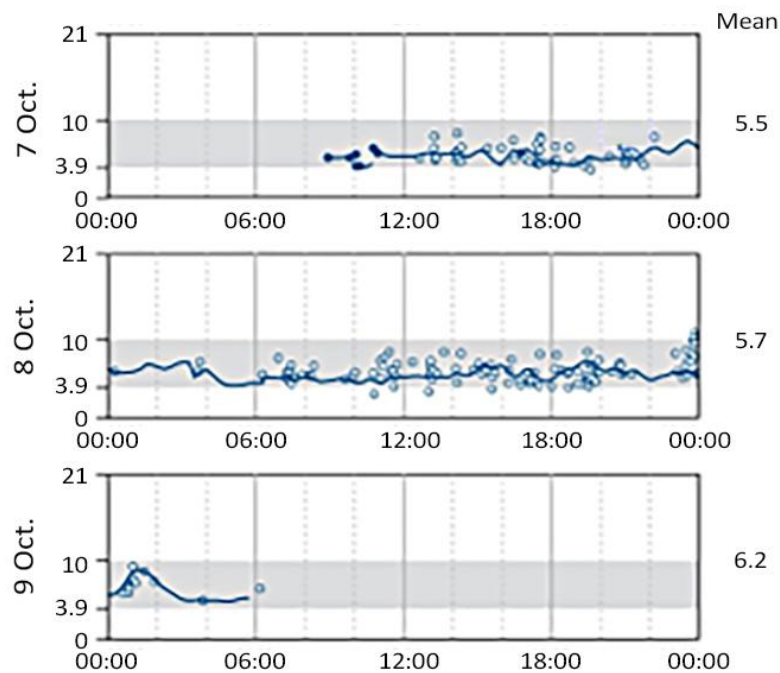


Supplementary material for: Haugen V.D. & Husjord L. 2025. The impact of stressors on cognition during a survival exercise in polar waters. *Polar Research* 44. Correspondence: Vivian D. Haugen, Department of Education and Pedagogics, UiT The Arctic University of Norway, Universitetsveien 39, NO-9019 Tromsø, Norway. E-mail: vivian.d.haugen@uit.no

Supplementary Fig. S1. The glucose results.



Supplementary Table S1. Extract of the weather report for every fifth hour through the field exercise. The weather station was on the beach.

Date and time	Average wind speed (m/s) sensor 5168	Wind gust (m/s) sensor 5168	Wind direction (°) sensor 2321	Air temperature (°C) sensor 3026	Relative humidity (%) sensor 1973
7 Oct. 14:03	1.0878	1.554	17.9316	11.12814	46.8531
7 Oct. 18:00	2.5641	6.5268	12.306	11.12814	48.3516
7 Oct. 23:00	5.1282	3.4188	313.9788	9.27202	67.2327
8 Oct. 03:00	2.7195	0.6216	317.4948	7.977105	79.3206
8 Oct. 07:00	0.3108	0.9324	143.4528	6.59369	83.916
8 Oct. 15:00	0.6993	0.9324	246.8232	6.13347	87.0129
8 Oct. 19:00	0.4662	0.9324	13.0092	5.673708	89.7102
8 Oct. 22:00	2.0202	4.3512	158.22	7.977105	66.8331

Supplementary Table S2. Mean values of the 1918 measures of the temperature and relative humidity during the exercise.

Type of value	Air temperature (°C)	Relative humidity (%)
Mean value	9.55	56.84
Maximum values	11.13	66.83
Minimum values	7.98	46.85

Supplementary Table S3. Overview of when and where the data were collected.

	Before the start of fieldwork: 16:00–22:00, 6 Oct., UiT campus in Narvik	In the field: 11:00, 7 Oct., to 23:00, 8 Oct.	After the fieldwork: 00:00–01:30, 9 Oct., UiT campus in Narvik
Pre- and post-testing	Pre-test at 21:00	Post-test at 23:00, 8 Oct.	
Medical exams	Medical exams at 21:00	Medical exams at 08:00, 8. Oct. Medical exams at 23:00, 8. Oct.	
Glucose measurements	Glucose monitors placed on the participants	Glucose measurements taken over 36 hours	Glucose measurements read
GoPro cameras		Observation over 36 hours with GoPro cameras	
Focus group interviews			Focus group interviews 00:00–01:30

Supplementary Table S4. Main themes and subthemes of the thematic analysis of the focus group interviews.

Main themes	Sub-themes
Experiences of sleep during the field period	<p>Sleep quality: restless sleep and frequent awakenings</p> <p>Perceived amount of sleep</p> <p>Experience with the use of PSK and GSK related to sleep</p>
Emergency rations and water	<p>Frequency of consumption of emergency rations and water</p> <p>Total intake of emergency rations and water</p> <p>Glucose measurements seen in the light of the intake of emergency rations and water</p>
Emotions	<p>Boredom, restlessness</p> <p>Perceived mood during the field period of 36 hours</p> <p>Need for both alone time and being social</p>
Participants' experience of temperature and wind conditions	<p>Experience with clothing and use of GSK and PSK</p> <p>Experience of being wet and cold</p> <p>Experience with using buddy check</p>