

## INTRODUCTION

- In Canada, suicide is the second leading cause of death among adolescents (Public Agency of Canada, 2012).
- **A greater risk of suicidality has been associated with disturbing dreams**, including nightmares and bad dreams (i.e., Russell et al., 2018).
- The Continuity hypothesis of dream formation postulates that the events, cognitions, and feelings experienced during daytime are reflected in dreams but in a selective and distorted manner (i.e., Schredl, 2019).
- Additionally, the Threat Simulation Theory (TST) postulates that dreaming has evolved as an adaptive survival mechanism to simulate threats drawn from waking-life experiences (Revonsuo, 2000).

### Objective and hypothesis:

To test the Continuity and threat simulation theories of dreaming in a sample of suicidal adolescents compared with a normative sample of adolescents to determine if the **dreaming experience may offer some clinical value in evaluating suicidal risk**.

### Predictions:

Compared to the control group, suicide attempt participants would experience:

- **A higher frequency of nightmares.**
- **A higher negative mood** and lower positive mood across all time periods (pre-sleep, dream, and post-sleep).
- **Dreams that contain more destructive themes**, less positive interactions, and more oneiric **threats**.

## METHOD

### Participants:

- **Suicide attempt group** (n=36,  $M_{age}=15.14$ ) consisted of adolescents who were admitted to The Children's Hospital of Eastern Ontario (CHEO) for a suicidal attempt.
- **Normative group** (n=36,  $M_{age}=15.14$ ) consisted of adolescents from the University of Ottawa's normative study of the dreams of Canadians.
- The study received ethical approval from the Hospital Board.

### Measures:

- Dream Questionnaire: included nightmare frequency, dream narrative, and mood.
- Hall and Van de Castle scales for dream content analysis (1966).
- Revonsuo & Valli dream threat scale (2000).

Dreams were analyzed independently by two judges; standard inter-rater reliability was established.

## RESULTS

### Suicide attempt dream sample:

*"Instead of all my clutter on the side table, it was everything I ever used to harm myself. It was every Pencil sharpener I had stolen, every knife I hid from my parents, every razor my sister "lost". All of it was right there. I reached out and then I woke up."*

Figure 1. Average nightmare frequency of the suicide attempt and control group

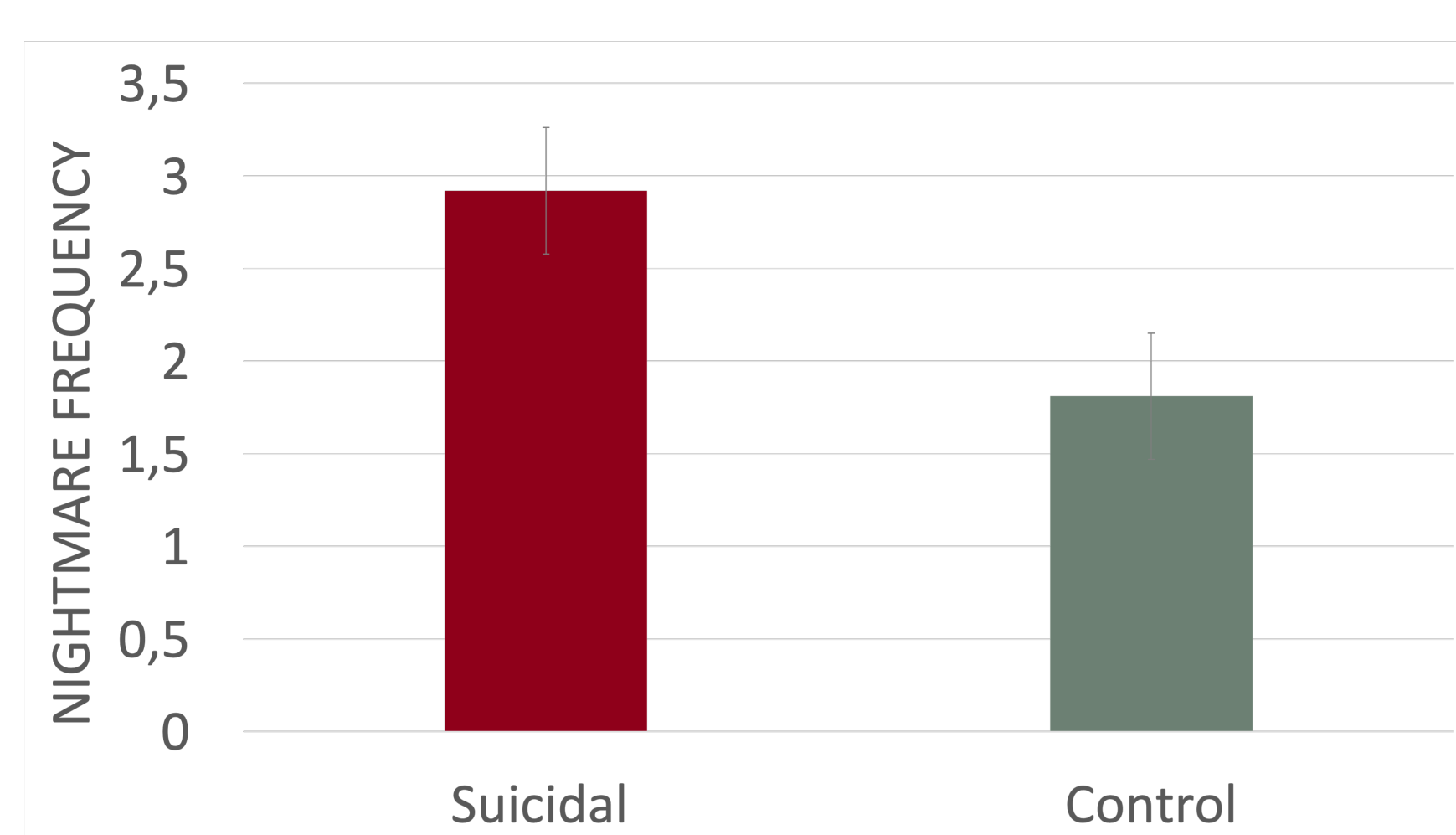
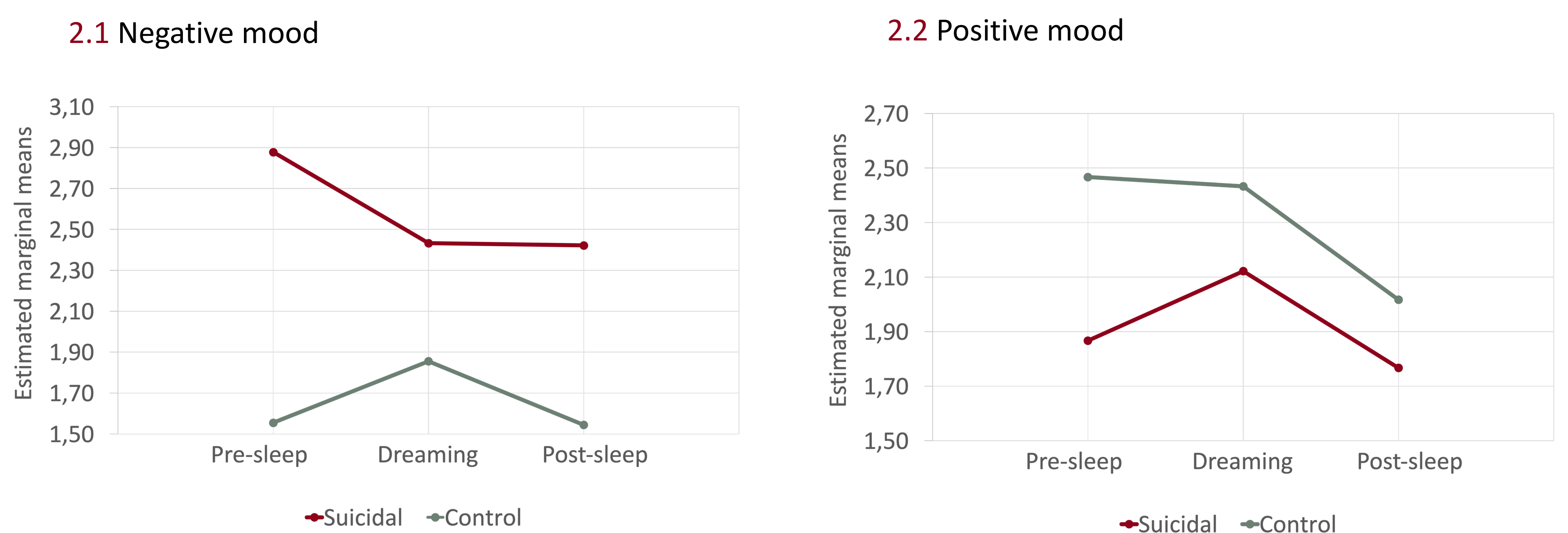


Figure 2. Average pre-sleep, dreaming, and post-sleep mood of the suicide attempt and control group



### Statistical analyses:

- Analyses of variance and t-tests were performed on the different variables and control for multiple comparisons was applied.

### Compared to the control group, suicidal adolescents reported on average:

- **Mood: Higher negative mood** and lower positive mood combined across time periods. A significant interaction effect was found between mood and group ( $F(1.58)=21.899$ ,  $p<0.001$ ,  $\eta_p^2=0.274$ ) as well as between mood, time of measure, and groups ( $F(2.57)=5.109$ ,  $p=0.009$ ,  $\eta_p^2=0.152$ ).
- **Destructive themes: More Death** ( $t(46.51)=3.042$ ,  $p=0.002$ ), Masochism ( $t(35)=2.996$ ,  $p=0.003$ ) or Self-directed aggression ( $t(35)=1.929$ ,  $p=0.031$ ), Death resulting aggression ( $t(35)=2.786$ ,  $p=0.004$ ), and Failure ( $t(53.23)=2.688$ ,  $p=0.005$ ) in their dream content.
- **Positive interactions: Less Friendliness** ( $t(51.06)=-2.662$ ,  $p=0.005$ ) in general in their dream content; the most significant sub-category was sharing a pleasant social activity ( $t(35)=-2.646$ ,  $p=0.006$ ).
- **Oneiric threats:** While there was no significant difference in the quantity of Life-threatening events, Physically severe threat and minor threats, but a higher quantity of psychological/financial/social type threats ( $t(63.13)=2.443$ ,  $p=0.009$ ). Their dreams also seemed to demonstrate a **higher threatening intensity** in terms of psychological and physical integrity ( $t(70)=2.070$ ,  $p=0.021$ ).

## CONCLUSION

Findings support both the Continuity and Threat Simulation theories, confirming that suicidal adolescents experience more nightmares, higher negative dream content and mood (Lafrenière et al., 2018).

**Clinical implications:** The results confirm that high **nightmare frequency is a risk factor of suicidal attempt** in adolescents and that future research should evaluate **the value of treating nightmares in suicidal adolescents**.

## REFERENCES

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