

The Scent of a Good Night's Sleep: How Partner's Scent Influences Sleep Quality

Marlise K. Hofer & Frances S. Chen

University of British Columbia

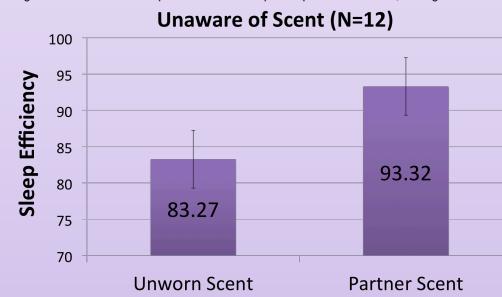
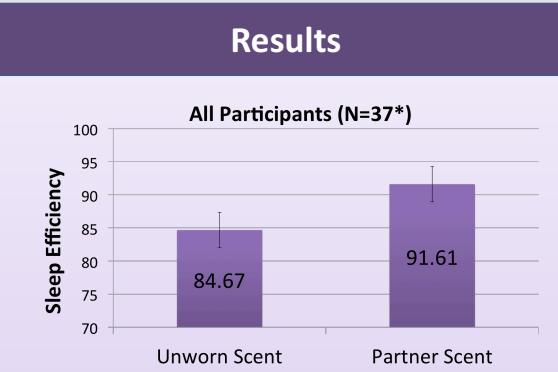


Introduction

- Poor sleep is linked to negative health outcomes (Motivala & Irwin, 2007; Pilcher, Ginter, & Sadowsky, 1997).
- Social support is positively linked to higher quality sleep (Shoup, Streeter, & McBurney, 2008).
- Hypothesis:** The scent of a close other may improve sleep quality.

Method

- N = 40 couples
- Males wore T-shirts for 24 hours
- Females slept with their partner's shirt for 2 nights, and an unworn shirt for 2 nights (order randomized)
- Objective Sleep: watches monitored movement
- Subjective Sleep: daily reports of sleep quality
- Covariates controlling for Individual Differences
 - Relationship Satisfaction & Length
 - Attachment Style
 - Daily Stress
 - Birth Control Usage



Self-reported sleep quality: Perceptions of sleep quality were identical on nights spent with partner vs. clean scent $t(35)= 0.00, p = 1$



Covariates

- HLM model predicted sleep efficiency from:
 - Level 1 (group mean centered): scent type & daily stress
 - Level 2 (grand mean centered): relationship satisfaction, length, birth control usage, attachment style, average stress & order of scent
- Controlling for all covariates, scent type continues to predict sleep efficiency $\beta = 6.96, 95\% CI [2.67, 11.25], p=.003$.

Conclusion

- Sleeping with partner's scent leads to
 - Increased sleep efficiency
 - No corresponding increase in perceived sleep quality
- Effect occurs outside of conscious awareness
- Future Directions**
 - Replicate and extend to males
 - Stranger's scent
 - Individual differences
 - Investigate other social bonds





The upside of flextime: Open-ended time facilitates creative insight

Ashley V. Whillans, Frances S. Chen & Jiaying Zhao

University of British Columbia



Abstract

When can deadlines help vs. hinder task performance? Our study suggests that externally imposed deadlines may benefit productivity at the expense of creativity.

Introduction

Externally imposed deadlines can encourage task completion and performance (e.g., Ariely & Wertenbroch, 2002).

Yet, deadlines can also promote narrowed attentional focus (e.g., Shah, Mullainathan & Shafir, 2012).

Thus, deadlines could interfere with tasks that require divergent thinking.

Demographics

N	152
Female	73%
Age (Median)	20
% Cognitive Majors	<10%

Flex-time Condition

"You will have as much time as you need to complete these tasks. These tasks will take between 5 minutes and 1 hour of your time."

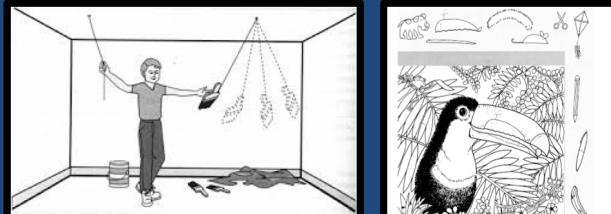


Deadline Condition

"You will have X amount of time to complete these tasks."



Insight Tasks and Analytic Tasks



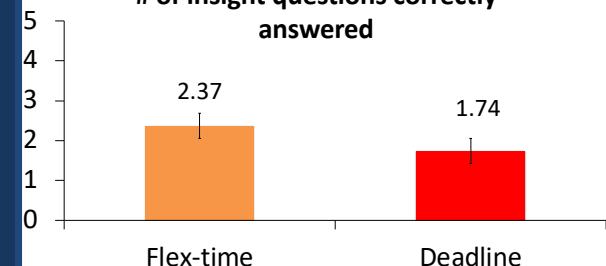
Initial Findings



- Amount of time taken, ns
- # of tasks completed, ns
- Positive affect, ns
- Time pressure, ns

Insight Tasks

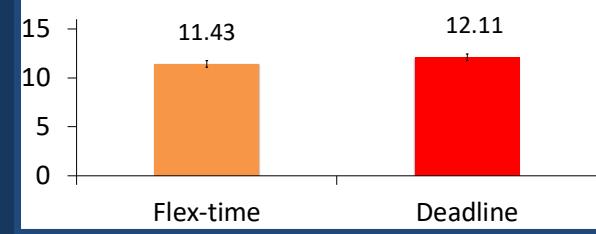
of insight questions correctly answered



$F(1, 151) = 5.17, p = .024$

Analytic Tasks

of differences found



$F(1, 138) = 2.17, p = .096$

Discussion & References

The perception of open-ended time resulted in a greater # of insight questions correctly answered. Initial analyses point to the role of enhanced distraction in explaining these effects.

Ariely, D., & Wertenbroch, K. (2002). Procrastination, deadlines, and performance: Self-control by pre-commitment. *Psychological science*, 13(3), 219-224.
Shah, A. K., Mullainathan, S., & Shafir, E. (2012). Some consequences of having too little. *Science*, 338(6107), 682-685.

The Scent of Social Support

Hanne Collins, Marlise Hofer & Frances Chen

The University of British Columbia

Research Question

- ❖ Close contact with loved ones can be very effective in lowering stress
- ❖ Can the scent of a loved one communicate social support and reduce stress when they are physically absent?

Method

- ❖ 64 heterosexual couples
 - ❖ Men acted as "scent donors", asked to wear a white cotton t-shirt for 24 hours
 - ❖ Women acted as "smellers"
- ❖ Experimental Manipulation: Women asked to smell either their partner's, a stranger's or an unworn shirt (without knowing source of the scent)
- ❖ Women participated in a standardized laboratory stress task involving delivering a speech and performing a math task in front of a panel of evaluators
- ❖ Self-reported anxiety levels provided at 5 different points throughout procedure with a 5 item measure including items such as:
 - ❖ How anxious do you feel right now?
 - ❖ To what extent do you have the current situation under control? (reverse scored)

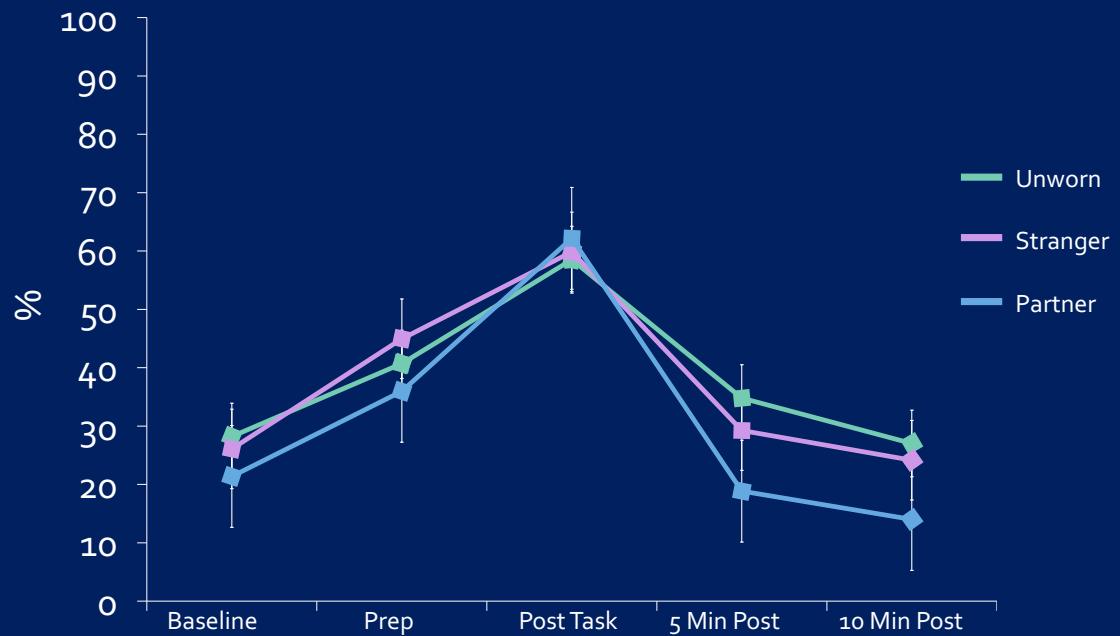
Manipulation

- ❖ Partner's scent (N=20)
- ❖ Stranger's scent (N=25)
- ❖ No scent (N=19)

Measures

- ❖ Self-reported anxiety levels throughout stress task

Self-Reported Anxiety Levels Throughout Stress Task



Results

- ❖ Data collection is ongoing
- ❖ Overall ANOVA revealed a non-significant trend ($F(2.48, 4.95) = 1.78, p = .12$) suggesting a possible difference between groups
- ❖ Preliminary results suggest that:
 - ❖ Self-reported anxiety levels of individuals in the **partner** condition differ from those of individuals in the **stranger** and **unworn** conditions at '5 Min Post' and '10 Min Post'

Summary

- ❖ Past research has found that social support has stress buffering effects
- ❖ Further research suggests that these beneficial effects can occur without one being physically present
- ❖ Women exposed to their **partner's scent** appear to show a more rapid recovery after a stressful event than those exposed to **no scent** or a **stranger's scent**

Evaluating an Online CBT Treatment Program for Social Anxiety

Hugh McCall, Fjola Helgadottir, Chris Richardson & Frances Chen

University of British Columbia

Abstract

Our study investigates the effectiveness of an online, CBT-based social anxiety treatment program. Initial results suggest that the program may reduce symptoms of social anxiety and increase life satisfaction among a non-clinical undergraduate population.

Introduction

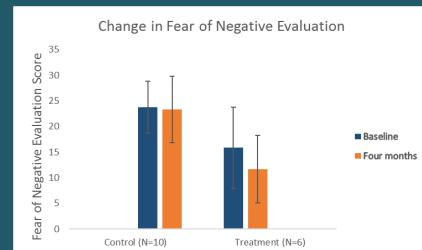
- Social anxiety is one of the most prevalent mental disorders (Stein & Stein, 2008), but its rates of treatment are among the lowest (Olsson et al., 2000).
- Computer-delivered therapies can overcome barriers to treatment of social anxiety, but most are ineffective as standalone treatments (Spek et al., 2007).
- Overcome Social Anxiety was developed to address major shortcomings of other online CBT treatments (Helgadóttir et al., 2009).
- We hypothesize that Overcome Social Anxiety will be effective for socially anxious UBC undergrads.*



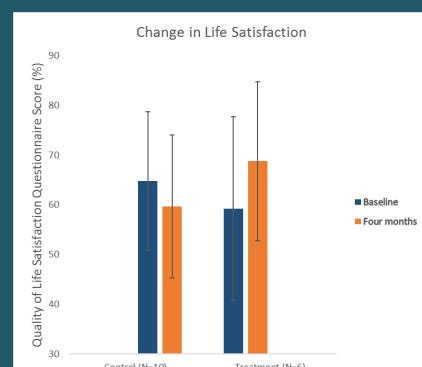
Clients of Overcome Social Anxiety connect with clinical psychologists Ross Menzies and Fjola Helgadottir through audio and video content.



Results



An independent samples t-test shows that there is not a significant difference between the two groups' changes in FNE scores over four months, $t(14) = 1.48$, 95% CI [-1.68, 9.22], $p = .08$, one-tailed.



An independent samples t-test shows that there is a significant difference between the two groups' changes in Q-LES-Q scores over four months, $t(14) = -2.08$, 95% CI [-2.99, -.005], $p = .029$, one-tailed.

Method

- N = 103 UBC students with subthreshold social anxiety
- Random assignment to treatment or wait-listed control
- Dependent measures (taken at baseline and four-month follow-up):
 - Fear of Negative Evaluation (FNE; Watson & Friend, 1969)
 - Quality of Life Enjoyment and Satisfaction Questionnaire (Q-LES-Q; Endicott, Nee, Harrison & Blumenthal, 1993)

Discussion

- Data collection is ongoing; early results indicate that Overcome Social Anxiety may be effective in reducing social anxiety symptoms among UBC students.
- Empirical support for the effectiveness of standalone, computer-delivered treatments highlights the opportunity for further research in this exciting area.

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- Watson, D., & Friend, R. (1969). Measurement of social-evaluative anxiety. Journal of consulting and clinical psychology, 33(4), 448.



Making Friends for your Health: Friendship Formation and Health in university students – a longitudinal study



Patrick Klaiber^{1,2}, Ashley V. Whillans^{1,3}, Frances S. Chen¹

¹University of British Columbia, ²Free University Berlin, ³Harvard Business School

INTRODUCTION

Social relationships and social integration play a critical role in an individual's health.¹

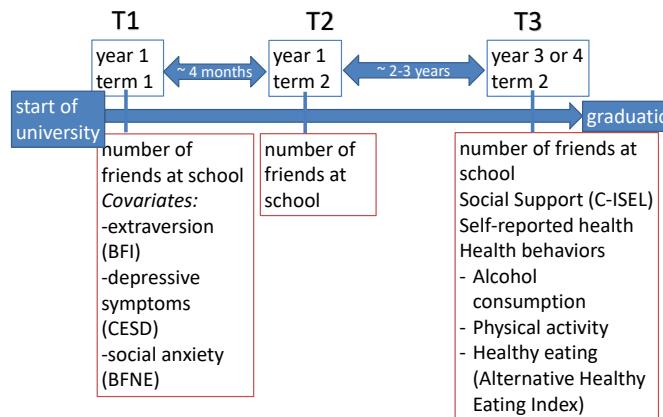
When students enter university, they gain new opportunities to **adopt or abandon healthy habits**.

Research Question: Can first-term friendship formation contribute to students' health and health behaviors years later?

METHODS AND MATERIALS

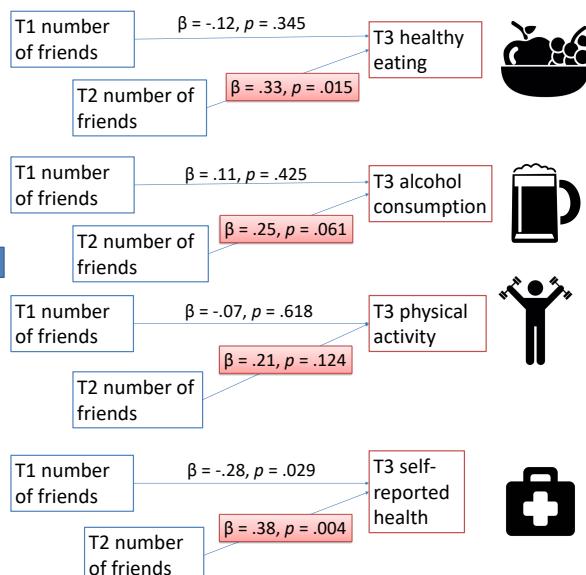
$N = 67$ ($M_{\text{age at T1}} = 17.82$; $SD = 0.92$, 75% female) university students were asked about their friendship formation at the beginning of their first and second term at university.

At a follow-up (2-3 years later) their health, and health-related behaviors were assessed:



MAIN RESULTS

Number of friends at different time points

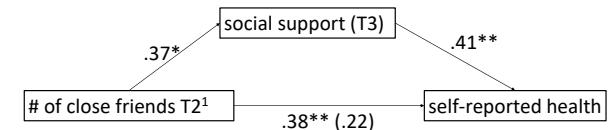


*All effects hold adding a number of covariates to the model (extraversion, depressive symptoms, social anxiety, gender at T1).

EXPLORATORY ANALYSIS

Are the effects of friendship formation on health and health behaviors due to more perceived social support at the follow-up?

→ Mediation analysis



¹ controlling for number of friends at T1, * $p < .05$, ** $p < .01$, standardized regression coefficients

A significant indirect effect was found for self-reported general health: $b = 0.03$, $SE = 0.01$, 95% CI = [0.01, 0.06].

➤ students who made more friends during their first term at university reported better general health due to perceiving more social support

CONCLUSION

The number of friends people make during a major life transition is an important predictor of self-reported health and healthy eating several years later.

Making more friends → more social support available → better self-reported health

How can we help students to adopt healthy eating habits?

➤ Helping students make friends could be one key aspect in designing programs and interventions on campus

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- ¹Holt-Lunstad J, Smith TB, Layton JB. Social relationships and mortality risk: a meta-analytic review. *PLoS Med*. 2010;7(7):e1000316.

