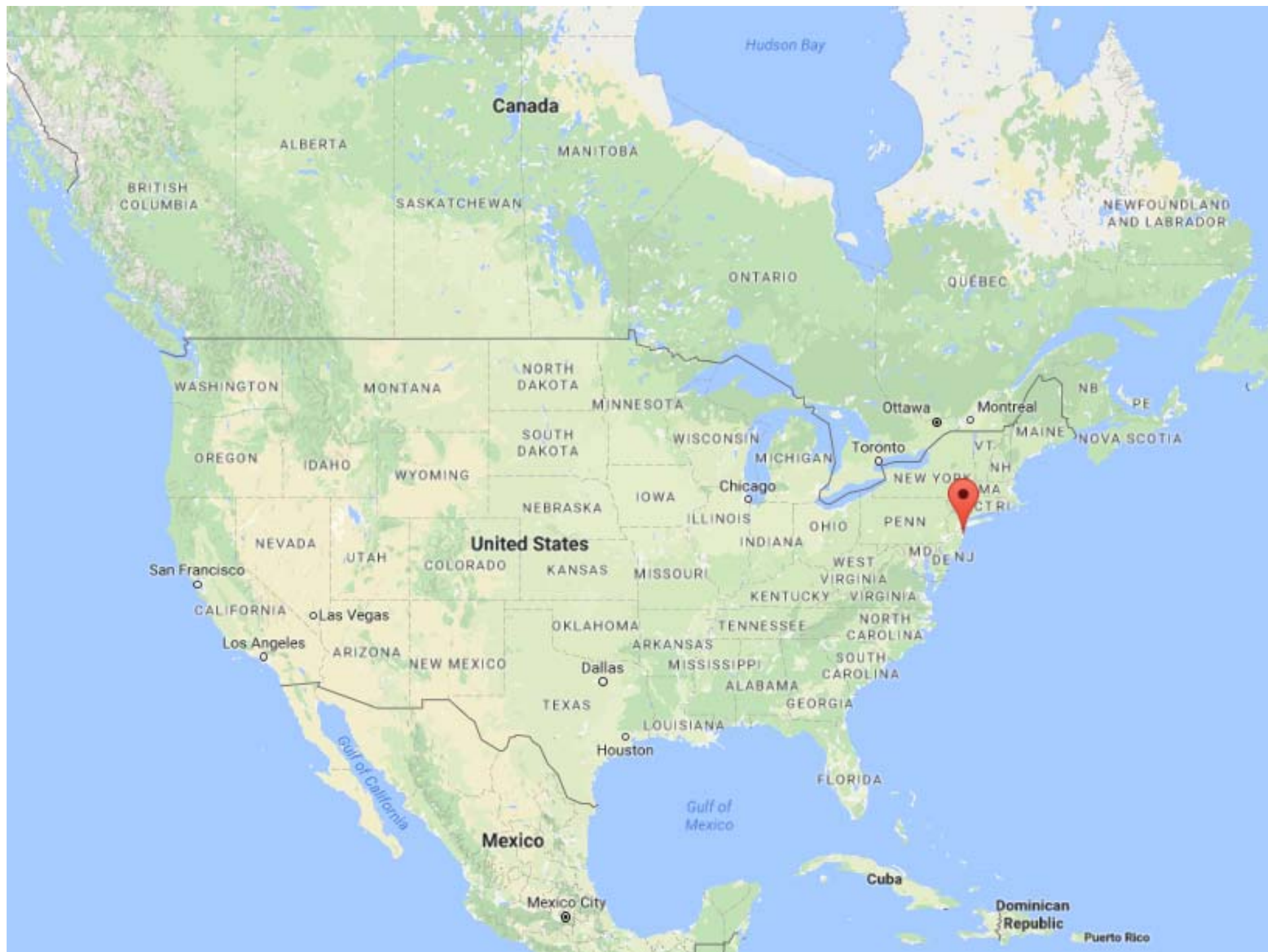




# The Norwegian Mindset for Loving Winter

Kari Leibowitz  
Stanford University











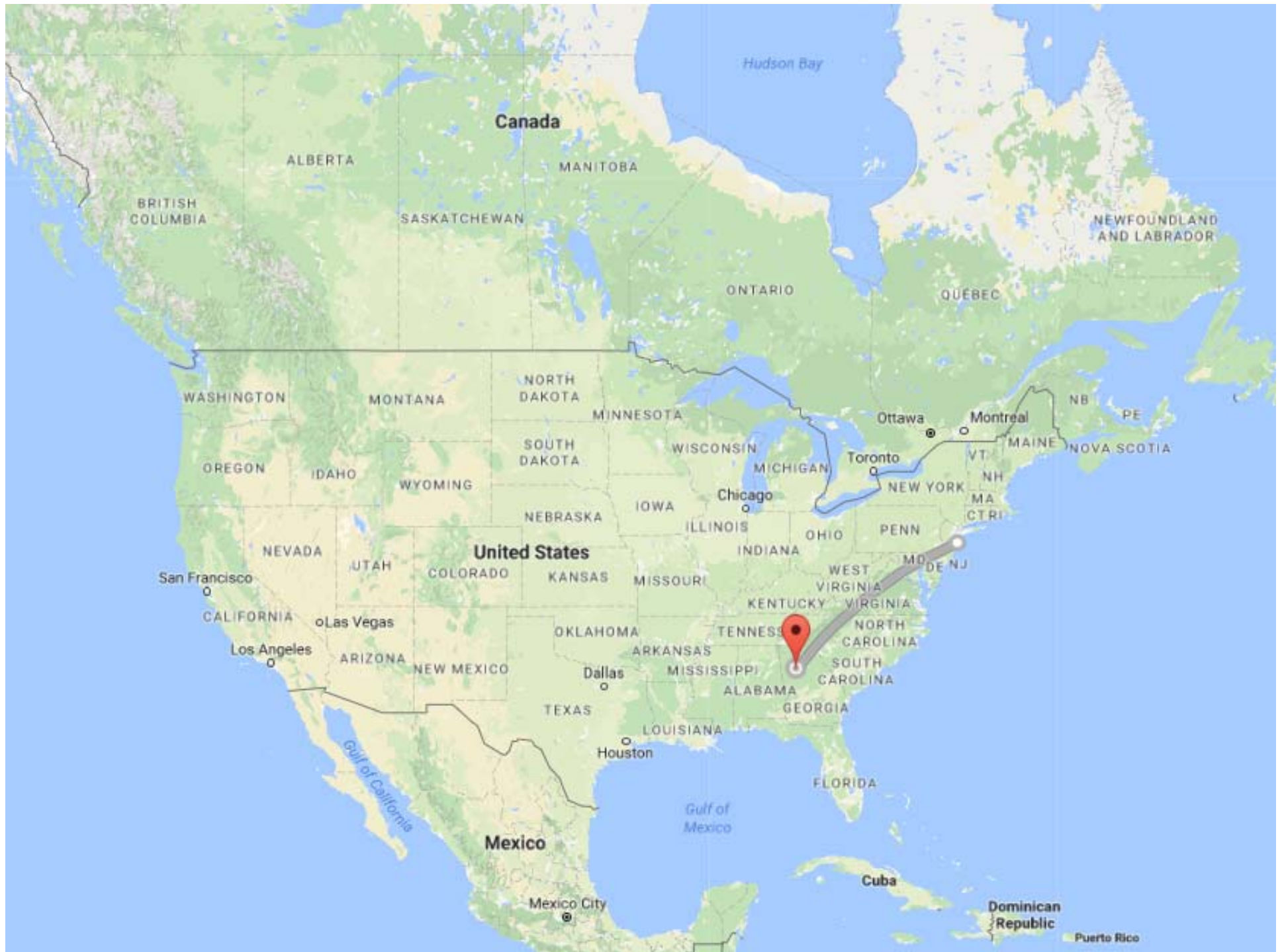
























Joar Vittersø



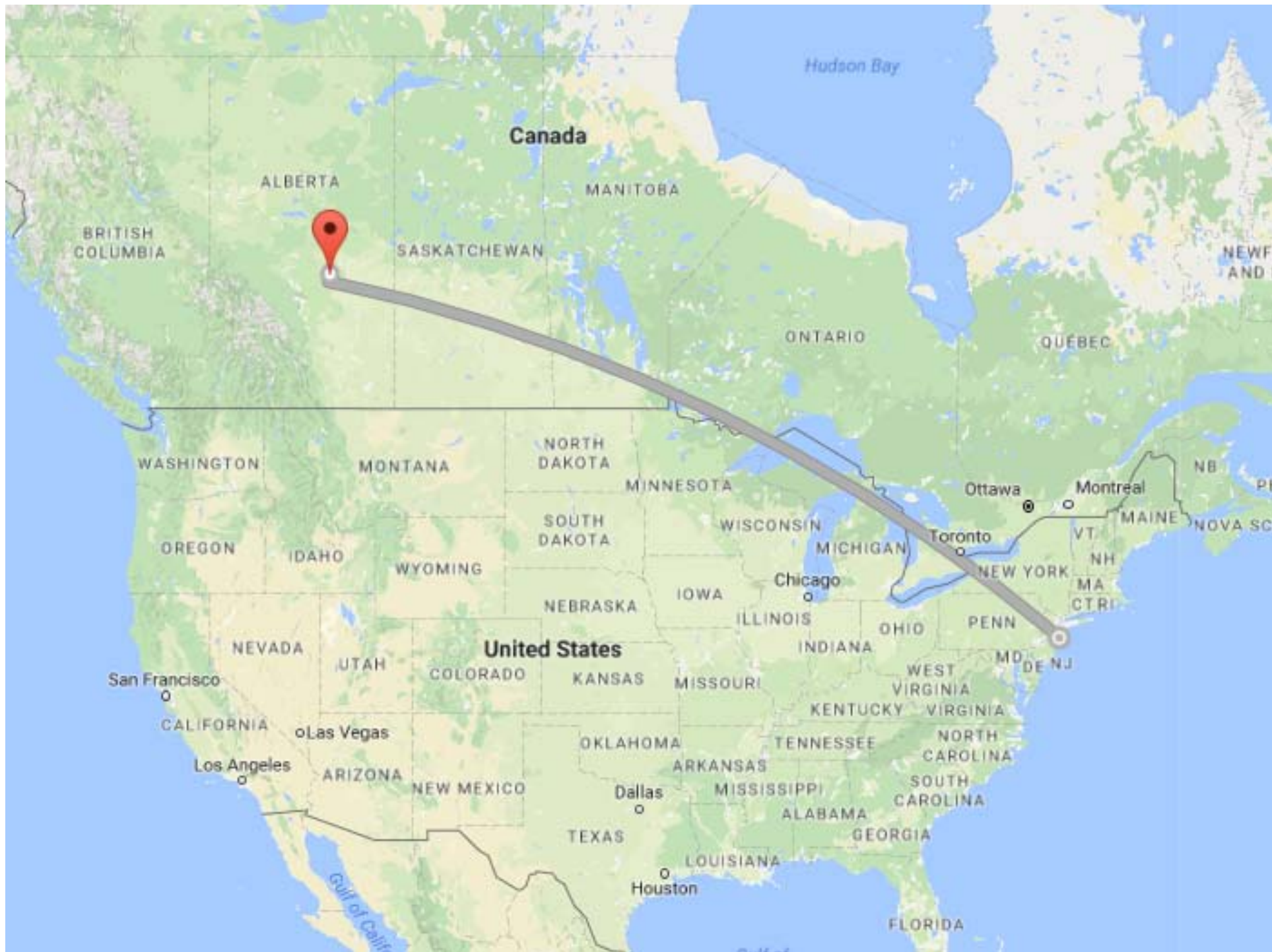




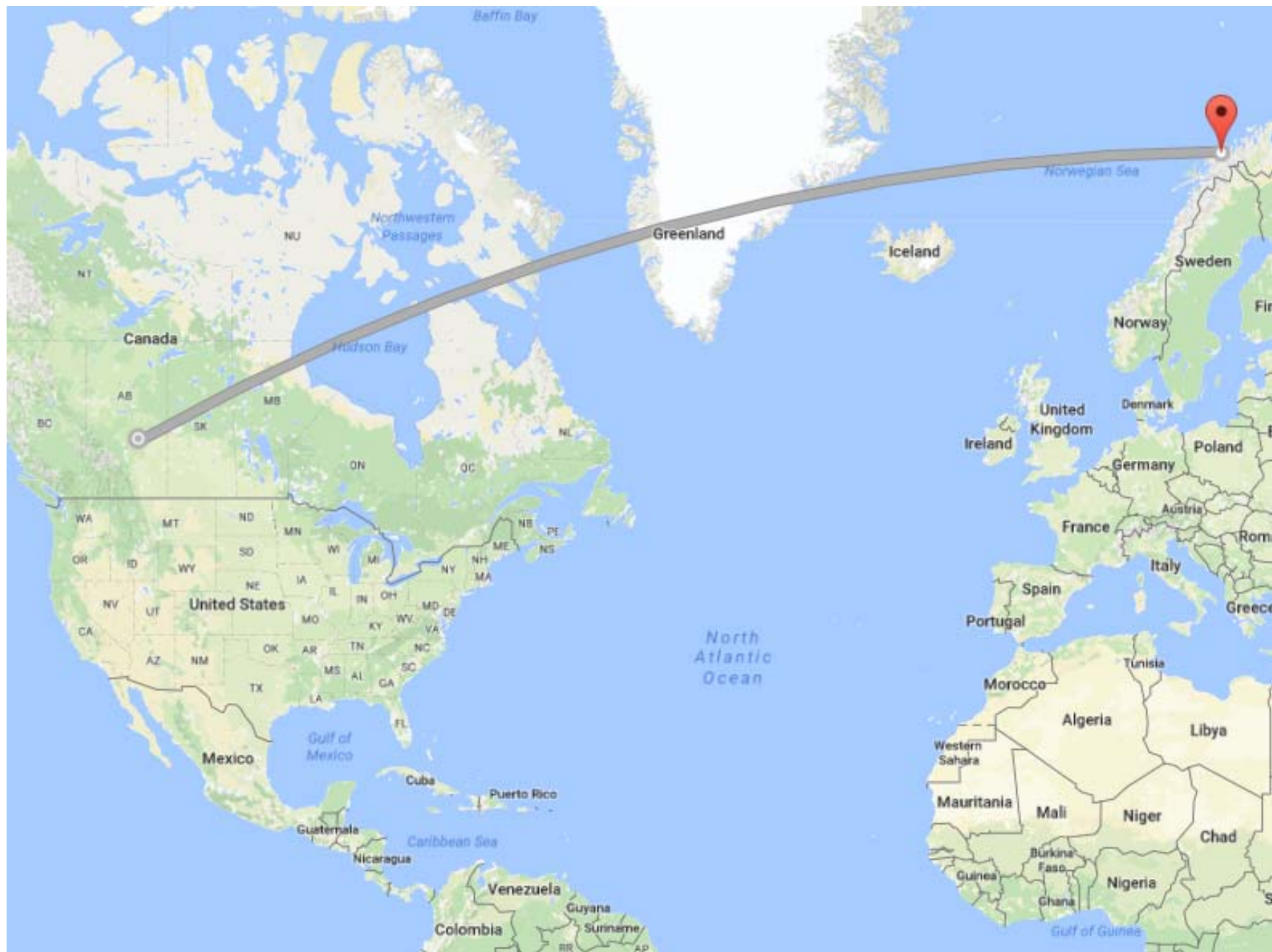


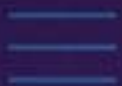












# Tromsø



TEMPERATURE

REALFEEL®

PRECIPITATION

## Intermittent clouds

### SATURDAY

09



10



11



NOON



13





Tromsø Island









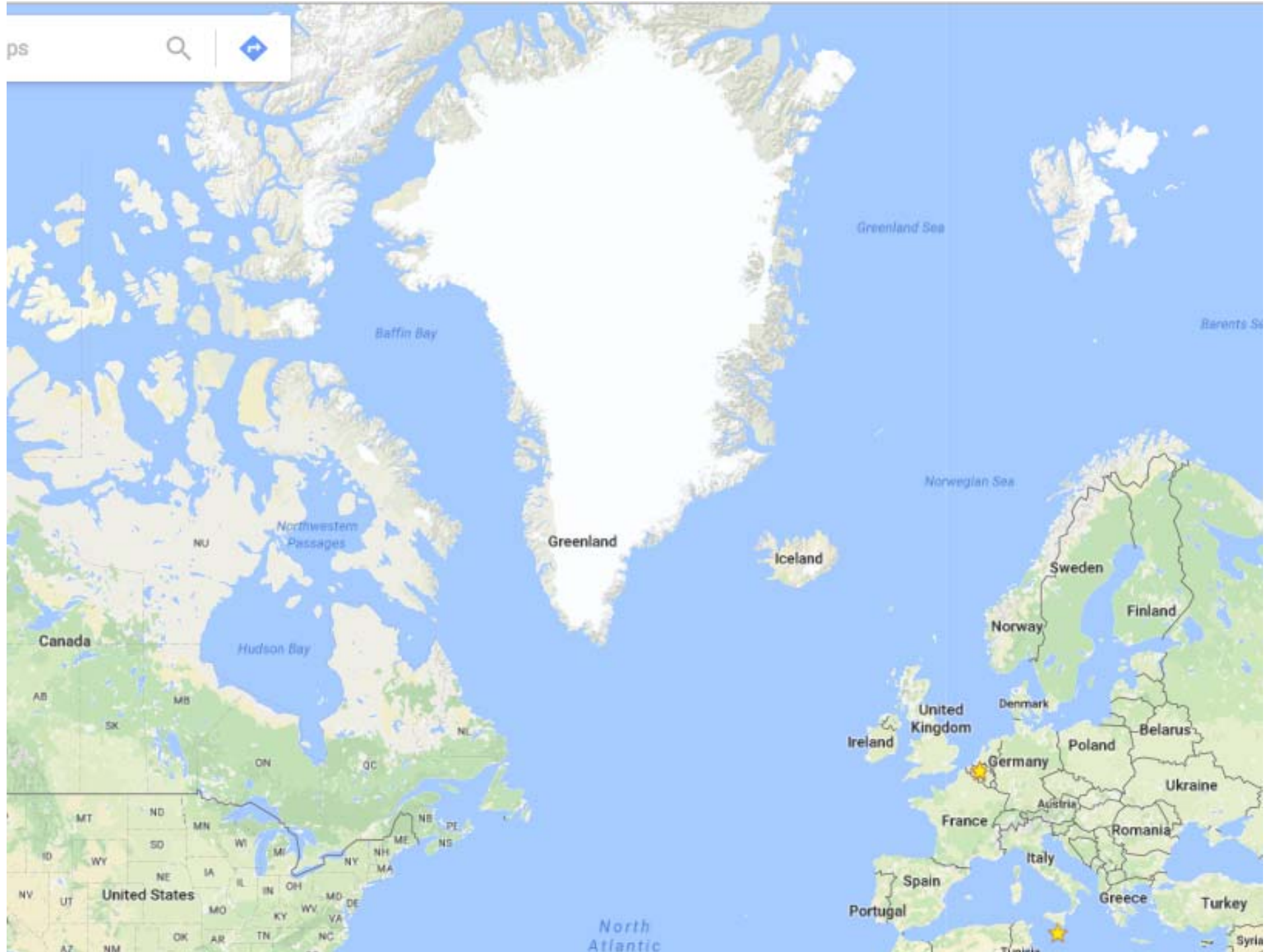
A photograph of a green wall with white text. The text reads 'THE COOLEST CITY IN THE WORLD' in a large, sans-serif font. Below this, the coordinates '69° 38' 46.2'' N 18° 57' 16.5'' E' are displayed in a smaller font. The wall has some reflections and a slight gradient of green.

# THE COOLEST CITY IN THE WORLD

69° 38' 46.2'' **N** 18° 57' 16.5'' **E**

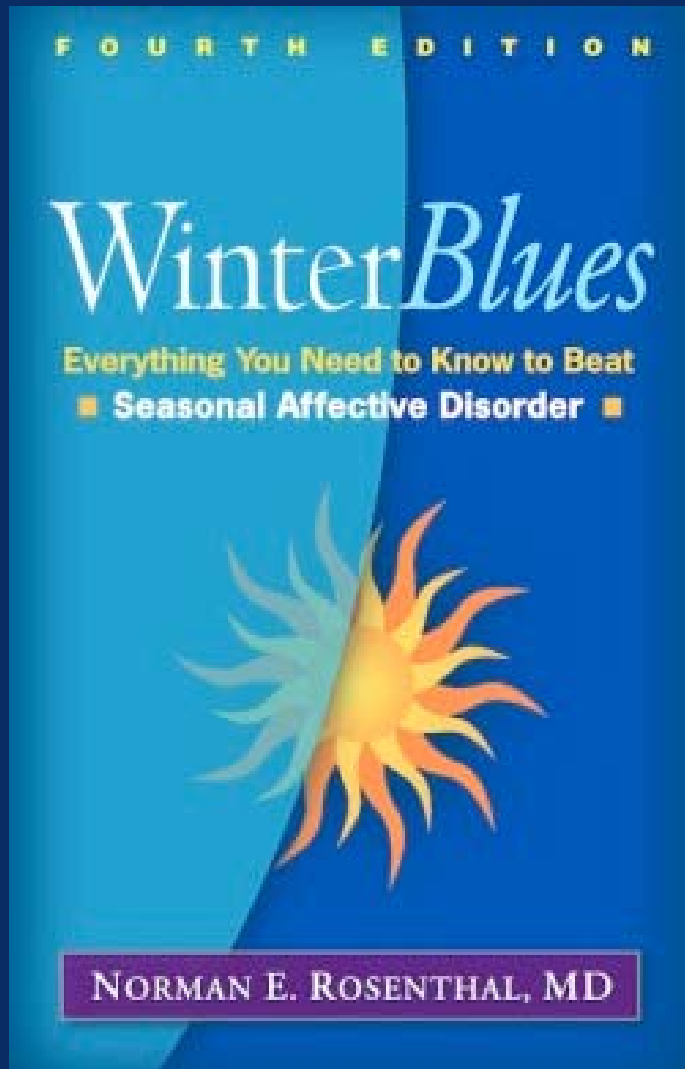








# Seasonal Affective Disorder



- First systematically described by Norman Rosenthal in 1980s
- Clinical depression with a seasonal pattern



## Quiz: Col

Around 6% of U

# Kellogg's have made a light therapy bowl so you can fight SAD over breakfast



Deborah Arthurs for Metro.co.uk Monday 6 Feb 2017 12:40 pm

CBCnews

Home

Opinion

Wo

Canada

Toronto

## Toronto Pu Disorder

A pilot project is giving

order?

the BMJ.



Kellogg's have made the world's first SAD lamp bowl and they're not afraid to use it

Toronto More Streams  
One  
isten Live  
99.1  
radio  
Video

al Affective





- No evidence of higher rates of wintertime depression<sup>1</sup>
- Same rates of self-reported depression in winter as in Maryland, USA at 39° and 41° north<sup>1,2,3</sup>

<sup>1</sup>Hansen et al., 1991; <sup>2</sup>Kasper et al., 1989; <sup>3</sup>Rosen et al., 1990

# Tromsø



Tromsø Main Street

- No seasonal differences in reporting of mental distress among residents of Tromsø<sup>1</sup>

<sup>1</sup>Johnsen et al., 2012



# Tromsø



Tromsø Main Street

- Same rates of self-reported depression in winter as in USA at 39° and 41° north<sup>1,2,3</sup>

<sup>1</sup>Hansen et al., 1991; <sup>2</sup>Kasper et al., 1989; <sup>3</sup>Rosen et al., 1990

Why aren't people in Tromsø more depressed during the winter?

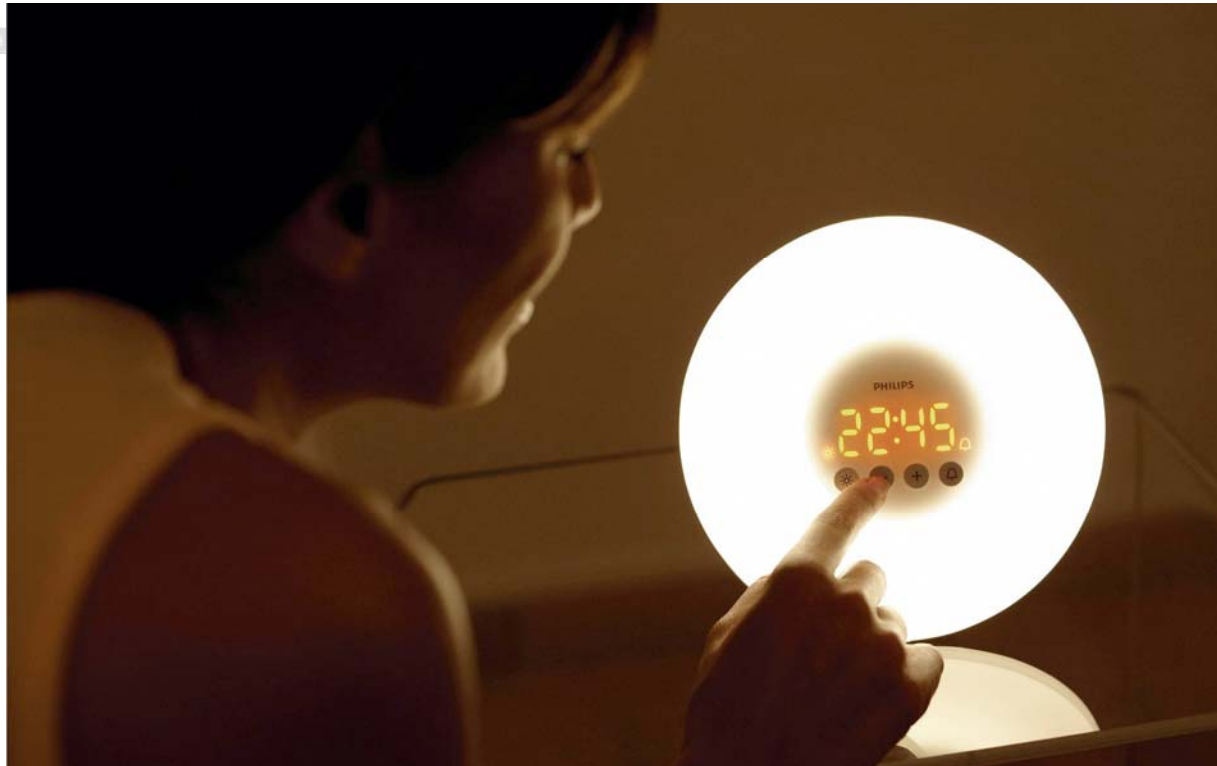








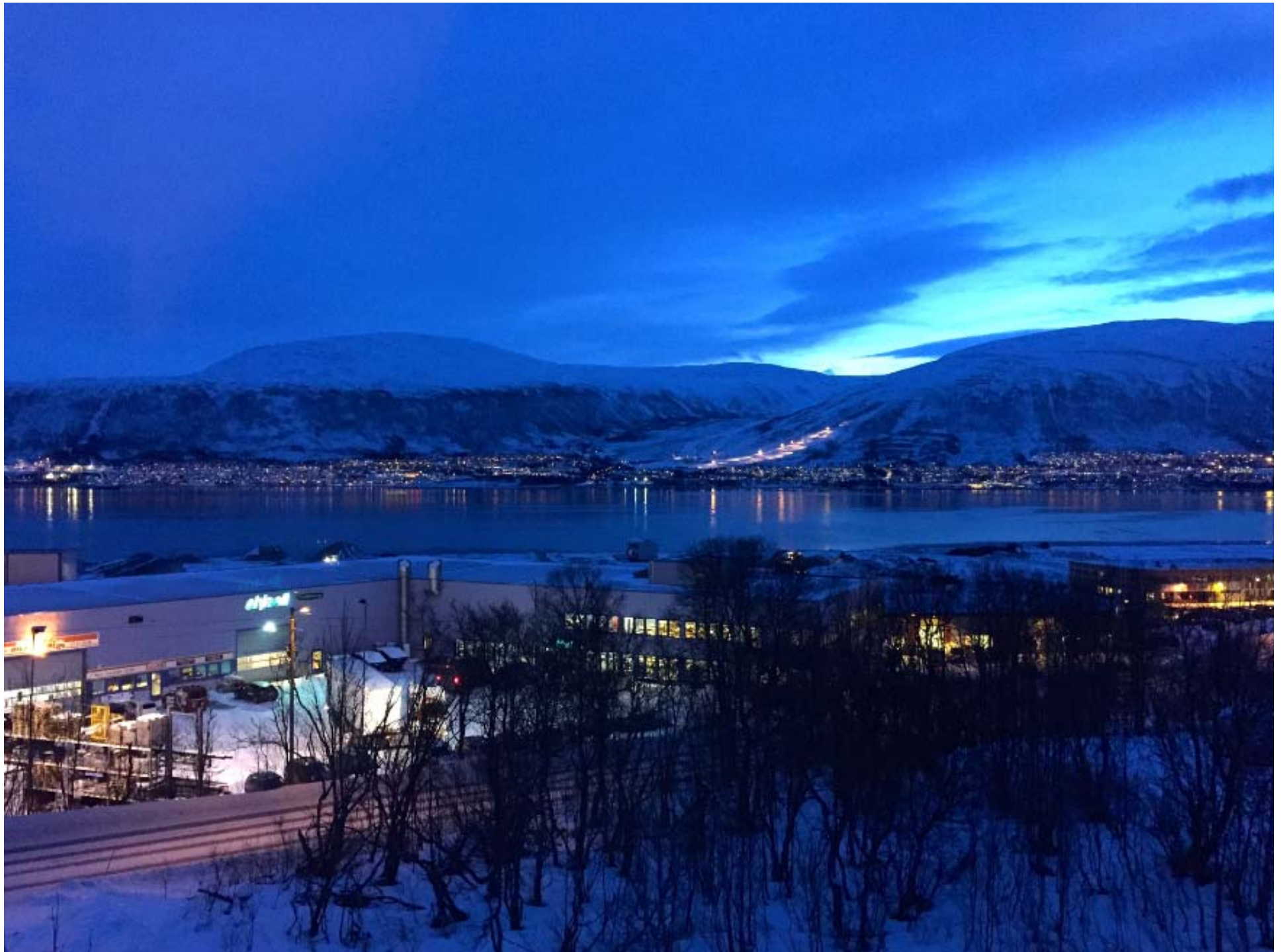




"I wouldn't necessarily say summer is the best season."





















Why aren't people in Tromsø more depressed during the winter?





How are Tromsø residents able to thrive during the winter?



## Survey Measures

### **Satisfaction with Life Scale** (Diener et al., 1985)

- Measures life satisfaction

### **Mental Health Continuum** (Keyes, 2002)

- Measures psychological flourishing

### **Personal Growth Composite** (Vittersø, Oelmann, & Wang, 2009)

- Measures openness to and engagement with experiences and challenges that lead to personal growth



# MINDSET:

The beliefs we  
use to  
understand and  
interpret the  
world





Alia Crum



“Intelligence is fixed”



“Intelligence is malleable”



- Greater appreciation for academics
- More motivation to do well academically
- Improved performance after failures and setbacks
- Better GPA

(e.g., Dweck, 2002; 2008)

“Shake is sensible”

KEEP REFRIGERATED  
SHAKE WELL BEFORE DRINKING  
Product of U.S.A.

**Nutrition Facts**  
Serving Size 1 bottle (12 oz)  
Servings Per Container 1

Amount Per Serving	Calories 140	Calories from Fat 0
		% Daily Value*
Total Fat 0g		0%
Saturated Fat 0g		0%
Cholesterol 5mg		2%
Sodium 200mg		8%
Total Carbohydrates 20g		7%
Dietary Fiber 0g		0%
Sugars 20g		
Protein 15g		
Vitamin A 0%		Vitamin C 4%
Calcium 50%		Iron 2%

\*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

**Ingredients:** nonfat yogurt [cultured grade A nonfat milk, modified corn starch, kosher gelatin, palmitate], water, vanilla puree, sucralose, potassium sorbate, malic acid, sodium citrate

**Sensi-Shake**  
Guilt Free Satisfaction

0% fat  
0 added sugar  
140 calories!

Get sensible with the new light healthy **Sensi-Shake**. It has all the taste, without the guilt - no fat, no added sugar and only 140 calories! **Sensi-Shake** is light and tasty enough to enjoy every day.

**French Vanilla**  
12 FL OZ (355 mL)

1 26039 47629 0

“Shake is indulgent”

KEEP REFRIGERATED  
SHAKE WELL BEFORE DRINKING  
Product of U.S.A.

**Nutrition Facts**  
Serving Size 1 bottle (12 oz)  
Servings Per Container 1

Amount Per Serving	Calories 620	Calories from Fat 270
		% Daily Value*
Total Fat 30g		45%
Saturated Fat 18g		91%
Cholesterol 115mg		39%
Sodium 460mg		19%
Total Carbohydrates 63g		21%
Dietary Fiber 2g		7%
Sugars 55g		
Protein 31g		
Vitamin A 0%		Vitamin C 4%
Calcium 50%		Iron 2%

\*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

**Ingredients:** Vanilla ice cream (cream, sugar, corn syrup, vanilla extract, mono and diglycerides, locust bean gum, guar gum, annatto color), liquid pasteurized eggs, whole milk, simple syrup [sugar, water, citric acid, potassium]

**INDULGENCE.**  
*Decadence you Deserve*

Indulge yourself with this rich and creamy blend of all of our premium ingredients - sumptuously smooth ice cream, satin whole milk, and sweet vanilla. It is heaven in a bottle and irresistibly gratifying.

Smooth, Rich, and Delicious!

**French Vanilla**  
12 FL OZ (355 mL)

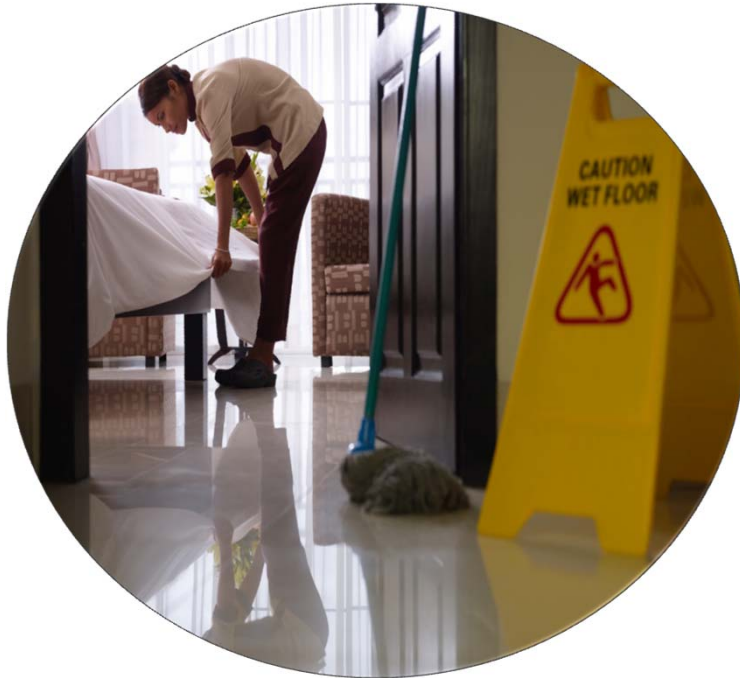
1 26059 37627 0

- Steeper decline in ghrelin (gut peptide that signals hunger)
- Greater physiological satiety

(Crum, Corbin, Brownell & Salovey, Health Psychology, 2011)



“Work is work”



“Work is exercise”



- Increased job satisfaction
- Lower systolic BP
- Weight loss

(Crum & Langer, Psychological Science, 2007)

“Stress is debilitating”



“Stress is enhancing”



- Fewer negative health symptoms
- Better work performance
- Improved life satisfaction

(Crum, Achor, & Salovey, 2013)



“Winter is dreadful”



- Winter is a limiting time of year
- Winter is boring
- There are many things to dislike about the winter

(Leibowitz & Vittersø, in preparation)

“Winter is delightful”



- Winter brings many wonderful seasonal changes
- Winter is fascinating
- There are many things to enjoy about the winter

How pervasive are negative wintertime mindsets?

*“In the winter, it is conceivable that their (the northern Norwegian investigators’) low energy level did not provide them with the creativity or enthusiasm to undertake such a study.”* (Rosenthal, 1993; Hansen et al., 2008)





# Wintertime Mindset



- There are many things to enjoy about the winter
- I love the coziness of the winter months
- Winter is my favorite season
- I find the winter months dark and depressing
- In the winter I often don't feel like doing anything at all

(Leibowitz & Vittsersø, *in preparation*)

# Winter & Well-Being in Norway

Svalbard

78° north

Tromsø

69° north

Oslo

60° north



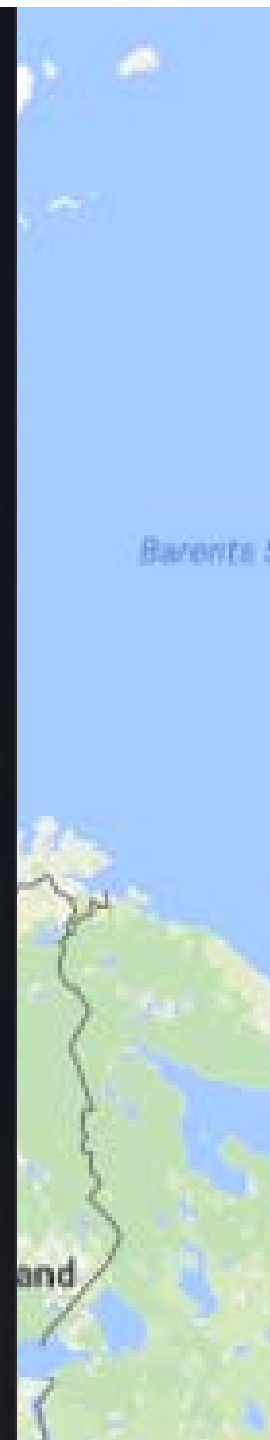


Winter

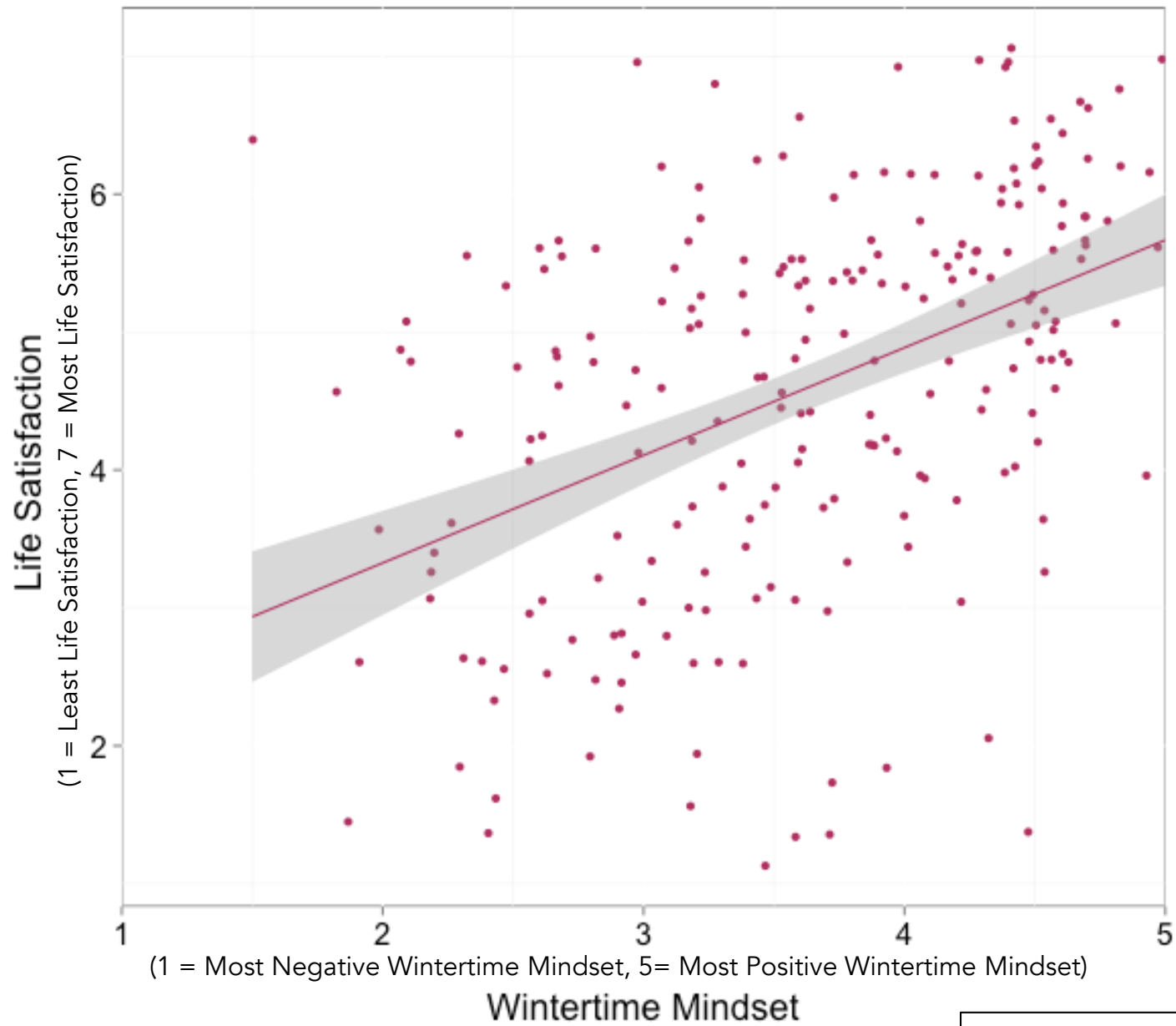
\*\*\*

+

1  
3  
5



## Wintertime Mindset and Life Satisfaction

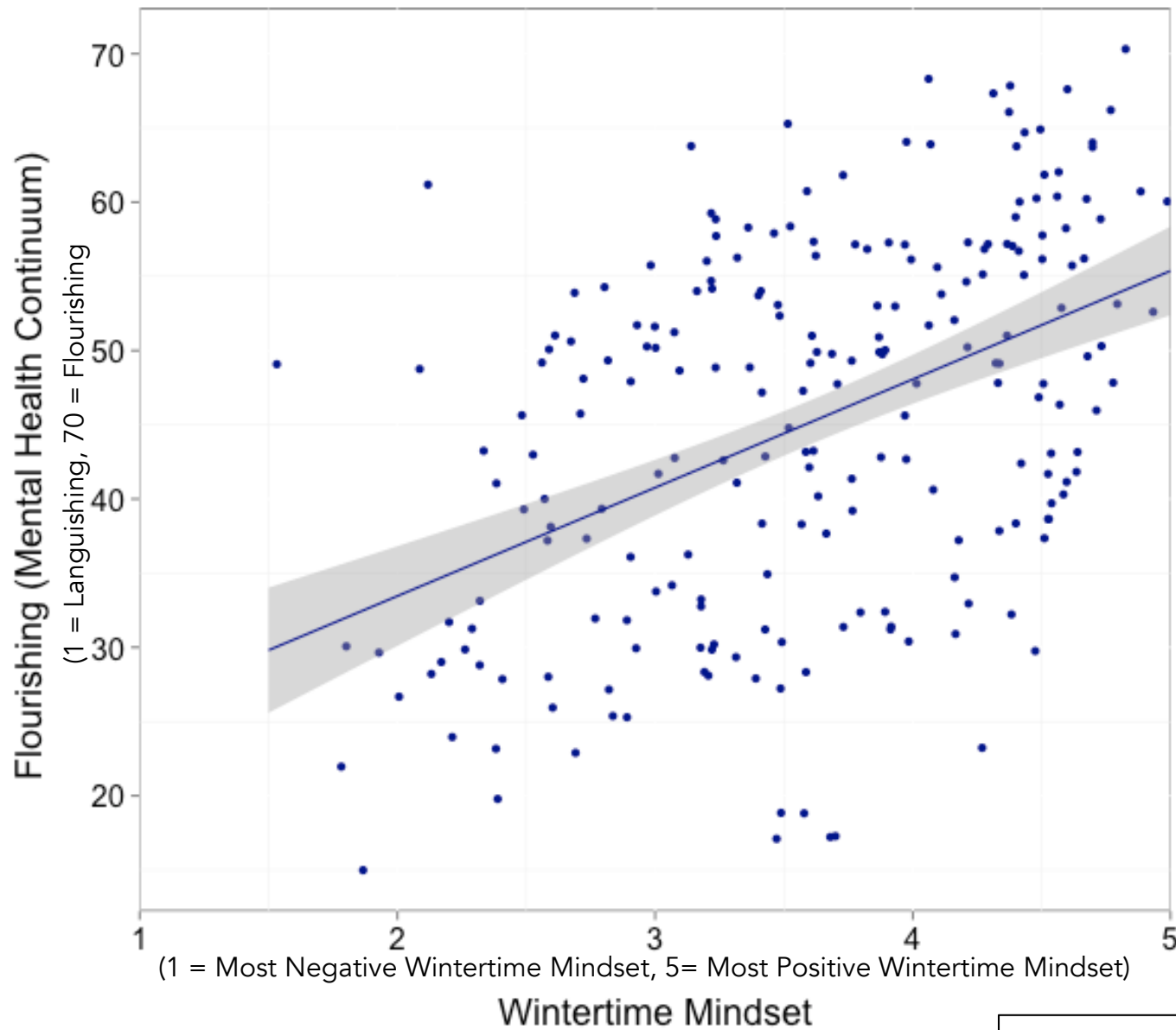


(Leibowitz & Vittsersø, *in preparation*)

$N = 224$ ,  $r = .44$ ,  $p < .001$



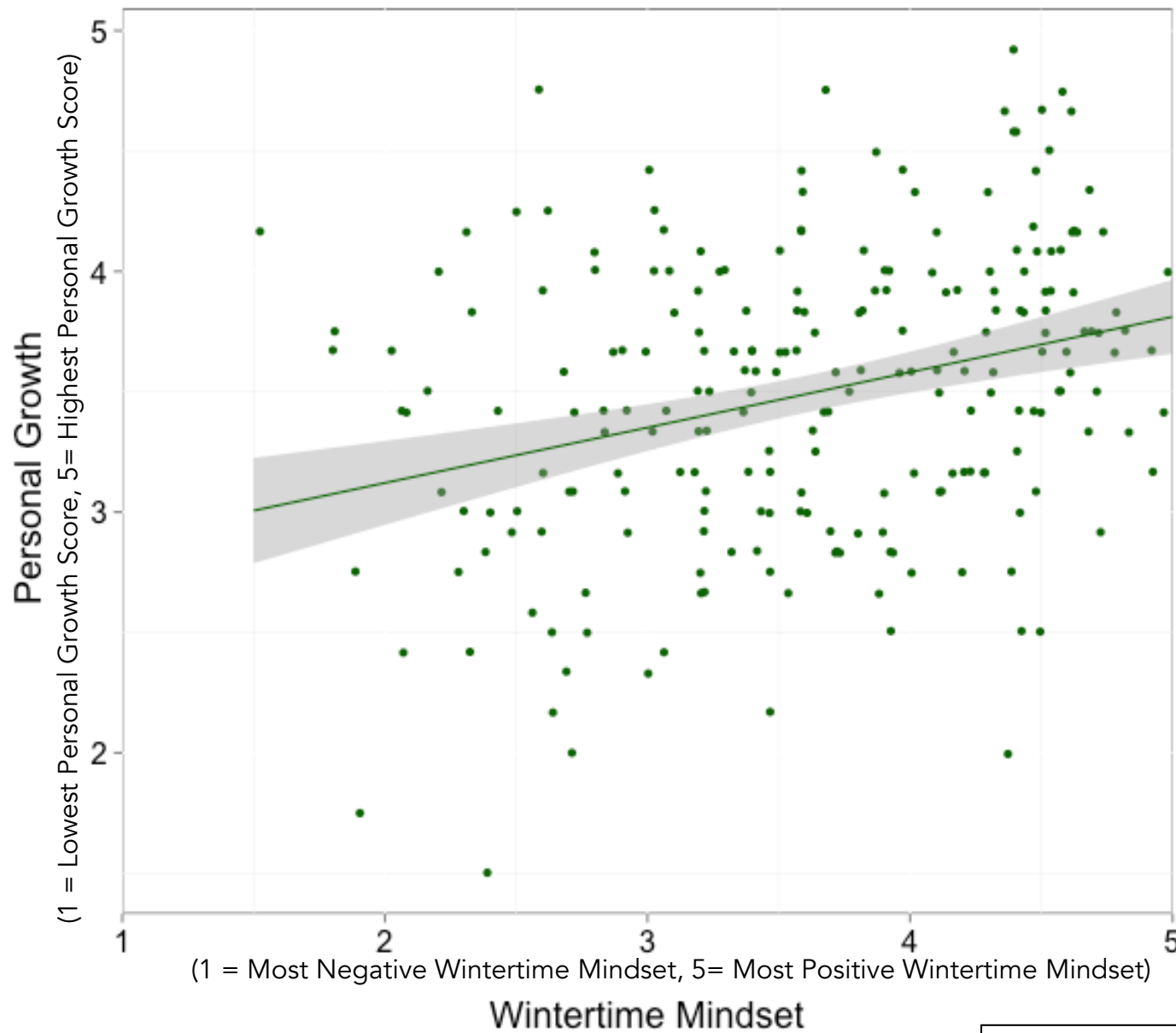
## Wintertime Mindset and Flourishing



(Leibowitz & Vittsersø, *in preparation*)

$N = 224, r = .46, p < .001$

## Wintertime Mindset and Personal Growth Composite

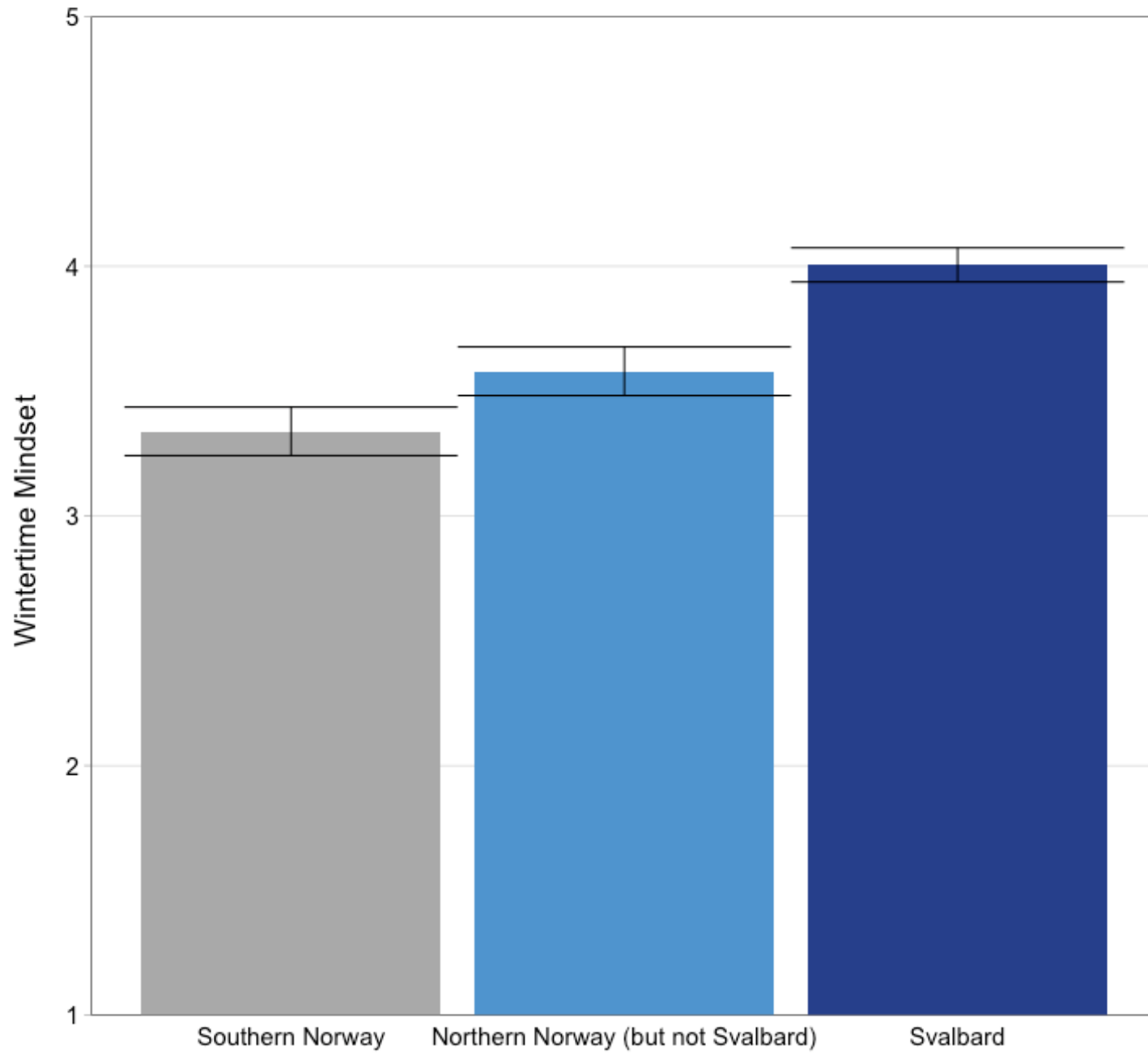


(Leibowitz & Vittsersø, *in preparation*)

$N = 227, r = .3, p < .001$



Wintertime Mindset by Latitude in Norway



## Main take-aways

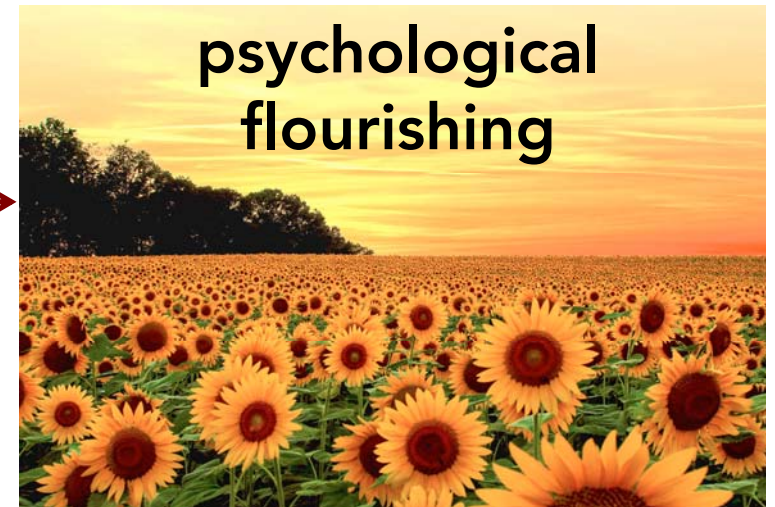
- In Norway, positive wintertime mindset was associated with latitude: the farther north you live, the more positive your wintertime mindset







**life satisfaction**



**psychological  
flourishing**



**personal growth**

## Limitations

- Correlational study: correlation  $\neq$  causation
- Study did not examine seasonal affective disorder
  - Important difference between clinical seasonal depression and winter blues; findings about wintertime mindset do not suggest that those suffering from clinical depression can just “snap out of it” by changing their mindsets
- Limitations of mindset





*“If winter was a place, it would be  
Tromsø”*













How pervasive are negative wintertime mindsets?

*“In the winter, it is conceivable that their (the northern Norwegian investigators’) low energy level did not provide them with the creativity or enthusiasm to undertake such a study.”* (Rosenthal, 1993; Hansen et al., 2008)







“Winter is dreadful”



- Winter is a limiting time of year
- Winter is boring
- There are many things to dislike about the winter

(Leibowitz & Vittersø, in preparation)

“Winter is delightful”



- Winter brings many wonderful seasonal changes
- Winter is fascinating
- There are many things to enjoy about the winter

“Winter is dreadful”



“Winter is delightful”



- Greater life satisfaction
- Greater mental flourishing
- Greater personal growth

(Leibowitz & Vittersø, in preparation)







## What can we say?

- Mindset may be a previously unexplored factor in influencing winter well-being





# How can we cultivate a positive wintertime mindset...

in ourselves?  
in our cities?



1. Get outside



2. Make winter special



3. Appreciate winter

1. Get outside



*Friluftsliv* = “open air  
liv”







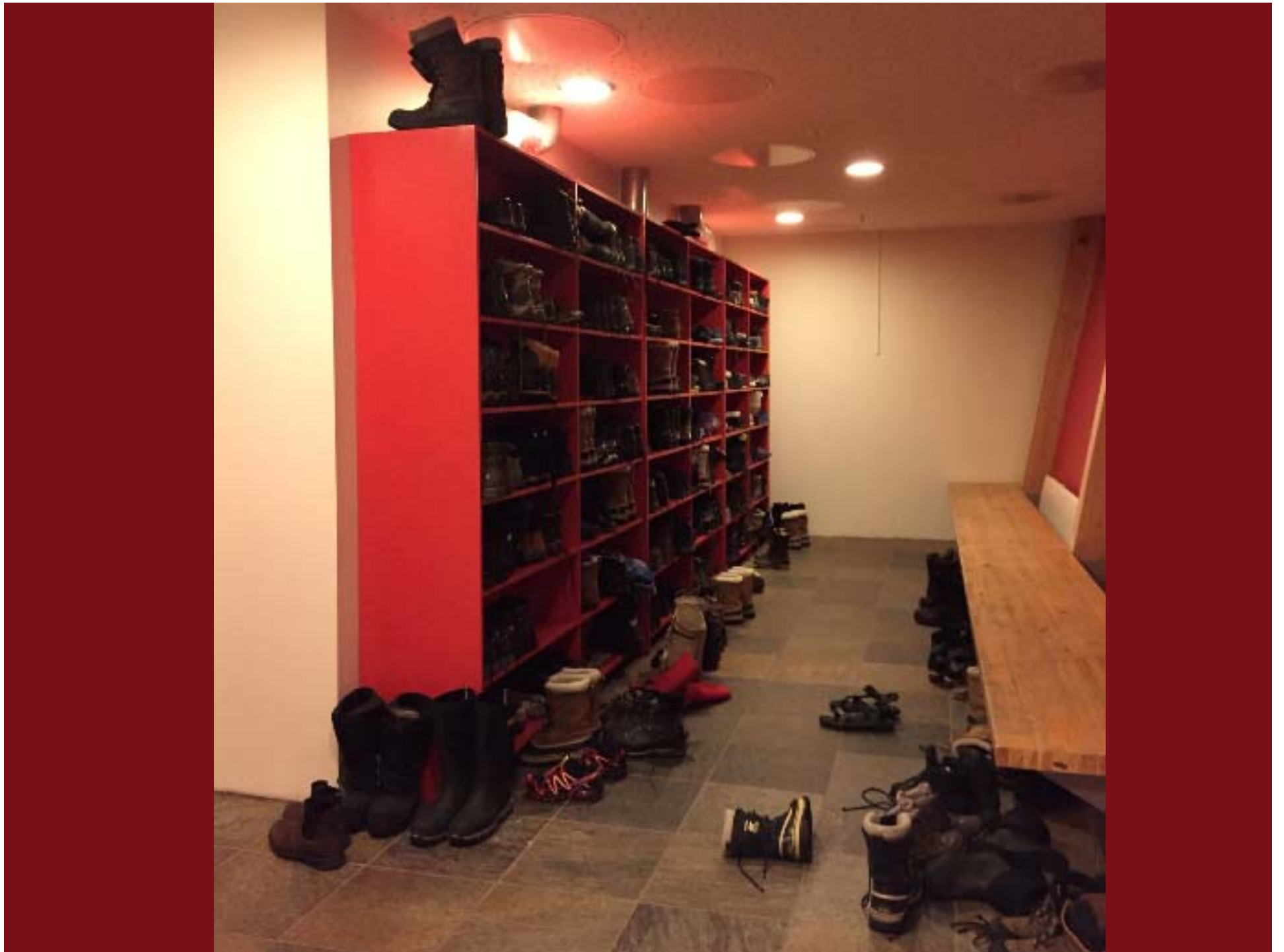


*There's no such thing as bad weather,  
only bad clothing!*













## 2. Make winter special

*koselig* =  
“cozy”



**hygge**

*/hyu-gah/* (n.) A Danish word that refers to a mental state of coziness, conviviality, and togetherness in the heart of winter.

























### 3. Appreciate winter – in our thoughts

I look forward to the winter because...



### 3. Appreciate winter - in our speech

Be a secret wintertime mindset ambassador

"I'm so sick of this winter we're having."





# Create a positive wintertime mindset



1. Get outside: dress for winter, find winter activities to love, create infrastructure that encourages people to get outside



2. Make winter special: make it cozy, promote cultural wintertime events



3. Cultivate winter appreciation: in your thoughts: focus on what you love about winter, & in your speech: participate in winter-positive talk







Thank you!

Joar Vittersø  
Alia Crum

UiT  
THE ARCTIC  
UNIVERSITY  
OF NORWAY