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Universität Bremen*

Losing body-weight by using Facebook

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Introduction

Theoretical Considerations
Data and methods
Results
Summary and outlook
Experiment in the planning stage

- The number of people communicating via online networks rises
- 70% of the German teenagers uses Facebook daily or weekly
- Some studies find: „Facebook generates envy and discontent“
- Are Facebook communication and health behavior related?

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TECHNISCHE UNIVERSITÄT
CHEMNITZ

Introduction
Theoretical Considerations
Data and methods
Results
Summary and outlook
Experiment in the planning stage

Resources und stresses

- Social support via social capital (Rose 2000, Jungbauer-Gans 2002)
- Stresses and strains as a result of burdensome contacts (Meadows et al. 2008)
- Impact depending on the characteristics of ties
 - Weak/strong ties (Burt 1995, Granovetter 1973)
 - Health related social capital (Cattel 2001, Ferlander 2007)
- Relationship between online social networks and body weight (Durst et al. 2013)

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TECHNISCHE UNIVERSITÄT
CHEMNITZ

Introduction
Theoretical Considerations
Data and methods
Results
Summary and outlook
Experiment in the planning stage

Hypotheses

- Intensity-Hypothesis:
The more intense the facebook usage – the stronger the wish to lose body weight
- Strength of ties-Hypothesis:
The stronger social ties – the stronger the wish to lose body weight

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TECHNISCHE UNIVERSITÄT
CHEMNITZ

Introduction

Theoretical Considerations

Data and methods


Results

Summary and outlook

Experiment in the planning stage

- **Data collection**
 - 1000 participants were retrieved from the GfK Online Panel
 - Fielded from 5th until 22nd May 2012
 - Quota sampling approach via gender and age
 - Additional sample criteria:
 - Facebook account
 - Be willing to install the Facebook application in order to give us access to their network data

5
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TECHNISCHE UNIVERSITÄT
CHEMNITZ

Introduction

Theoretical Considerations

Data and methods

Results

Summary and outlook

Experiment in the planning stage

- **Operationalization**
 - Intensity of using online social networks
 - Daily usage of Facebook in minutes
 - Number of ego initiated Wallpost etc.
 - Characteristic of network contacts
 - Share of contacts that exist in the real world
 - weak/strong ties
- **Methods**
 - Logistic Regressions: wish to lose body weight (yes/no)
 - All users
 - Only if BMI > 30
 - Only for normal BMI 20-26


6
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		all	only for BMI 30+	total of normal BMI 20-26
wish to lose body weight (1=yes)				
Age	0.017* (2.551)	0.034*** (4.327)	0.002 (0.225)	
Male	-0.858*** (-5.705)	-0.207 (-1.069)	-1.416*** (-7.021)	
educ (in years)	0.031 (1.019)	-0.090* (-2.514)	0.033 (0.790)	
Facebook usage in min.	0.003* (2.126)	0.005*** (3.718)	0.002 (1.188)	
homogenous network (educ)	-0.045 (-0.303)	-0.048 (-0.249)	0.094 (0.460)	
BMI 20-26	-1.114*** (-7.379)			
Number of contacts	0.000 (0.466)	0.001 (1.122)	0.000 (0.178)	
Contacts exist (ref: virtual)	0.411* (-1.987)	-0.061 (0.242)	0.626* (-1.985)	
weak ties (ref: medium)	0.185 (0.926)	-0.091 (-0.356)	0.108 (0.392)	
strong ties (ref: medium)	0.167 (0.535)	-0.276 (-0.659)	0.099 (0.246)	
Constant	0.812* (2.368)	-3.163*** (-7.581)	0.565 (1.299)	
p	0.000	0.000	0.000	
N	924	924	480	
0/1	342/582	784/140	237/243	

*p<0.05, **p<0.01, ***p<0.001 7 <http://www.tu-chemnitz.de/hsw/soziologie> <http://www.wi.uni-bremen.de/de/>

		all	only for BMI 30+	total of normal BMI 20-26
wish to lose body weight (1=yes) + additional information via Facebook account				
Sum of Ego-initiated Wall-P.	0.001 (1.548)	0.003** (3.161)	-0.001 (-0.628)	
Number of listed friends	0.261 + (1.721)	-0.109 (-0.586)	0.254 (1.302)	
Constant	0.382 (0.994)	-3.152*** (-6.753)	0.203 (0.420)	
p	0.000	0.000	0.000	
N	904	904	469	

+p<0.10, **p<0.01, ***p<0.001 8 <http://www.tu-chemnitz.de/hsw/soziologie> <http://www.wi.uni-bremen.de/de/>



TECHNISCHE UNIVERSITÄT
CHEMNITZ

Introduction

Theoretical Considerations

Data and methods


Results

Summary and outlook

Experiment in the planning stage

- The more intense the Facebook usage, the stronger is wish to lose body weight
- The higher the share of friends that exist in the real world, the stronger is wish to lose body weight
- Online social networks affect health behavior
→ approaches to behavioural prevention may be useful
- Outlook:
a randomized controlled experiment is in the planning stage: does a smartphone app help losing body weight?

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TECHNISCHE UNIVERSITÄT
CHEMNITZ

Introduction

Theoretical Considerations

Data and methods


Results

Summary and outlook

Experiment in the planning stage

- The prototype of an app to help losing body weight was programmed by master students (business informatics, FAU Erlangen-Nuremberg)
- The effect of the app should be tested in a randomized controlled trial
- IFB AdiposityDiseases (BMBF) provides the access to 3000 obese people
 - must lose weight because of medical reasons
 - they are under regular medical supervision
- People showing BMI 22-27 who wish to lose body weight are recruited via GFK access panel

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TECHNISCHE UNIVERSITÄT
CHEMNITZ

Introduction

Theoretical Considerations

Data and methods

Results

Summary and outlook


Experiment in the planning stage

Designing a mobile App

- Self-evaluation is done by comparison to others with similar opinions and abilities
- The importance of an opinion or ability has an impact on the drive for evaluation

- Upward and Downward Comparison
 - Upward comparison inspires to do better but might lower self-esteem
 - Downward comparison reduces the motivation but boosts self-esteem

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TECHNISCHE UNIVERSITÄT
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Introduction

Theoretical Considerations


Data and methods

Results

Summary and outlook


Experiment in the planning stage

General motives
for exercising



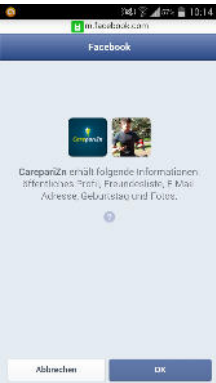



- Improve health condition
- Improve physical condition
- Lose weight
- Look better
- Build up muscles
- Have fun
- Reduce stress
- Social contacts
- Feel better

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Introduction
Theoretical Considerations
Data and methods
Results
Summary and outlook
Experiment in the planning stage

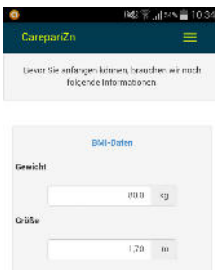


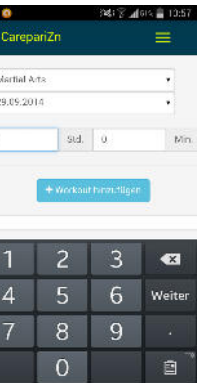





13

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Introduction
Theoretical Considerations
Data and methods
Results
Summary and outlook
Experiment in the planning stage

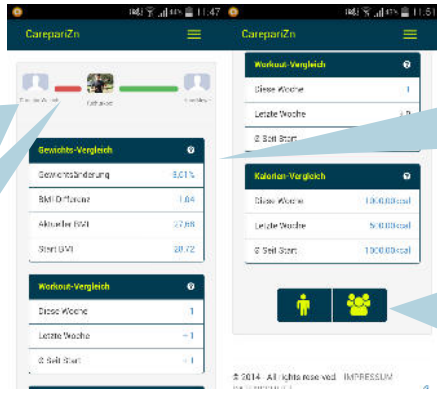
14

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<http://www.wi.uni-bremen.de/de/>




Introduction
Theoretical Considerations
Data and methods
Results
Summary and outlook
Experiment in the planning stage

Friend's Profile Picture
Upward and Downward Comparison /




Stats Self-Assessment

Dynamic Distance Line
Self-Enhancement / Self-Improvement



Gender Selection
Similar vs. dissimilar

15
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16
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