Comment number	Comment	Authors' responses
1	In line 26, 'At present, on−scene training is obligatory for trainees [4,5], although opportunities to maneuver a ship as a cadet in situations that require attention are somewhat limited for rational reasons for safety (add https://doi.org/10.1016/j.chemosphere.2022.135245).	Thank you so much for the kind comment with the additional citation information. The revised relevant part is in line 28.
2	For the text clarity, would you refrain from using additional words, mostly meaningless filler words, which can be omitted or some archaic words see e.g. "respectively", "thus", "hence", therefore", "furthermore", "thereby", "basically,", "meanwhile", "wherein", "herein", "Nonetheless", "Perceivably," etc.? Please carefully go through the entire manuscript including Table and Figure.	Thank you for your kind review comment regarding English expressions We've revised relevant parts as your comment.
3	Avoid using they, we, etc. in the manuscript.	Thank you for the kind review comment on the English expressions. We've revised relevant parts as your comment.
4	The unit and the name of the all the axis X and Y (figures) to be clearly stated. Figures 2, 4, 6, 7, 8 and 9.	Thank you for your keen observation. We added and enlarged the axis of figures as your comment. However, Figure 7 and Figure 9 are not changed because the z−score normalized value and t−SNE values don't have units.
5	In Table 5, Gross tonnage does not have unit. Gross Tonnage means the measure of the overall size of a ship. The Gross tonnage is calculated using a formula that takes into account the ship's volume in cubic meter below the main deck in the enclosed spaces above the main deck this volume is then multiplied by a coefficient which results	Thank you for the kind review comment. We've checked our mistake, and revised the Table 1. In line 78.

	in a dimensionless number all measurements used in the calculation of molded dimensions in the drawing that tonnage is given a different color within gross tonnage which is more or less the whole ship to indicate the difference between Net Tonnage and Gross tonnage.	
6	In line 82, what does it mean by 5−min?	Thank you for your keen observation. We revised relevant part in line 82
7	In line 116, All participants have experience in onboard training, thereby possessing the basic knowledge of handling navigation equipment (add https://doi.org/10.1080/18366503.2021.1878981).	Thank you so much for the kind comment with the additional citation information. The revised relevant part is in line 116.
8	Please elaborate more on the limitations/potential future development in the conclusion section?	Thank you for the precious comment. We added the relevant parts in lines 249−252, 255−257, 258−259.
9	What is the way forward for this study?	As a part of the project titled "Development of Smart Port−Autonomous Ships Linkage Technology," supported by the Ministry of Oceans and Fisheries, Korea, we conducted this research to develop the training simulator for Shore Remote Control Officer (SRCO). The research findings will be applied to the generation process of navigation scenarios of the SRCO training simulator in the year 2023; hence the purpose of the research was to propose specific criteria for dividing difficulties of navigation and validate if the criteria were reasonable or not.
10	Authors have to remove all the typo and grammatical error in the paper which may interfere with the reading and understanding of the paper.	Thank you for the comments, we've revised the manuscript as your comments.
11	Author(s) need to explain in detail what have done and what have not been done in other studies (each of them). What is the different within your study and other study?	Thank you for the precious comment. We've revised the relevant part in lines 244−249.
12	In Table 2, why the difficulty degrees only up to 3?	Thank you for the keen comments. As the answer to the comment, this research concentrated on the evaluation of navigation difficulties to establish the distinguishable degrees of difficulty. So, we expected that if the degrees are too

		many, it would be hard to analyze the result. In the future, advanced future works will include more navigation elements with 5 to 10 degrees of difficulty.