshi	25 (1.8%)
	Jamaican	7 (0.5%)
	British	2 (0.1%)
	Australian-Filipino	1 (0.1%)
	Indonesia	1 (0.1%)
Gender	Male	1113 (96.1%)
	Female	39 (3.4%)
	Prefer not to say	6 (0.5%)
Rank	Officers	735 (64.1%)
	Ratings	183 (16%)
	Others	228 (19.9%)
Types of vessels	Various tankers (oil product tankers, chemical tankers, LNG/LPG tankers, and others)	314 (30.3%)
	Bulk dry containers	312 (30.1%)
	Container ships	193 (18.6%)
	General cargo	62 (6.0%)
	Car carriers	35 (3.3%)
	Other types (ro-ro, dredger, refrigerated cargo, tug, etc.)	118 (11.4%)
Types of contracts	Permanent	199 (19.9%)
	Per voyage	412 (41.1%)
	Other (cadetship, etc)	391 (39.0%)
Length of contracts	Up to 10 months	909 (91.8%)
	More than 10 months	81 (8.2)

Limitations of the Study

When interpreting the findings of this study, the following factors must be considered from a methodological standpoint. Firstly, the use of an online web-based questionnaire limits the sample to respondents who are literate and comfortable with inputting information using computers or smartphones. The respondents in this study were generally young, with half of the sample population being under the age of 32. Younger people are generally perceived to be more tech-savvy, which may account for the higher response rates in this age group. Secondly, those without internet access or with very limited access either could not participate or would be hindered in participating in the study, thereby favouring respondents with access to a stable internet connection. Thirdly, data collection occurred a year and a half after the start of the pandemic. As a result, there may be a recall bias, and respondents' perceptions of, or experiences with, psychosocial interventions may have changed throughout the pandemic. Fourthly, because study used convenience sampling design, it is very difficult to determine whether those who chose to participate in the survey may be different from those who did not. Finally, there was a disproportionate frequency of respondents according to nationality, with the majority being Filipinos (66.9%), followed by Chinese (8.1%), and other nationalities (4.6%). Caution must therefore be exercised when inferring outcomes based on nationality.

RESULTS AND DISCUSSION

As described previously, 22 types of support were identified during the in-depth interviews. These types of support can be divided into two broad categories: support provided by companies, and support provided by other stakeholders (e.g., self, family, colleagues on board, charities or NGOs, and governments). In the latter type of support, this study included 'self-help' strategies utilised by seafarers on board. The two broad classifications of support are not mutually exclusive; for example, social distancing measures on board might be viewed as an individual practice but may in fact be encouraged by companies or governments as a specific policy, or as part of new health and safety protocols relating to COVID-19.

From in-depth interviews, the following quotations illustrate how this study identified the types of support used in the survey.

One representative from an NGO stated that:

'We provide various pastoral and spiritual care and services to seafarers world-wide.'
(Chaplain, female).

In the Philippines, another reported that:

'During the first 3 months (i.e., March to May 2020) of "lockdowns" or border closures of various towns and cities, we provided accommodation and food to about 60-80 seafarers who could not go home to their families. These seafarers are not from Manila, so they did not have money or a place to go to because of the border closures, and in effect they were stranded.'
(Chaplain, male).

A Chinese officer provided some information about company support, stating:

'Free Wi-Fi and email are provided so that the crew can keep in touch with family, relatives, or friends.'
(Master Mariner #1, male).

Seafarers of multiple nationalities (Chinese, Japanese, and Filipino) recognised that talking to their fellow crewmates eased the stress caused by extended contracts, or the 'no shore' leave policies of various companies. However, according to another seafarer, on board seafarers practise the following:

'Social distancing, keeping an optimistic mindset, and exercising.'
(Master Mariner #2, male).

In-depth interviews, as shown in these selected vignettes, provided information about the various types of support or intervention provided to seafarers, as well as the sources of these interventions. The survey results and analyses of these interventions are discussed in the two subsections that follow.

Psychosocial support provided by companies

Of the 22 types of support identified, 11 were grouped as being mainly provided by companies:

Increase in food allowances

Increase in recreational allowances

Increase in wifi data allowances

Reduction of overtime hours

Overtime/extended service bonus pay

Provision of sufficient and high-quality personal protective equipment (PPE)

Provision of immediate family support

Updates on crew change and Covid-19

Facilitating timely crew changes

Outsource professional counselling services

Provision of mental health self-support videos, books, or other materials on board

Figure 1 shows the results of whether the respondents received or experienced these forms of direct company support. The most widely provided support was updates on crew change and COVID-19 information, while the least commonly provided was family support.

In relation to 'provision of sufficient and high-quality PPE', 11.2% of the respondents indicated that high-quality PPE was provided but not enough for all crew members; 25.4% reported sufficient PPE being provided but it not being of high-quality; more worryingly, 8.4% reported being provided with low quality PPE that was not sufficient for all crew members; and 1.9% stated that no PPE was provided at all. These constitute the 46.9% negative responses as indicated in Figure 1.

Chi-square tests identified some significant differences between company interventions based on nationality. For example, Chi-square tests of independence show statistically significant number of Filipinos report that they have received increased food allowances (p-value = 0.0001), increased recreational allowances (p=0.000), as well as experienced reduction of overtime hours (p-value = 0.000) compared to Chinese and other nationalities. Only 17% of Chinese respondents report receiving an increase in food allowances, whereas 36% of Filipino respondents and 29.2% of other nationality respondents did so. Regarding an 'increase in recreational allowances', 11% of Chinese and 12.5% of other nationalities reported receiving this benefit, while 28% of Filipinos reported the same. There were also more Filipino respondents (34.3%) reporting a 'reduction of overtime hours' than other nationalities (22.7%), and Chinese (15.9%) respondents. The illustrations related to 'facilitating timely crew changes', 'outsourced professional counselling services', and provision of PPE are similar (see Figures 2, 3, and 4). Overall, Filipino seafarers were more likely to receive these types of support than their Chinese colleagues.
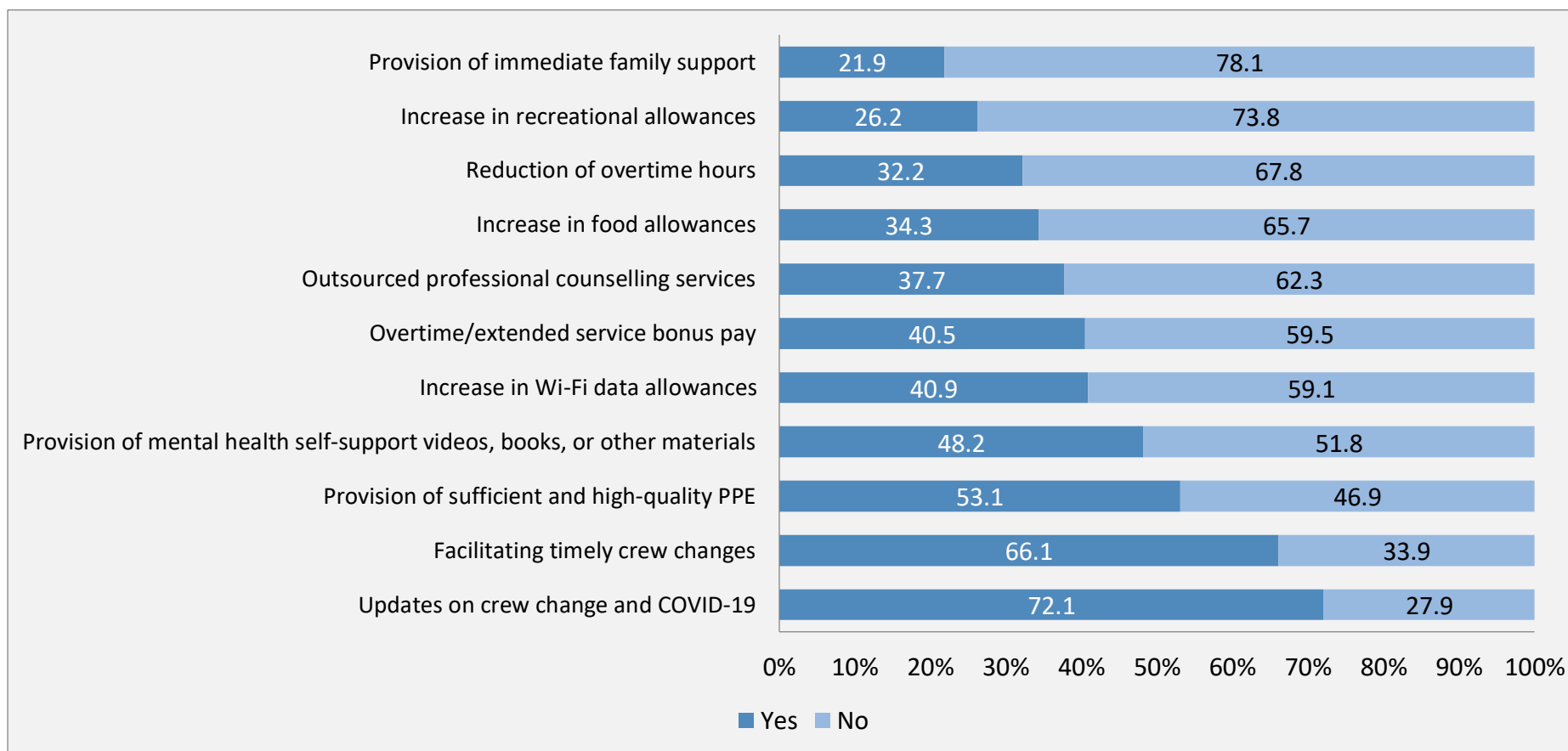

Source: Seaman Online

Figure 1. Provision of support by companies
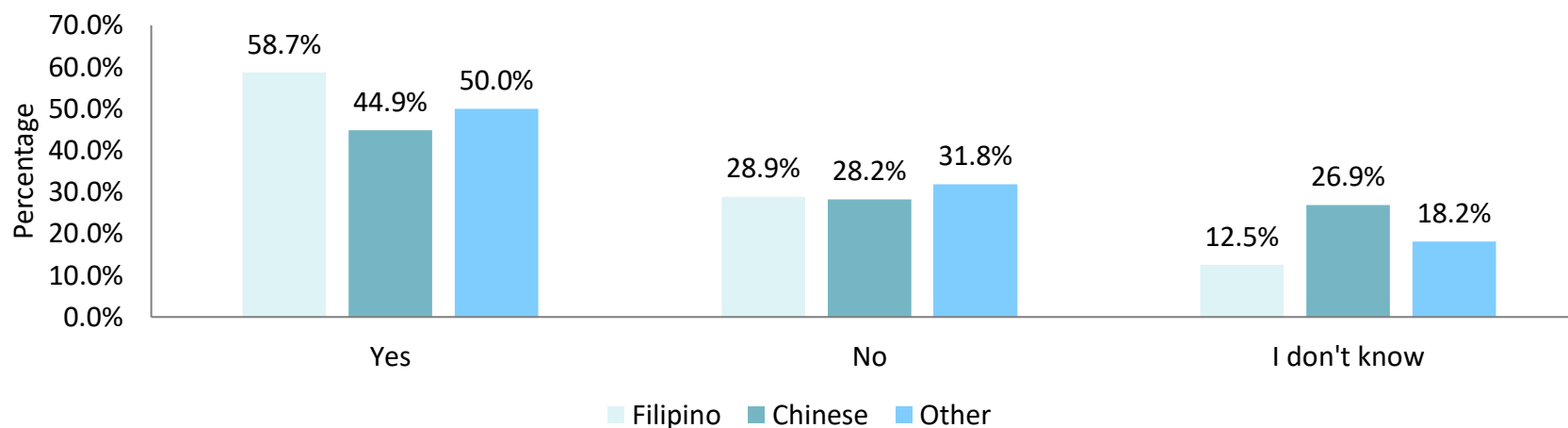
Figure 2. Whether companies try their best to facilitate timely crew changes
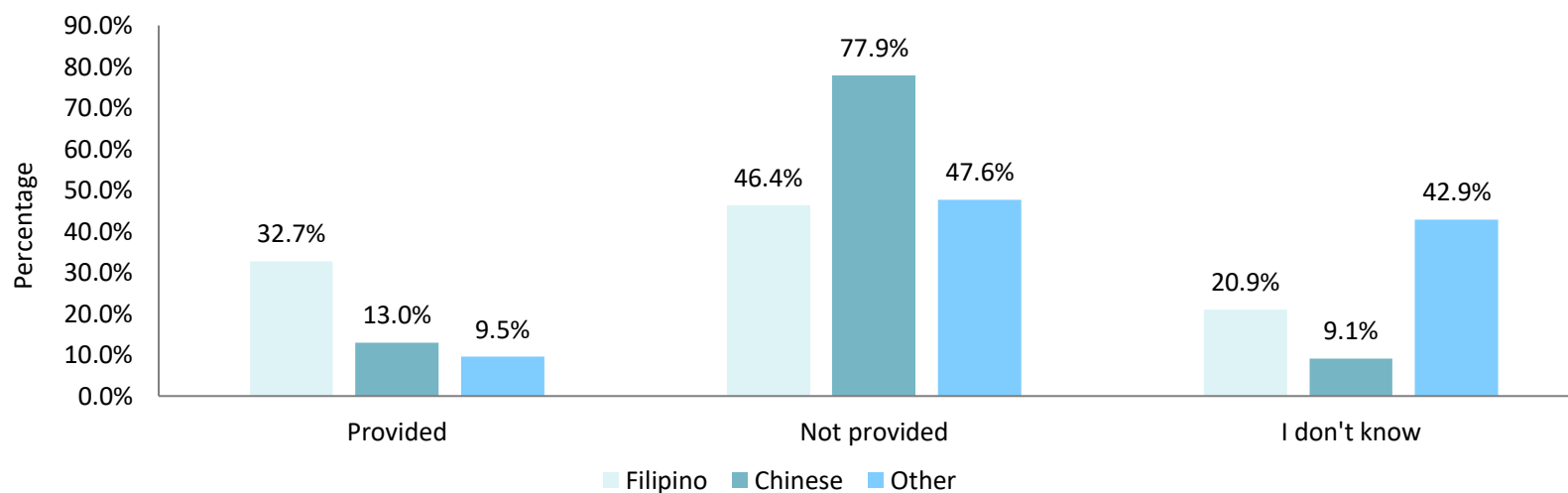

Figure 3. Whether companies provided outsourced professional counselling services
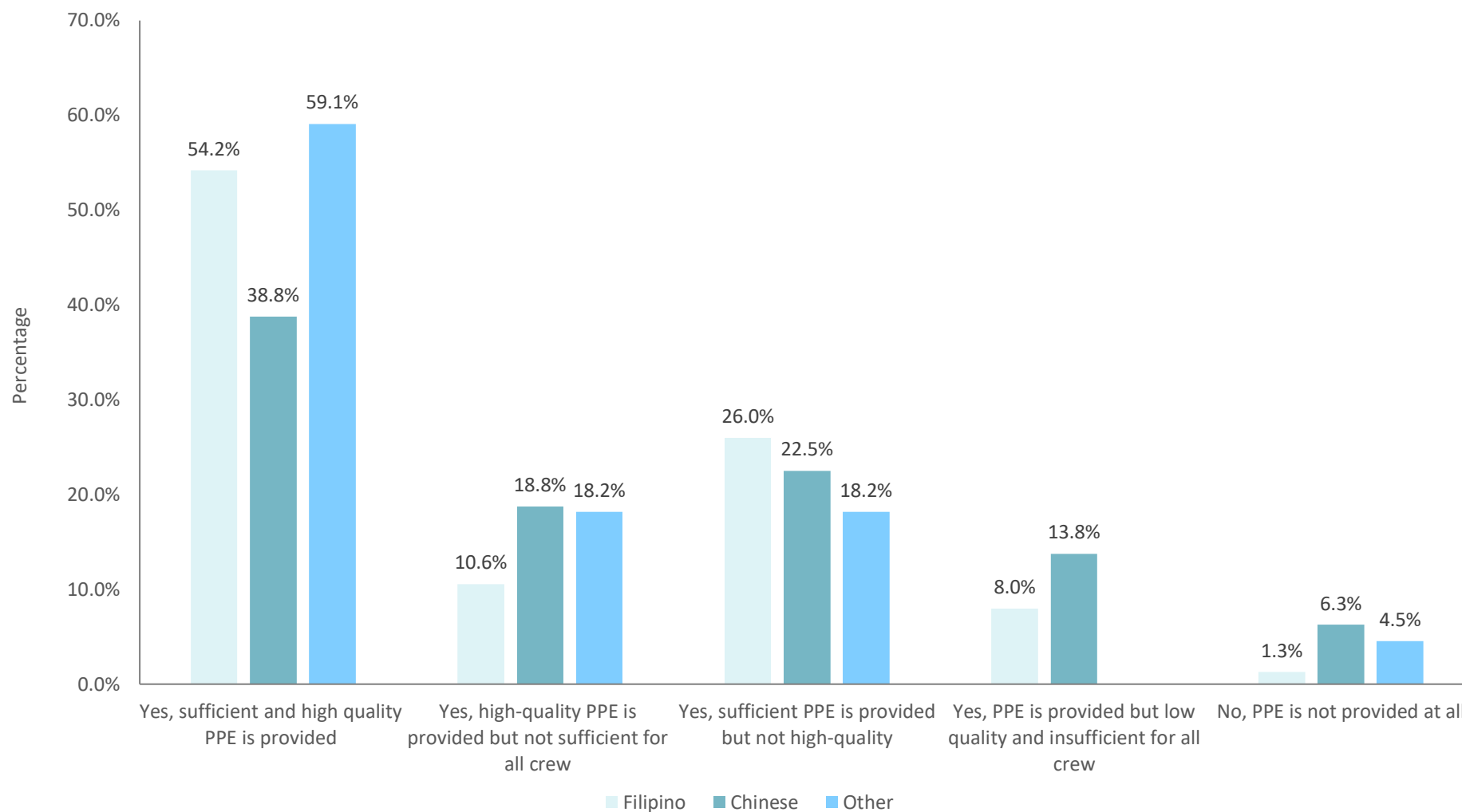
Figure 4. Whether companies provide sufficient high-quality PPE

We also identified significant differences in the provision of overtime/extended service bonus pay and outsourced professional counselling services, based on type of contract. Those with a short-term voyage contract (46.7%) were more likely to receive overtime/extended service bonus pay than their colleagues on a permanent contract (40.8%), and other types of contracts (33.9%). Those on a short-term voyage contract (34.3%), or on a permanent contract (32.9) were more likely than respondents on other types of contracts (23.7%) to report that their company outsourced professional counselling services for confidential tele-counselling to crew members in need during the COVID-19 pandemic.

Chi-square test of independence shows that seafarers with short-term voyage contracts were more likely to report getting overtime/extended services bonus pay (p-value= 0.001), and that their companies outsourced professional counselling services (p-value = 0.003) compared with seafarers with permanent contracts.

Psychosocial support provided by other stakeholders

Alongside support from companies, we also identified 11 forms of support provided by other stakeholders:

Group recreational activities

Communication with family

Being prioritized for vaccination

Being vaccinated

A positive and collegial athmosphere on-board

Casual counselling or support among crewmembers

Physical exercise

Meditation

Pastoral and spiritual care from port chaplains

Seafarers' mental health helplines

Seafarers' mental health applications or 'apps'

It is worth noting that, while 'group recreational activities' can be viewed as support among colleagues and 'communication with family' as support from family, they may require company policies to encourage group events, while internet access on ships is necessary to communicate with families.

Figure 5 shows the results of whether the respondents have received or experienced seven types of support provided by other stakeholders. It indicated that the vaccination rate was quite low at the time of sampling and that meditation was not a popular type of support.

Regarding group recreational activities, 34.5% of the respondents reported undertaking such activities 'once a month', 14.7% 'once in two weeks', 15.6% 'once a week', and 2.5% 'twice or more a week'. Together, they constitute the 67.3% of the respondents who provided positive answers as shown in Figure 5. In relation to physical exercise, the 70.4% of positive answers in Figure 5 comprised of 16.8% of the respondents who exercised 'daily', 24.3% 'once in two or three days', 20.6% 'once a week', and 8.7% 'once every two weeks'.

Respondents were given five options when asked about the presence of a 'positive and collegial atmosphere on board': strongly agree, agree, neither agree nor disagree, disagree, and strongly disagree. In Figure 5, the first two options (chosen by 25.1% and 51.6% of the respondents, respectively) are combined into a 'Yes' response, the last two options (5.4% and 0.9%, respectively) are combined into a 'No' response, and the remaining 16.9% who answered 'neither agree nor disagree' were re-categorised into the 'don't know' group.

Regarding three types of support provided by other stakeholders – pastoral and spiritual care from port chaplains, seafarers' mental health helplines, and seafarers' mental health apps – respondents were asked not only whether they (or their colleagues) used such services, but also whether they were aware of the existence of these services. Figure 6 shows the results, which indicate that these services were not widely used by seafarers and that only 26.8% of them were aware of the mental health apps.

The interview data suggest that frequent communication between seafarers and their families has a positive impact on mental health and wellbeing. Needless to say, seafarers do keep in touch with their families while working at sea, but the frequency of this contact varies widely. Most respondents (60.5%) reported communicating with their family on a daily basis, 21.4% on a weekly basis, 7.5% on a bi-weekly basis, and the remaining 10.7% on a monthly basis. This was influenced by respondents' nationality, as Chinese respondents were less likely to report daily communication than their counterparts from the Philippines and other countries (see Figure 7).

The frequency of group recreational activities on ships was also affected by nationality, as shown in Figure 8, with Filipino respondents reporting more frequent activities than their Chinese and other nationality counterparts. In contrast, the majority of Chinese respondents (81.6%) reported being vaccinated against COVID-19, while only 23.7% of Filipinos and 50% of other seafaring nationalities did. Given the large number of Filipino respondents, this meant that only 30.1% of those polled had been vaccinated.

Only 25% of Chinese respondents reported awareness of pastoral and spiritual care from port chaplains, whereas 60.9% of Filipinos and 50% of other nationalities of seafarers did so. A similar trend was identified regarding awareness of mental health helplines: 15.5% of Chinese, 66.2% of Filipino, and 64.7% of other nationality respondents reported awareness. While all respondents reported low awareness of mental health apps, Chinese seafarers again reported the lowest (7.0%), with Filipino (29%) and other nationality (29.4%) participants reporting slightly higher awareness rates.

The findings also show that contract type has a statistically significant impact on the frequency of recreational activities on ships. Those on long-term contracts reported more recreational activities than those on short-term voyage contracts and other contracts (see Figure 9).

Source: Mr. Rhoderick Eledia
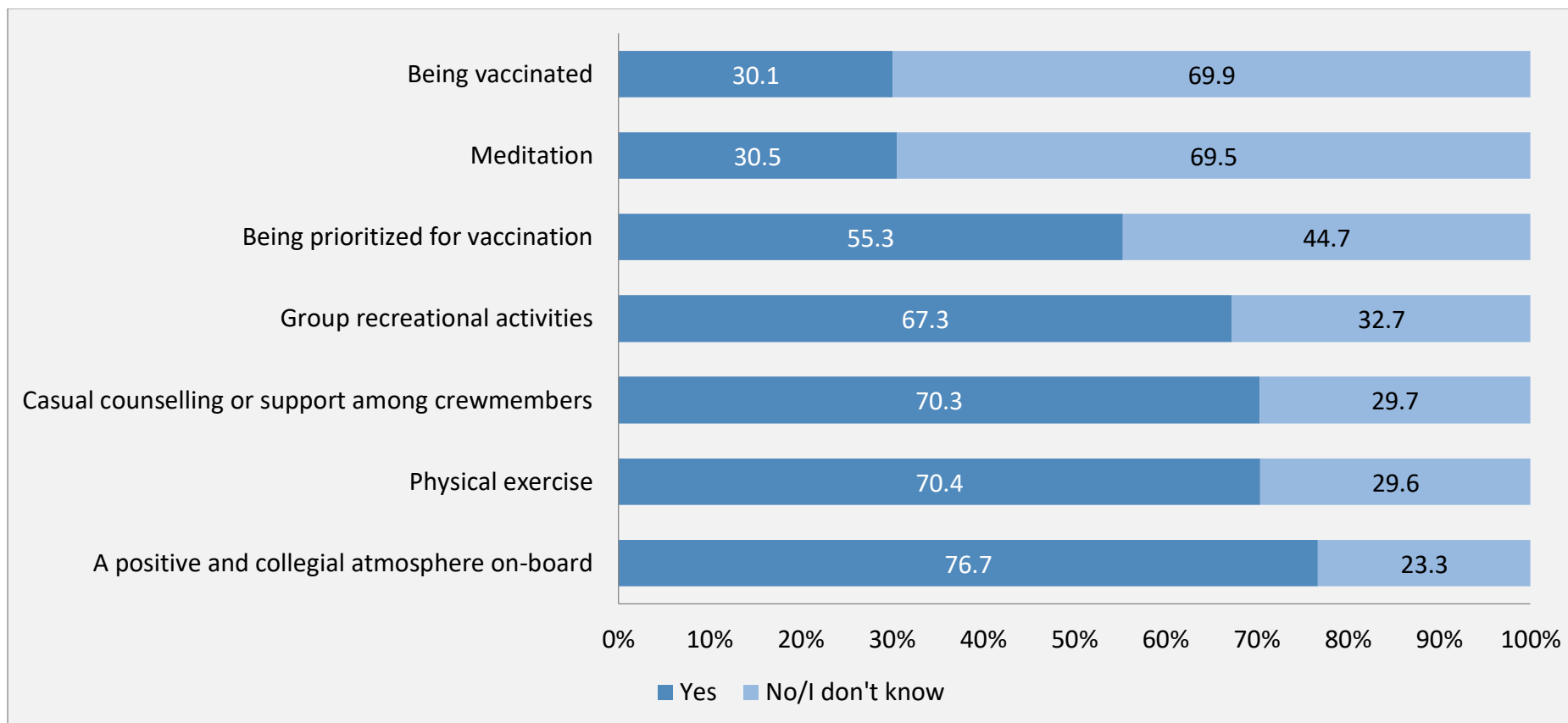
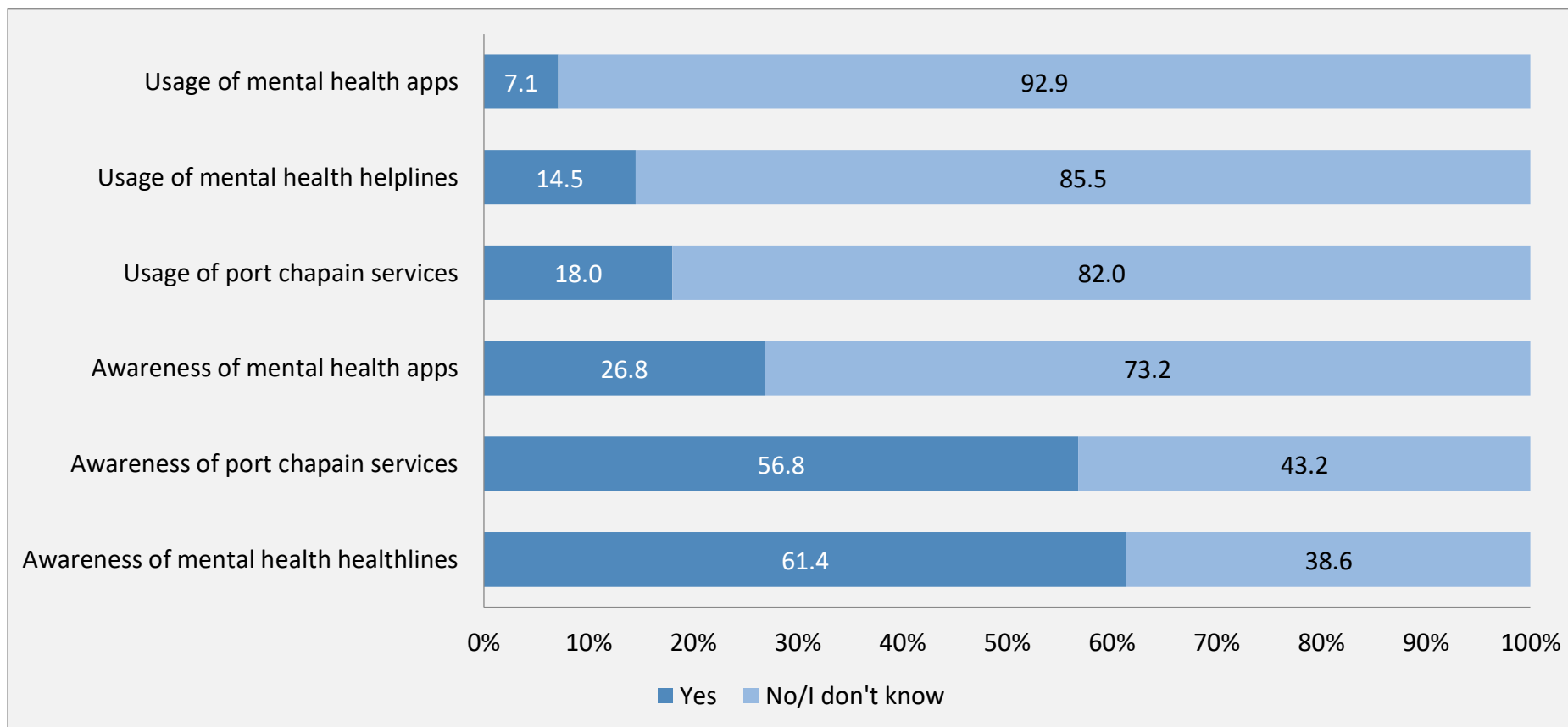*Figure 5. Provision of seven type of support by other stakeholders*

Figure 6. Awareness of usage of six types of support provided by other stakeholders
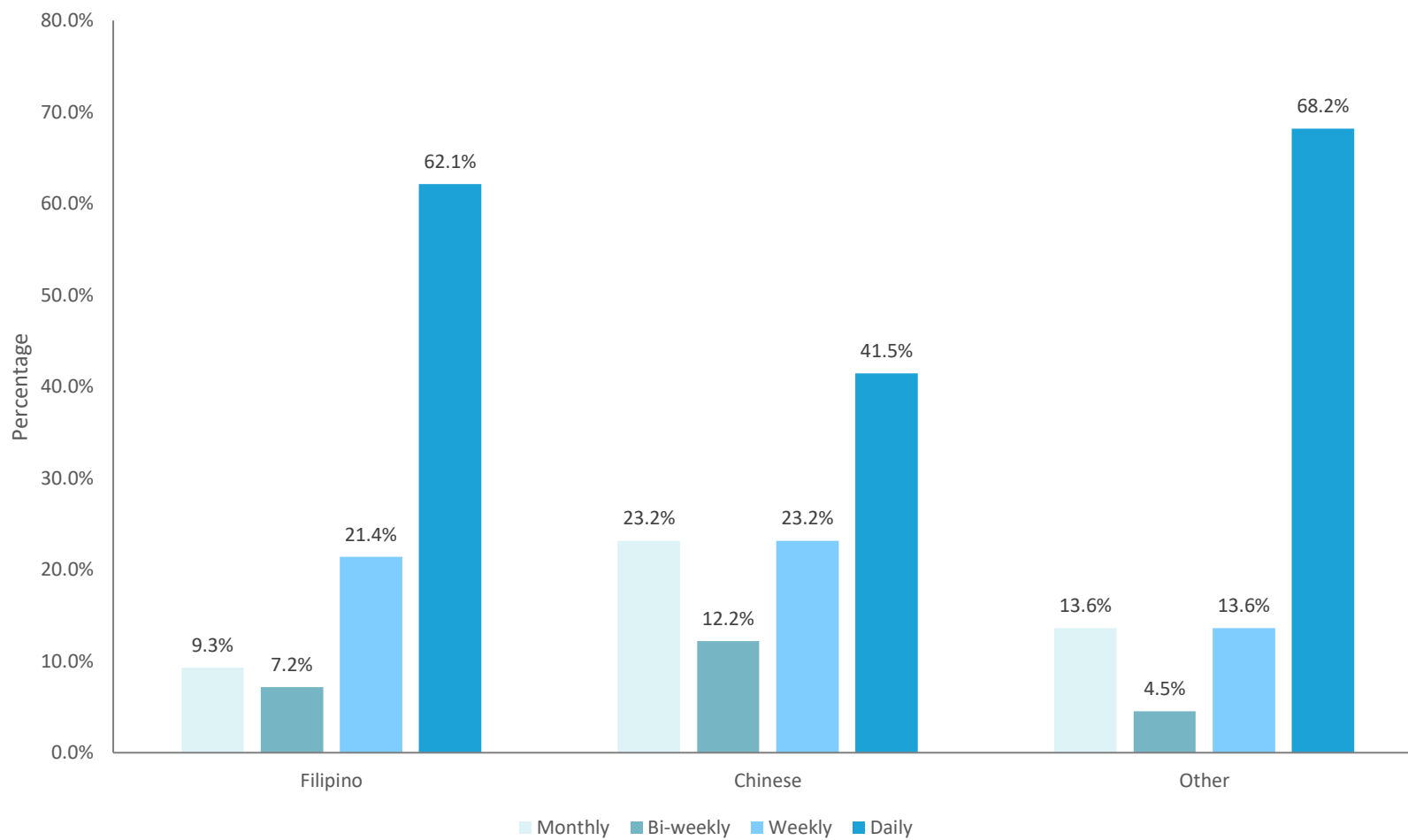
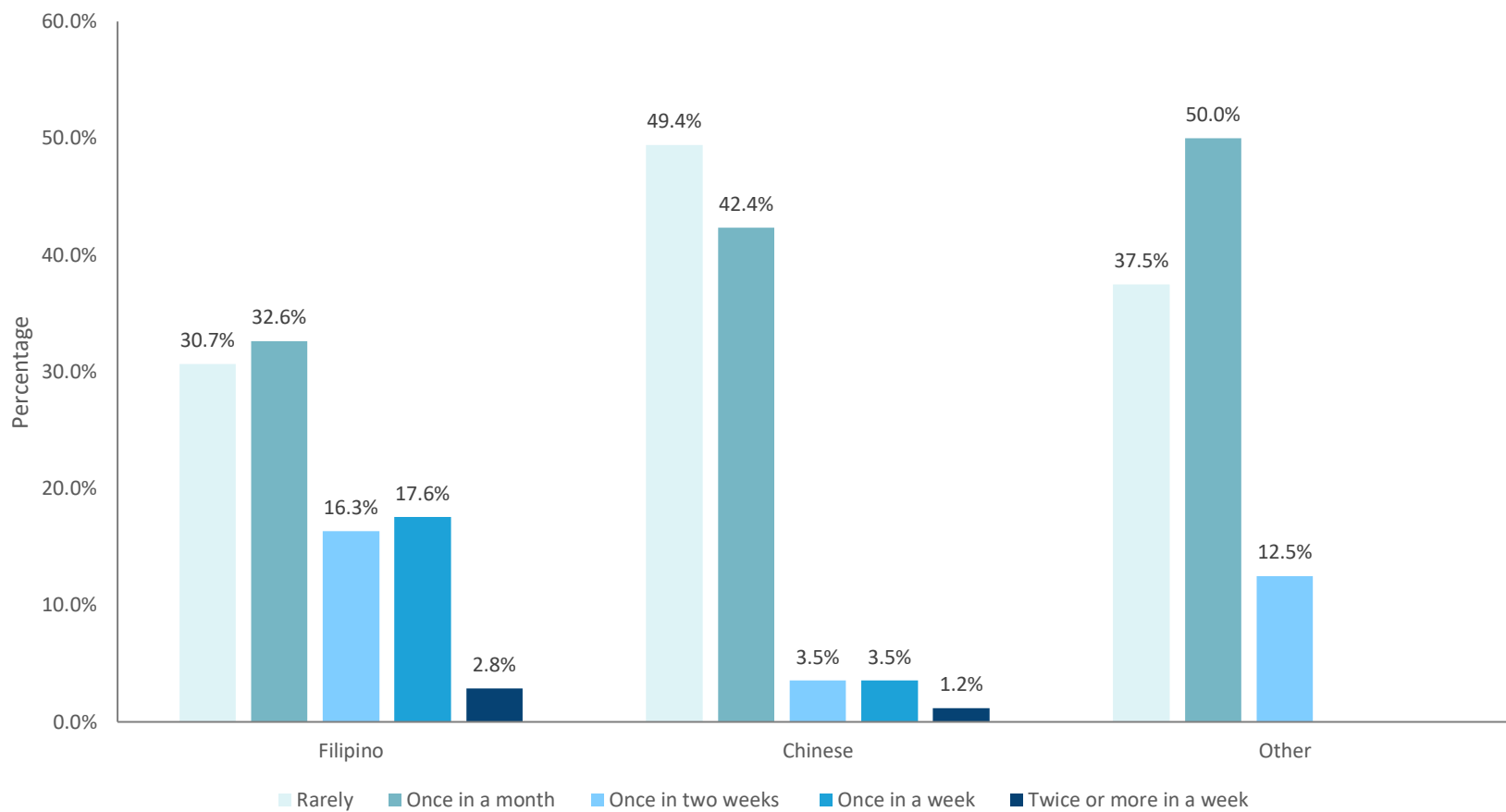*Figure 7. Frequencies of communication with family*

Figure 8. Frequency of group recreational activities on ships in relation to nationality
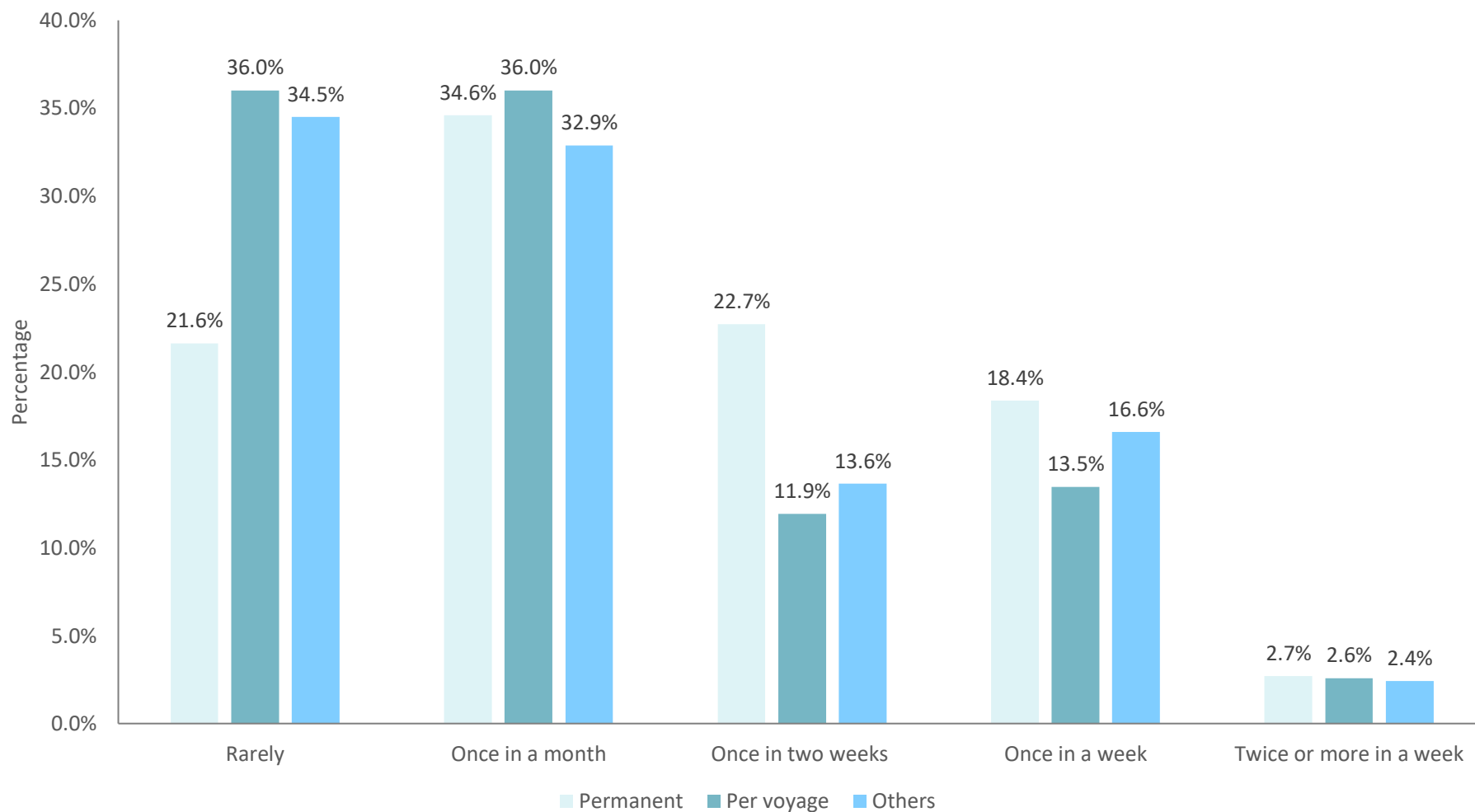
Figure 9. Frequency of group recreational activities on ship vs. type of contract

Perceived usefulness of mental health support received/experienced

The respondents who indicated having made use of, received, or experienced a type of mental health support were also asked to answer a follow-up question, 'How much help does it bring in terms of improving your mental health?' Figures 10 and 11 show the results of company support and support from other stakeholders respectively. Overall, the results indicate that all 22 types of support were perceived to be helpful. The most effective support was communication with family and timely crew changes. On the one hand, it indicated the importance of family life for seafarers, and on the other, it reflected the challenging situation during the crew change crisis. COVID-19 vaccination and support among colleagues were also perceived to be important.

Chinese seafarers were more likely to report being vaccinated, they were less likely to say that vaccination provided 'a great deal' or 'some' help (87.5%), compared with their counterparts from the Philippines (98%) and other countries (100%). Similarly, Chinese respondents were less likely to report meditation providing 'a great deal' or 'some' help (87.5%), than Filipino (97.2%) and other nationality (100%) respondents; and only 63.6% of Chinese respondents indicated that pastoral and spiritual care from port chaplains provided 'a great deal' or 'some' help, the vast majority of Filipino (95.5%) and other nationality (100%) respondents did so.

	increase in recreational allowances	increase in food allowances	provision of mental health self-support videos, books, or other materials	overtime/extended service bonus pay	updates on crew change and COVID-19	outsourced professional counselling services	reduction of overtime hours	provision of sufficient and high-quality PPE	increase in Wi-Fi data allowances	provision of immediate family support	facilitating timely crew changes
Not much	20.2	15.6	9.2	11.2	8.8	4.5	5.5	9.1	7.5	4.6	17.8
Some	32.8	32.7	33.2	31.1	30.4	30.3	29.7	24.8	28	26.7	2.2
A great deal	44.1	45.9	55	55.6	59.8	61.4	62.8	63.3	63.5	67.7	79.8

Legend: Don't know/cannot say · Not at all · Not much · Some · A great deal

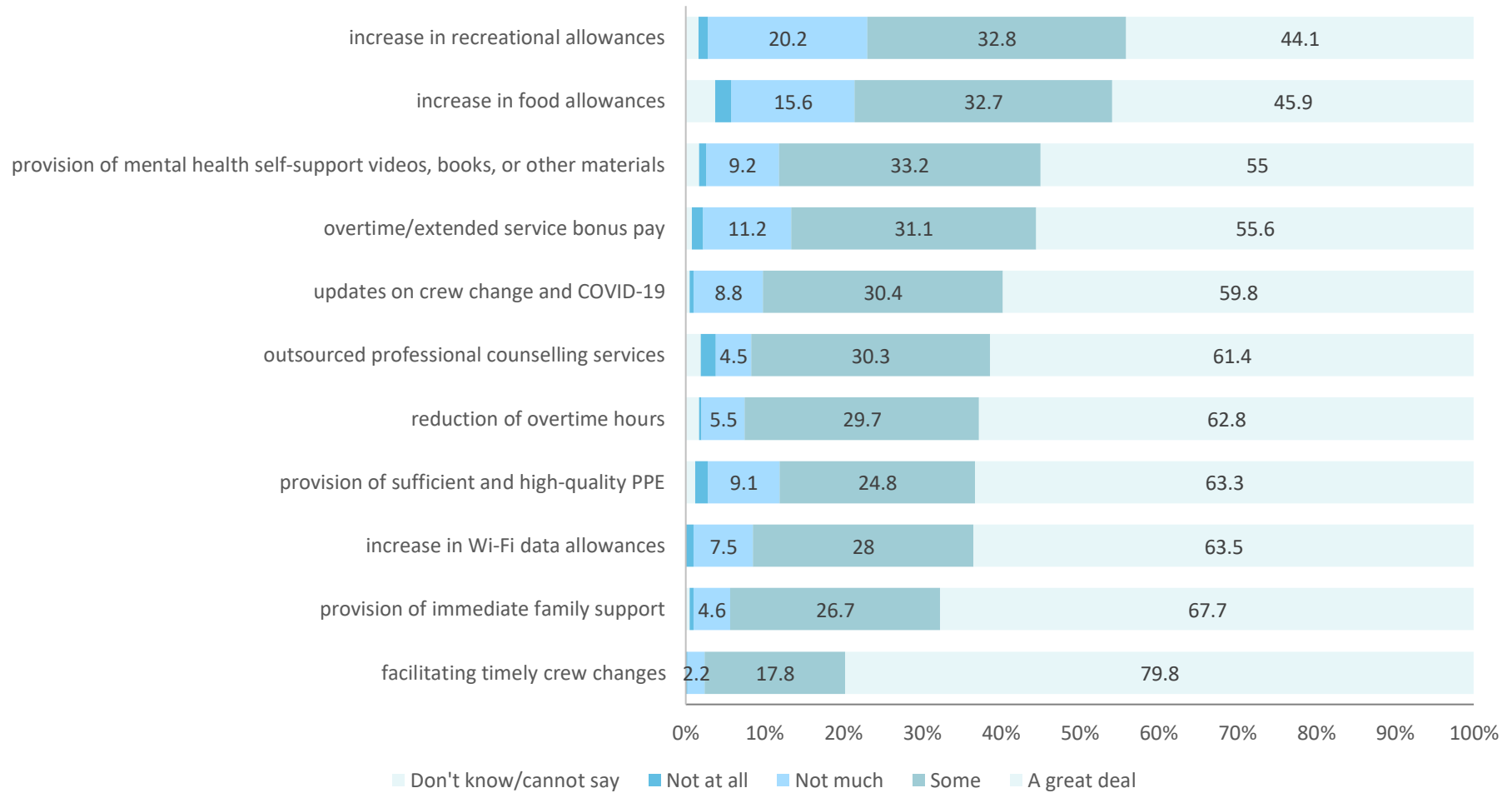*Figure 10. Perceived usefulness of support provided by companies*
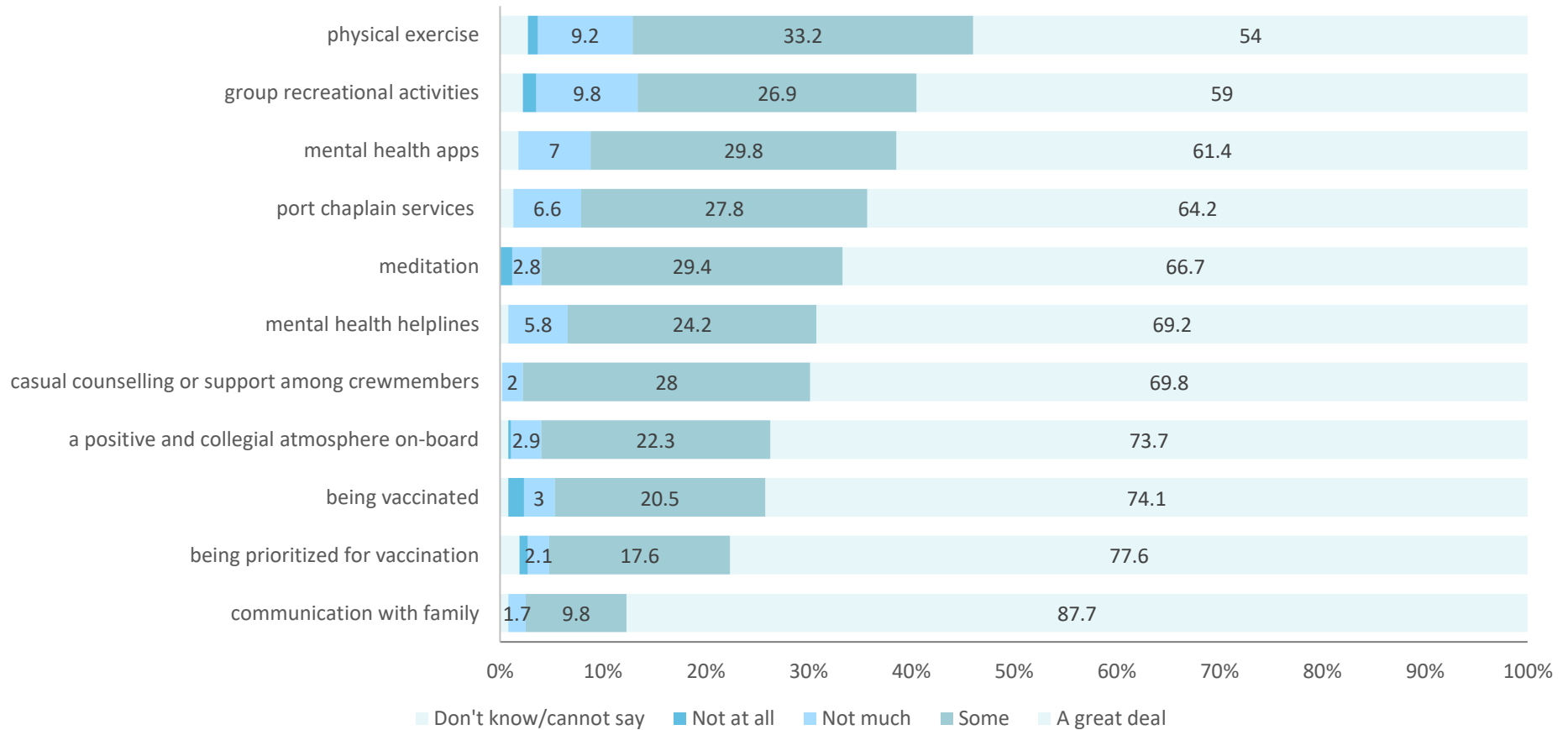
Figure 11. Perceived usefulness of support provided by other stakeholders

	Don't know/cannot say	Not at all	Not much	Some	A great deal

physical exercise: 9.2, 33.2, 54
group recreational activities: 9.8, 26.9, 59
mental health apps: 7, 29.8, 61.4
port chaplain services: 6.6, 27.8, 64.2
meditation: 2.8, 29.4, 66.7
mental health helplines: 5.8, 24.2, 69.2
casual counselling or support among crewmembers: 2, 28, 69.8
a positive and collegial atmosphere on-board: 2.9, 22.3, 73.7
being vaccinated: 3, 20.5, 74.1
being prioritized for vaccination: 2.1, 17.6, 77.6
communication with family: 1.7, 9.8, 87.7

Analysis of psychosocial interventions and seafarers' perception of their impact

This section combines the findings related to whether seafarers received or made use of the various forms of support, as well as their perception of their usefulness, into two scatter plot graphs. Figure 12 shows support provided directly by companies, while Figure 13 relates to support provided by other stakeholders. In the questionnaire, five answers are provided to the questions 'How much help does it bring in terms of improving your mental health?' To generate the scatter plot graphs, the answers were assigned values: not at all=0, not much=1, don't know/cannot say=2, some=3, and a great deal=4. As can be seen from Figures 10 and 11, all forms of support were perceived positively. Their mean values (the term 'mean score' or MS is used below) of perceived usefulness range from 3.15 (increase in food allowances) to 3.84 (communication with family).

To aid the analysis, each scatter plot graph is divided into a 4-part quadrant graph. It is necessary to note that, although the MS 3.5 is used as the mid-line, it is not a division line between negative and positive perceptions. Any MS above 2 can be regarded as positive, and since all types of support received an MS of more than 3, they are deemed to be positive. In this context, the forms of support on the left side of the MS 3.5 mid-line should not be understood as non-effective. It is worth noting that Figure 13 does not include 'communication with family' because the question, 'How often they communicate with their families?', cannot be transformed into a question whether the support is provided or not.

We propose using the graphs as a 'decision matrix' to inform companies and other stakeholders as to the types of interventions that they should prioritise to improve mental health and wellbeing in the face of the ongoing COVID-19 pandemic.

From the perspective of companies, if resources are limited, they should prioritise the forms of support on the right side of the MS 3.5 mid-line, such as 'facilitating timely crew changes', 'provision of immediate family support', 'increase in Wi-Fi data allowance', and 'reduction of overtime hours' (see Figure 12). Additionally, they can enact policies to encourage the creation of 'a positive and collegial atmosphere on board' ships, and 'casual counselling or support among crewmembers' (see Figure 13).

The support shown in the lower right quadrant should be of specific concern to the industry due their high impact but low levels of provision or uptake such as 'provision of immediate family support', 'increase in Wi-Fi data allowance' (see Figure 12) and 'being vaccinated' (see Figure 13).

In Figure 13, 'mental health helplines' and 'port chaplain services' are in the right lower quadrant, meaning that they are perceived to be highly effective but are not widely used. This may be due to cultural reasons as highlighted by the split by nationality, or the respondents might not feel the need to use them. Nevertheless, as Figure 6 shows, only slightly more than half of the respondents were aware of these services. As a result, service providers may need to reconsider how they promote these services in collaboration with other stakeholders, emphasising the beneficial impact that seafarers' colleagues report from using them.
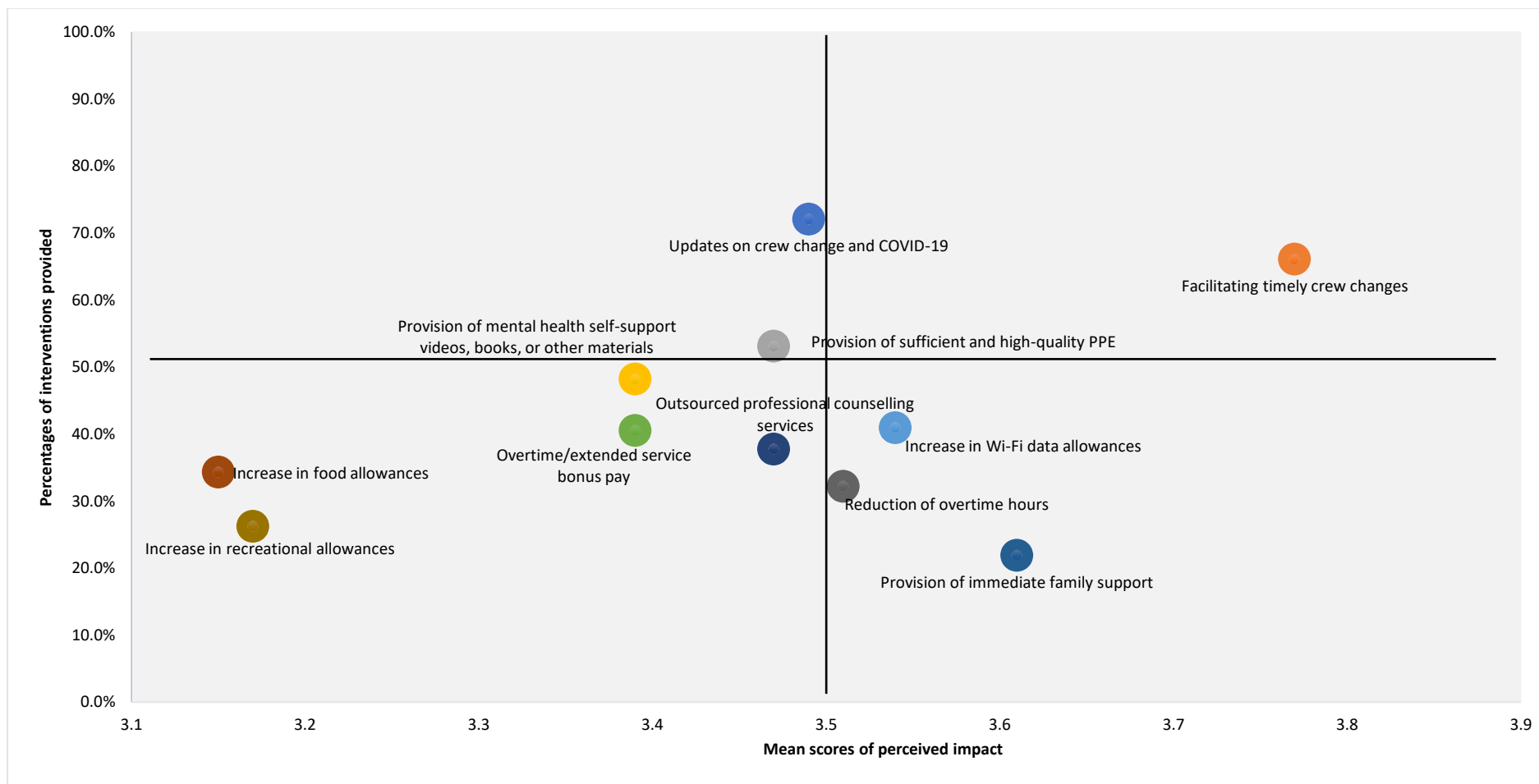
Figure 12. Relationship between Perceived Impact of Support and Interventions Provided by Companies
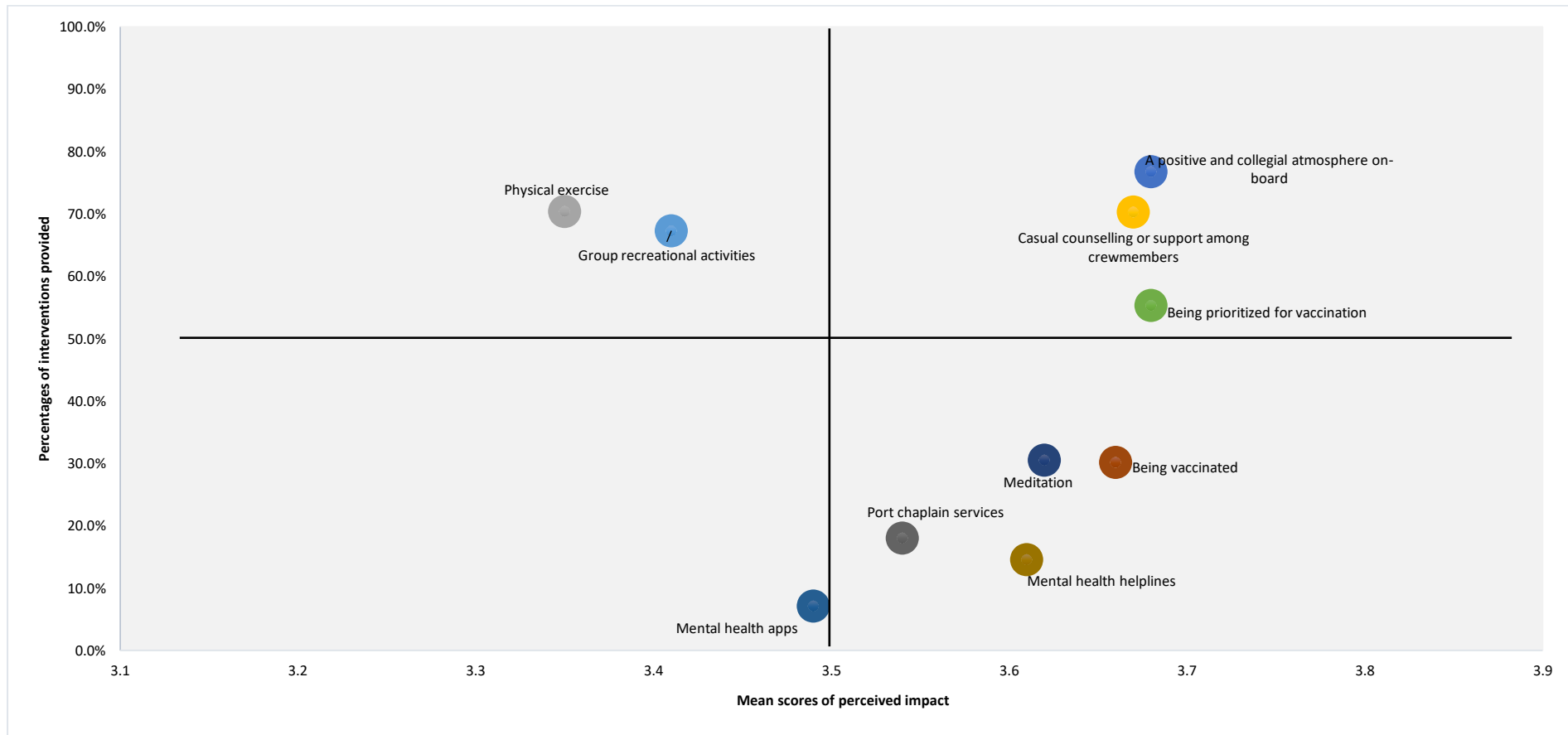
Figure 13. Relationship between Perceived Impact of Support and Interventions Provided by Other Stakeholders

CONCLUSION AND RECOMMENDATIONS

Key findings 1: Availability of various types of psychosocial or mental health interventions for seafarers provided by companies and other stakeholders.

This report provides evidence of the various types of psychosocial support or mental health interventions provided to seafarers by stakeholders including their employers, NGOs, and their peers and their families, during the COVID-19 pandemic. In the context of an ongoing global crisis, and however limited in scope and impact, these interventions contribute to the promotion of the wellbeing and mental health of seafarers.

The maritime industry and seafarer organisations have been provided with various policy recommendations for managing seafarers' mental health and wellbeing. However, some of these recommendations were either written before the pandemic (Blackburn, 2020; Sampson & Ellis, 2020), or did not focus on the actual experiences or insights of seafarers on these interventions during the pandemic (see LRF, 2021). Cognisant of the recommendations offered by various sources, this report offers some recommendations based on seafarers' experiences of these interventions during the pandemic. These recommendations are provided in the next two key findings as these recommendations are targeted to key parties in the maritime industry.
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Key findings 2: Among the 11 support measures directly provided by companies and all of which were perceived to contribute effectively to seafarers' mental health and wellbeing, only 3 were provided to more than half of the respondents.

Data suggests that (1) 'facilitating timely crew changes', (2) 'provision of immediate family support', (3) 'increase in Wi-Fi data allowance', and (4) 'reduction of overtime hours' were highly effective. However, the latter three were provided to less than 50% of the respondents.

Based on the evidence presented, we advance the following recommendations to companies:

- Improve efforts to support seafarers' mental health and wellbeing on board and be flexible in adapting to the needs of seafarers during crisis situations.
- Prioritise 'facilitating timely crew changes', the 'provision of immediate family support', an 'increase in Wi-Fi data allowance', and the 'reduction of overtime hours.'
- Ensure that seafarers have access to adequate, high-quality PPE, and promote a safe working and living environment.

Key findings 3: Among the 11 types of support provided by other stakeholders, all of which were perceived to positively contribute to seafarers' mental health and wellbeing, only 5 were provided to more than half of the respondents.

In terms of protecting seafarers from COVID-19 infection, a disappointing 69.9% of respondents were not vaccinated. Being prioritised for vaccination would positively affect the mental health and

wellbeing of the crew. Services such as pastoral and spiritual care from port chaplains and mental health helplines, typically provided by NGOs, were not widely used by seafarers in our study due to port restrictions. Furthermore, only a small percentage of seafarers were aware of the availability of mental health support apps.

Crew members tend to support each other, as evidenced by frequent usage of two supportive on-board practices, namely creating a 'positive and collegial atmosphere on board' and 'casual counselling or support among crewmembers'. These support practices were perceived to positively affect the crew's mental health and wellbeing. Importantly, 'communication with family' was perceived to be the most effective form of support.

Based on the evidence, we propose the following recommendations:

- Governments should ensure that seafarers are fully vaccinated against COVID-19.
- Seafarers should be classed as essential, or front line, workers by governments to encourage vaccine uptake[1].
- NGOs and other seafarer organisations should review and update how they provide spiritual, pastoral and guidance counselling services, prioritising the usage of virtual platforms to effectively deliver support.
- NGOs should find creative and robust strategies to improve the awareness of, access to, and use of mobile mental health apps.
- Stakeholders should support companies to make, implement and strengthen policies to encourage the creation of 'a positive and collegial atmosphere on board' and 'casual counselling or support among crewmembers'.
- Companies should better facilitate 'communication with family' for seafarers.

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[1] We are cognisant of the increasing number of seafarers who were inoculated whilst this study was in progress, hence the low percentage of fully vaccinated seafarers presented here may have changed.

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Source: 2ⁿᵈ Officer Jury Salinas