THE LINKAGE BETWEEN SHIPPING, CLIMATE CHANGE AND RELIGIOUS BELIEFS A MULTICULTURAL DEBATE IN CONSTANTA MARITIME UNIVERSITY

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Abstract

Internalization is a process affecting almost all the aspects of our modern life, including higher education. Integration of international students is quite challenging for host universities and it requires institutional strategies enabling academic well-being and progress on campus. Maritime transport affects in a major way the global economy because it is related with different industries. Its fast development implies highly skilled seafarers, with technical and inter-cultural communication skills, since ships are operated by multicultural crews. For the maritime sector, multiculturalism is a situation firstly met in higher education institutions, and then on-board the ships. The goal of this article is to explore how an inexperienced welcoming activity can contribute to the integration of international students in Constanta Maritime University. The activity was conducted as a debate on shipping - climate change - religious beliefs linkage and has gone at the beginning of the current academic year. Participants were recruited from junior international students and senior Romanian students. A total of 42 students agreed to take part in the debate and to form three groups: pro team (Christians and Muslims), con team (seculars) and audience (Christians, Muslims, Hindu and seculars). Both teams showed strong pro-environmental values, expressed by different approaches: believers focused on stewardship, while seculars on empirical evidence. The conclusion of the debate, stating that bridging shipping, climate change and faith is appropriate and fruitful and that this theme improved communication between students with different values, was approved by 93% of participants.

Keywords: shipping, climate change, faith, students

1. Introduction

Maritime shipping deals with the movement of passengers and goods, from one place to another, via sea routes.

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Many studies researching the linkage between maritime shipping and climate change revealed important aspects, such as: maritime transport plays a key role in the global trade and international economy, since about 80% of global trade it is transported over water masses, from oceans to rivers. Both international trade and economic growth lead to more intense shipping activities. It is important to point out that ships use fossil fuels and to admit that shipping contributes to global climate change throughout the release of carbon dioxide emissions (nearly 3% of the global CO_2 equivalent emissions) and other greenhouse gases emissions in the atmosphere. This reality pushes the maritime industry to became more sustainable, to reduce its level of emissions, in order to join international temperature goals - by implementing new technologies and accurate policies in response to environmental and human health. Climate change affects both ports (where the rising of sea level is found in facilities damage or in delays of specific activities) and carriage of goods and passengers by sea-going vessels (negatively impacted by the frequency and intensity of extreme weather events) [1-3].

A well-trained ship crew, with precise responsibilities, ensures safety of navigation and environmental protection. More than 70% of world's merchant fleet is served by multicultural crews making maritime shipping a multicultural business [4]. Seafarers must adapt with the multicultural and multinational environment on board the ship and to be able to work and cooperate both socially and professionally; mixed crewmembers have to have technical and soft skills for a quality seafaring. Often, the seas are not a safe environment for human lives. Many seafarers come on board with strong religious believes which help them to face this specific environment [5].

However, multiculturalism is identified also in universities, due to the globalization of economic system, which leads to international students increase. First year international students have to face challenges such as adaptation to new environment, religious beliefs and practices, social behaviour, language barrier [6]. The number of international students searching for higher education in a foreign country is an indicator of the position of that country in the international community and of the quality of its higher education system; universities and their academic communities are in charge with the rapid and effective adaptation and integration of international students to their new environment [7]. Besides achieving competences specific for their future profession, students are interested in being successful in their exams.

Findings cited by Mendoza indicate that religious practices have a positive impact on students' performance, consequently lecturers should encourage students to involve their beliefs in classrooms, if this is associated with a strong learning motivation [8]. Harper et al. have noticed that several foreign students struggle to cope with their new academic environments. In this respect, the authors consider that the organization of welcoming activities - at the beginning of the semester, maximise the integration opportunity for these students [9]. The study developed by Billingsley et al. shows that, according to some point of views, Science and religion are on opposite position, while for the others the

linkage between Science and religion might bring progress - when dealing with multidisciplinary topics [10].

Debates on the relationship between Science and religion involving students are a good tool in observing how truth and values are reflected in the relationship established between humankind and environment and behaviour towards each other.

A similar position it is found in Hulme's study [11]. He states that the connection between religion and climate change cannot be avoided, moreover it is inevitable. Religious thoughts might play a key role in climate change mitigation due to the fact that Science approaches in an exhaustive manner this issue, while religion is able to provide positive alternatives to current lifestyles by an adequate shaping of awareness.

The study developed by Hope and Jones is a good example of how the pro-environmental attitude is manifested by academic trained young people forming three groups (Christians, Muslims and seculars) [12]. Authors have found that all the three groups present pro-environmental concern, even if their motivations are different. The study is limited to one British university, but it would be interesting to validate the results in other universities showing faith diversity. Constanta Maritime University is one of them.

Constanta Maritime University is an important supplier of highly educated seafarers to the international market. Students from all over the world apply to different academic programs, making this university a multicultural environment. In this context, when focusing on the maritime sector, results that it is not only about multiculturalism on board the ships, it is also about multicultural students introduced in this academic environment and their adaptation and integration. That is why, the host university should not be concerned only in offering a high quality of theoretical education, well equipped laboratories, good trained academic staff or diverse practice opportunities; there are needed also extracurricular activities aiming to ensure a smooth integration process. As any other universities, Constanta Maritime University explores the well-known factors that influence international students integration into university life. Some of the factors that determine the expected level of integration are related to social, academic or environmental aspects of the life in our university. For example, experienced members of the academic staff are appointed to work as academic tutors. Their role is to ensure a good link between students and university - in all its aspects, and to facilitate students' personal and academic development. Tutors deals with different aspects of their tutee integration, such as participation in events, adjust to the new social environment, learning compatibility or attachment. In our university it is considered that a successful junior international students integration is based on a fruitful interaction between them and Romanian students - that is why in many activities they are brought together. Some of the common activities are: Yachting Regatta (a sport event aiming to develop teamwork and teach fair play), Blue Day Career (it addresses the issue of affiliation of future seafarers to the maritime labour market), International Seafarers' Day (which highlights the

significant role and contribution of seafarers to society), International Students' Scientific Workshop (which provides a platform for students from different maritime universities to connect, share experience, socialize and built fruitful relationships). Tutee might discuss with its tutor, or the academic staff with the support of the tutee, aspects regarding improving communication between students and academic/management staff, curricula, assignments, learning resources, emotional states. Additionally, at the beginning of the current academic year it was explored a completely new approach of the junior international students integration consisting in an original welcoming activity.

This paper investigates how a debate on shipping-climate change-religious beliefs linkage can contribute to the integration of junior international students in the environment of this university and how religion might shape the environment consciousness of future seafarers. This welcoming activity is an inexperienced one and brings together Romanian and junior international students (in order to facilitate the better comprehension and mastering of this new context). The debate has gone at the beginning of the current academic year (first week of the first semester). Another innovative aspect is that this paper also explores how the engagement between ship emissions and faith can be used as an early introduction to multiculturalism.

2. Methods

It is very important to know the profiles of participants in a debate. As mentioned above, the main objective of the debate is to open the floor to pros and cons argumentation on the acceptance of the constructive relationship between Science and religion, when fighting against ship emissions, by involving, mainly, fresh enrolled international students. It will be helpful for junior foreign students to be introduced to the one another and to Romanian students, as well. All first year international students were contacted while Romanian students were selected from the third year of study. Since the topic of the debate was proposed by the Thermodynamics lecturer, were selected Romanian students who obtained the highest scores on the Thermodynamics exam (Thermodynamics is scheduled in the second year of study; the invitation was addresses to students with grades between 8 and 10). Were contacted 29 junior students and 34 senior students. Students were informed about the purpose, structure, carry on of the debate, place, time and assessment of the debate. Students were asked to provide basic information about them such as: age, gender, religion (if they are believers). In addition, they were asked to express their intention to participate or not.

Additionally, students received a debate material in order to be introduced in the topic of the debate and to help them to position themselves precisely in the debate context. The deadline for getting their responses was two days.

2.1. Information provided on the purpose of the debate

Reaching well-being for junior international students is of a great importance in Constanta Maritime University. This concept requires also support services at the disposal of foreign students.

This is an attempt in reaching this desideratum throughout an extracurricular activity with the participation of junior international students, and some senior Romanian students. Within a friendly environment, ensured by the university, focused students will be able to participate to a formal discussion on a sensitive topic: establishment of the beneficial link between shipping-climate change-religious beliefs. By the involvement of the religious creativity, students are encouraged to express their believes and to bring pro and con arguments.

This activity is not only a welcoming activity; it is a base for getting soft skills (requested on board the ships) and an introduction to multiculturalism (an important feature of modern shipping).

2.2. Information provided on the structure of the debate

The debate involves three groups as follows: the affirmative (pro) team, the opposing (con) team and the audience. A president conducts the debate and ensures the freedom and opportunity to express the opinions in the established framework. Both teams have four members. The affirmative team has a pro main speaker and a pro second speaker, while the opposing team has a con main speaker and a con second speaker, as well. Designation of these positions belongs to team members.

Pro main speaker supports the topic, formulates pro examples and proposes implementation solutions. Pro second speaker defends the position of its team, opposes to the arguments of the other team, and adds depth to the solutions provided by its mate.

Con main speaker declines the topic and denounce it, combats pro examples pointing out their drawbacks, combats the solutions expressed by the pro team. Con second speaker renews the opposition to the topic, by considering the pro examples to be overstated; if possible, comes with new arguments for combating pro solutions.

Students willing to apply for these positions in particular, need time to prepare themselves on the basis of the debate material (provided by the Thermodynamics lecturer) and on their own researches.

2.3. Information on carry on of the debate and timing

The president introduces the topic of the debate, the groups and participants. The pro group is the first one to express their pro arguments, followed by the second team. Each speaker has 10 minutes for its intervention and no interruption is permitted.

The audience is invited to ask questions and to come with their own convictions. At the end of the debate, the president (Marine Refrigerating Plant lecturer) will propose a conclusion, voted by all participants. The vote will reveal the winning side. The activity is scheduled for maximum two hours long.

Forty-four students had replied to our call. Table 1 summarizes the data responses from students accepting the invitation.

Table 1. Summary of responses from students.

Students	International students	Romanian students
No. of acceptances	20	22
Age of participants (years)	18-22	20-21
Male	19	13
Female	1	9
Seculars	-	6
Believers	20	16
Christians	15	14
Muslims	3	2
Hindu	2	-

2.4. Debate material

Regional and international shipping activities are intensified in the last decades, resulting an important generation of toxic pollutants; the specific greenhouse gas (GHG) emissions and air pollutants are not negligible for global climate change issue and are associated with the moving power source of the ship (main and auxiliary engine) and the boiler (used to provide steam) [13].

International waters concept includes the vast majority of the global oceans; although these seas do not belong to someone, they are the responsibility of the human kind. Ships sailing in international waters are major contributors to carbon dioxide emissions, the most pollutant ones being the following types: general cargo, liquefied gas and container [13]. Despite of this reality, for international waters there are no shipping policies on carbon mitigation and only voluntary efforts are not sufficient. In the same time, it is useful to known that ships emissions in and around ports have a negative impact on public health in port cities.

The total amount of ship emissions is given by the following sum [14]:

$$E_s = E_{ma} + E_{ae} + E_b \quad (1)$$

where: E_{ma} regards the main engine, E_{ae} the auxiliary engine and E_b the boiler.

The amount of emissions produced by the main engine depends on the: installed power, instantaneous load factor, emission adjustment factor, operating time, emission factor. The amount of emissions produced by the auxiliary engine and boiler are expressed in terms of the installed power, emission factor, load factor, operating time.

According to Albo-Lopez et al., during the trip ship, emissions are principally produced by main engine, while port emission are produced by auxiliary engines - when they produce the power needed in specific operations [15].

According to Hussain et al., the quality of the air is affected during hoteling (loading and unloading), manoeuvring (enter-exit coastal waters of a country) and transiting along the coast (reduced size zone). The authors also provide a formulae for the assessment of these emissions, depending on the engine power, engine factor load, emission factor, time for each operation, engine category and type, emissions, fuel and operation types [16].

Climate change mitigation in maritime transport is a challenge requiring a strong linkage between scientist, professionals, policy makers and public awareness throughout education and information dissemination. Climate change has an undeniable effect on shipping and maritime trade. We are all witness to the more events that affect typical maritime trade routes. In this context, vessels are forced to modify planned routes in order to minimize or avoid delays, cargo loss, ship damage and life losses.

For Muslims, the Quran contains answers to all the facts encountered in their daily life. Muslims use the verses from this Holy Book as behaviour guidance. According to Bsoul et al., Islam claims the environment and natural resources protection through many verses; this is an important task for the human race - which has the role of guardian, for the benefit of the future generations [17]. These researchers linked this Islamic principle to the concept of 'environmental sustainability' sustained, nowadays, by policies developed in order to improve efficiencies and mitigate reckless environmental aspects.

In Islam, the Creation is described as a sign of Allah power: "When He decrees a matter, He only said "Be" and there it is: heavens and earth" (Surah Al Baqarah 2:117). The Bible teaches Christians that God is the Creator through: "In the beginning God created the heavens and the Earth" (Genesis 1.1). In Islam and Judeo-Christian doctrines, human kind is unique in rights and responsibilities and has the privilege to take advantage of all that was created by God/Allah, on Earth and in the sky, in a rational manner [18].

According to Tkacova and Slivka, the Bible commands humankind to be responsible for the Creation of God and teaches about individual participation and responsibility. These researchers connect this biblical role to modern sustainable development [19]. According to Jenkins et al., not only religious authorities embrace the idea of faith engagement with climate change. Many scientists adhere to this idea - willing to reveal how climate change impacts the world, but also to point out that climate change has a moral dimension (fact which is missing in pure scientific approaches); faith - climate change engagement may be established outside conventional religious establishments, by involving different faith practicants and seculars as well [20].

A seafarer's faith is not only an unlimited resource of strength - when it is about facing the difficult shipboard conditions. Faith can inspire environmental awareness and actions and can contribute, in a unique way, to environmental policies development and implementation.

Humankind's progress has not only economic and technological dimensions. It is time to approach this topic from moral and spiritual point of view, in order to avoid the ecological crisis. The engagement between shipping - climate change – religious beliefs exists, have to be accepted and, moreover, explored due to the positive outcomes found in the achievement of a safe work environment on-board, an effective crew work and in acting against climate change.

3. Results and discussions

All international students declared to be 'believers' and less than 30% of the Romanian students are uninvolved with religion. International students are coming from Ukraine, Syria, India, Egypt, Turkey and Bangladesh. Students have formed the pro and contra teams and have assigned the speaker; the audience has 34 participants.

Debate opened with the pro main speaker point of view. Mohamed (Muslim) expressed from the beginning the support for the topic. He quotes from the Holy Quran in order to show that, in Islam, the environmental attitude is not optional. "Indeed, in the creation of the heavens and Earth, and the alternation of the night and the day, and the [great] ships which sail through the sea with that which benefits people, and what Allah has sent down from the heavens of rain, giving life thereby to the Earth after its lifelessness and dispersing therein every [kind of] moving creature, and [His] directing of the winds and the clouds controlled between the Heaven and Earth are signs for a people who use reason." (Quran 2:164) "… And do not commit abuse on the Earth, spreading corruption." (Quran 2:60).

He said that in Islam and Christianity human beings have a privileged position; we have this world in trust. "He is the One who has placed you as successors on Earth and elevated some of you in rank of others." (Quran 6:165) "Eat and drink, but do not waste. Surely He does not like the wasteful." (Quran 7:31) "It is He who made you successors on the Earth and raises some of you above others in ranks, to test you through what He gives you." (Quran 6:165)

Mohamed affirmed that the role of 'steward' do not mean possession of the Creation. He continues by saying that Quran teaches about ships over the sea: "And of His signs is that He sends the winds as bringers of good tidings and to let you taste His mercy and so the ships may sail at His command and so you may seek of His bounty, and perhaps you will be grateful" (Quran 30:46).

Pro main speaker insists that God's wish is that human being makes use of His creation, by quoting: "Be fruitful, multiply, fill the Earth and subdue it. Have domination over the fish of the sea, over the birds of the sky, over living thing that moves on the Earth" (Genesis 1.28). He also mentions that shipping activity

is found in the Bible, as "others went to sea in ships, conducting trade on the vast waters" (Psalms 107.23).

Mohamed said that the topic of the debate was an opportunity to research other religious beliefs. Understanding other practices will be helpful in multicultural academic integration and multicultural on-board integration. For instance, he found out that Hinduism is one of the oldest belief system with many philosophical implications. This religion teaches that preserving a good environment ensures a healthy life. An opposite situation will have severe consequences. According to this religion, human beings not dominate the world, but should be in equilibrium with the five elements of space (air, fire, water, earth, space).

Other arguments presented by Mohamed are summarized as:

- atmospheric pollution in port cities is considerable higher than the one of non-port cities, because of the marine and rail traffic or specific industries;
- maritime transportation relies on the use of fossil fuels;
- ship emissions can affect hundreds of kilometres inland air quality;
- maritime shipping pollution has regional and global implications;
- despite the scientific evidences, global warming and climate change threats face the political inaction and simplification of their real dimensions;
- immediate actions are delayed by climate change denial, shown both by part of the public and policy makers;
- thwarting policies addressing climate change is based on growth dependent economic system.

In this context, Mohamed affirmed that shipping-climate change-religion linkage is essential and mandatory. Religious beliefs can shape conscience and teach to consume wisely and share resources (ships transport goods between different regions, for example cereals - to deficient zones). Science and religion are not on opposite positions. A deeper understanding of this connection might facilitate the acceptance of the fact that climate change is a result of humankind distancing from the world steward role. Mohamed proposed the intensification of dialogue between scientists, stakeholders, academic communities, policy makers, population and media - in the most various environments. High level of public awareness may force more drastic regulations. Also, he considers that the cooperation between believers and seculars is at the base of more courageous actions against climate change and ship emissions mitigation.

At this turn, the pro second speaker (Maksym, Christian), claimed the support for the pro main speaker arguments and the acceptance of the strong connection between shipping, climate change and faith. His pro arguments are summarized as follows.

- Some faiths highlight the stewardship responsibility, others search divinity in nature, but all require deep respect for nature, its protection and a sustainable lifestyle.
- Faiths may contribute to climate change mitigation throughout public support, being seen that people, regularly, do not consider it a priority, despite scientific evidences.

- The lack of scientific data and uncertainty among scientist is one of the pylons of scepticism about climate change and political climate change denial.
- Religious and Science are not on opposite sides when it is about fighting against climate change.
- Religion relies on conscience and conscience on knowledge.
- Students might be able to understand better different topics from their curricula if they are aware about the limits of Science; deeper understanding might be facilitated by involving Science and religion education in the approach of limits of Science.
- Acceptance of the Universe as a divine creation do not affect technical skills gain.
- The maritime industry should become a 'clean' one by using carbon-neutral fuels or renewable energy; this effort should be sustained not only by scientists, but by ship owners, operators, suppliers, stakeholders and seafarers - this is the reason why the religious approach is a necessity (Science alone cannot solve this problem nor religion).

The con main speaker (Alex, secular) started by strongly rejecting the existence of the link between shipping, climate change and religion. His position is detailed below.

In the actual trade context, maritime industry contributes to climate change by the combustion of marine fuel. Many researches indicate that the rise in temperature of the earth surface is because of global warming; another effect is the increase of sea surface temperature. The economic reality shows that growth and development of a nation depends mainly on trade and transport. So, according to this speaker, there is a relationship only between shipping and climate change and religion has no place in this context. Climate change is a major threat to international safety and should be approached by scientific investigations (observations and experiments) and the use of their findings, and not on religion - which is based on obedience to Divinity and do not depend on empirical evidence. This speaker considered the pro arguments to be exaggerated. He affirmed: "For some, in particular for seafarers, faith might be a factor providing general health and a sort of attitudes to environment, but nothing more". He continued by rejecting that humankind has a privileged position assigned by the Divinity. In his team's opinion, man has evolved exclusively because of its specific anatomy. He attacked the idea of offspring and spread the religion; human activities led to global warming and climate change and the generators of this risky situation are population growth, consumerism, greed, use and abuse of Nature. This speaker rejected the affirmative team's solutions.

His solutions are stated in the following:

- The appetite for Science, knowledge and consciousness for wellbeing and environment leads to the achievement of ecological values.
- The environment attitude of the public, seafarers, operators, stakeholders is shaped through education.

- Public and political agendas should overlap to face a climate crisis.
- Strengthening the cooperation between IMO (International Maritime Organization) states in order to reduce shipping emissions.

In his opinion, bringing together religion and Science against climate change will not be found in immediate and drastic actions, but he admit that this is a good opportunity to exchange ideas between students and seafarers, as well.

Andrei (secular - con second speaker) has renewed the position of his mate. He has pointed the following ideas.

- Debates on shipping and its impact on climate change with the involvement of future seafarers are 'a must', but without the religious component - which is a sign of weakness.
- International and Romanian students do not need encouragement from the lecturers to use religious creativity; instead students should be motivated to gain ecological knowledge by having at their disposal extra specific bibliography.
- Religious people may believe that the Divinity has created for them the 'perfect world' and they can dominate it by showing a high level of climate scepticism.
- Believers accept the apocalypse as a divine punishment, not as a consequence of human irresponsibility.
- Conservation of Nature is a moral value and social conscience is developed through out education.
- Sea level rise affects vulnerable areas; this danger should be approached by using strategies and engineering solutions.
- The academic environment, professionals and policy makers should talk more in public about specific measures, such as: the need to alternative fuels, newer ships, carbon taxes or clean energy; this type of debates might intensify public pressure and might unlock funds for research.

From the audience were noted a few interventions.

- *Intervention 1*: "In my neighbourhood, the priest exhorted the believers to select household garbage selectively. This requirement has been introduced long time ago, but people have ignored it. This is a good example of the fact that religion can shape the lifestyle, in an environment friendly way."
- *Intervention 2*: "In modern times, religions should be approached from other perspective: the value of the environment. Thus, might be ensured a wider environmental consciousness. It is fruitful to find common values in different faiths, instead of seek diverse perspectives. This debate was a good opportunity to get more information about each other and learn more about the environmental challenge in shipping industry."
- *Intervention 3*: "My questions are addressed to the con speakers: do you think that the cooperation between seculars and believers is unacceptable? Is there any chance this cooperation would be a fruitful endeavour?"
- *Con main speaker's answer*: "No, we do not reject future cooperation with believers. During this debate we realized that, even if they do not share same opinion as us, we have same goals - but with different approaches."

The president was able to draw the following conclusion: "Maritime transport is the backbone of international trade; it creates connectivity and must be wisely developed in order to support economic growth. Unfortunately, this industry emits various pollutants. As a result of growing awareness on climate change, policy makers, stakeholders and all the parts involved in international shipping are called to act on tackling emissions from maritime transport. There are needed quick and fundamental changes in emissions pathway. Any action in this direction is an emergency. Science is not the only way of dealing with this issue. Science and religion reflect different aspects of human experience: science is constructed on knowledge about material world, while religion does not require testing, but also it is able to shape environmental behaviour and to change mentalities and lifestyles. Bridging shipping, climate change and religious beliefs can accelerate actions against climate change and also can improve communication among people with different values by identifying common themes: safety on-board and safety climate."

Participants were asked to vote the conclusion. Voting results were as follows: in favour - 39, against - 3, abstention - 0. This result shows that all the believers support the conclusion, while 3 seculars joined this group. This do not necessarily show that they accept religious values, but they agree with the benefits brought by shipping-climate change-religious linkage. Null abstention indicates that participants have a clear view on the topic of the debate and they have no doubts about the arguments presented in the speeches.

4. Conclusions

Maritime shipping is of a great importance for the global trade and economy, but at the same time it is associated with environmental impacts. Participants agreed that climate change is a real threat and actors in shipping industry need to take rapid action to reduce emissions from the shipping industry.

Believer participants approved the existence of the linkage between shipping, climate change and religious beliefs. They pointed out responsibility for the Divine Creation and the moral aspect of climate change. These participants affirmed that religious beliefs are able to shape consciences and a more rapid implementation of drastic regulations can be achieved, if faith science co-exist.

On the other side, the secular participants rejected the veracity of such a linkage. This second team considers climate change to be the result of population growth, consumerism, greed and abuse of Nature. According to them, the correction of this behaviour has nothing to do with faith, but with education and cooperation - based on scientific evidences.

Both parts do not reject the collaboration between believers and seculars, when they are called to act on tackling emissions from maritime transport. The vote on the conclusion of the debate showed that students have no doubts about

pro and con arguments; moreover, half of the seculars approved the conclusion on the linkage between shipping, climate change and religious beliefs.

The debate topic turned out to be a common theme for diverse participants, being a contributor in the integration of junior international students and a step towards safety on-board and safe climate.

The results of this study reveal the importance of such particular extracurricular activities, which can be seen as a useful manner to spend free time. Integration can be achieved through engaging junior international students in multidisciplinary debates because the described experience has stimulated creative, professional and technical skills of the participants. During the first semester was seen an improvement in junior international students attendance in lectures (33% higher compared to junior students in previous academic year) and in higher exam scores (scored, on average, 15% higher on first semester end exams). This study will be of great significance for the university management, resulting further recommendations such as: helping future international junior students to acquire early knowledge on curricula and multiculturalism that will enable them to cope with challenges of university life - through welcoming activities; conducting activities, both at the beginning and during the semesters, in order to raise international and local students awareness of the emotional, academic, professional and social problems they may face as students and as seafarers as well; having in view preparation of potential international candidates to be able to cope with Constanta Maritime University life - by observing the behaviour of present international students during different extracurricular activities; consolidation communication platforms with students' families as this has a great impact on their psychological well being.

The results obtained from this debate can improve the integration strategy in universities. It was revealed that the issue of integration of engineering and faith is an interesting topic for students. Future research may continue this linkage, such as 'how navigational astronomy and religion intersect'. Another research direction is monitoring the participants in order to study the degree of integration during their academic life and on-board as well. In addition, other lecturers might be encouraged to explore faith-Science interconnection (for example scientific explanation and Quranic view on the laws of Thermodynamics).

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