# Pilotstudy iPin- intervening in problematic Internet use Brief intervention for risk groups

Anja Bischof, Gallus Bischof, Bettina Besser, Sonja Glorius, Jennis Freyer-Adam\*, Sabina Ulbricht\*, Christian Meyer\* & Hans-Jürgen Rumpf

University of Luebeck Center for Integrative Psychiatry, Department of Psychiatry and Psychotherapy

\*University Medicine Greifswald Institute of Social Medicine und Prevention

## **Conflict of interest: None.**



### **Internet is part of our daily life**





HOME PLAY

SLEEP



## When does it start to get pathological?



## **Prevalence of "Internet addiction"**



- International studies:
  - 1-14% (Christakis 2010, Petersen et al. 2010)
- Heterogeneous definitions and measures (CIUS, IAT, duration per day...)
- Definitions widely arbitrary and not evidence based

# "Internet Gaming Disorder" as a diagnosis for further research in DSM-5 (2013)

At least 5 of the 9 following criteria have to be met:

- 1. Preoccupation with games
- 2. Withdrawal symptoms when Internet gaming is taken away (irritability, anxiety, or sadness)
- 3. Tolerance: increase of frequency and/or intensity of gaming
- 4. Unsuccessful attempts to control the gaming
- 5. Loss of other interests as a result of gaming
- 6. Continued excessive use despite knowledge of psychosocial problems
- 7. Deceiving family members or others regarding the amount of gaming
- 8. Use of gaming to escape or relieve negative moods
- 9. Jeopardizing or losing a significant relationship, a job, or career opportunities because of the gaming

## **Previous results (PINTA, PINTA-DIARI)**

- Prevalence: 1% for the general population of Germany, up to 4% in the group aged 14 to 16
- Excessive Internet users are more often male, unemployed and have more often a migration background
- DSM-5 criteria for Internet addiction define a subgroup within excessive Internet users with significant clinical impairments:
  - High rates of Axis I comorbidity (72% vs. 52% excl. tobacco dep.)
  - High rates of Axis II comorbidity (29.6% vs. 9.3%)
  - Higher impulsivity scores
  - Higher impairment due to Internet use according to health, fitness, relationships, employability, job performance
- Data revealed no substantial difference between addiction to Internet gaming and other forms of addicted Internet use

### iPin: Intervening in problematic Internet use

- Although treatment utilization increases, concerned individuals are not reached sufficiently
- To date, the care system offers no treatment for persons at risk
- Proactive early detection and intervention are approved methods in substance related problems
- Because of increased prevalence among unemployed: job centers as adequate setting
- Aims of the iPin-Pilotstudy:
  - Development of a brief intervention based on MI and CBT
  - Examining recruitment setting and participation rates

# Setting

- Employment Agency and job centers in Luebeck, Northern Germany
- Target group: Unemployed individuals aged 16 to 64.





### **iPin: Recruitment**

- Study nurses addressed all attendants of job centers (16-64) in the waiting area
- Indication of confidentiality referring to the employment agency/job center
- Screening questionnaire for health behavior:

Internet use (duration) + CIUS Subjective state of health

**Physical activity** 

Average fruit and vegetables consumption

Mental health (MHI-5)

Smoking (FTND)

Alcohol consumption (AUDIT-C)

• Eligible if cutoff of 21 points in the CIUS OR more than 4 hours of Internet use



### iPin: Characteristics of Screening positives

	Screening negative (n=1382)	Screening positive (n=298)	р
Female sex (%)	57.7	47.0	<.001
Age (SD)	34.5 (12.2)	28.8 (10.5)	<.001
Sum score CIUS, MW (SD)	8.8 (6.1)	24.5 (9.4)	<.001
Average daily Internet use	2.5 (2.5)	5.5 (4.4)	<.001
Average daily Internet use on weekends	2.9 (2.6)	6.7 (4.7)	<.001
Subjective status of health	2.7 (0.9)	2.8 (1.0)	.226
BMI	25.8 (5.4)	25.5 (6.4)	.580
Consumption of fruits	1.1 (1.0)	1.0 (1.3)	.283
Consumption of vegetables	1.1 (1.0)	1.1 (1.4)	.981
Smokers(%)	60.9	61.0	1.00
Alcohol consumption AUDIT-C	2.4 (2.4)	3.1 (2.8)	<.001
MHI-5	12.8 (3.3)	11.8 (3.5)	<.001

### iPin: Bias check

	Diagnosed (n=88)	Not diagnosed (n=210)	р
Female sex (%)	44.8	48.0	.700
Age (SD)	27.0 (9.3)	29.6 (10.9)	.039
Sum score CIUS, MW (SD)	25.0 (10.0)	24.3 (9.0)	.586
Average daily Internet use	5.8 (4.4)	5.3 (4.4)	.441
Average daily Internet use on weekends	6.6 (3.4)	6.7 (4.9)	.984
Subjective status of health	2.9 (1.1)	2.8 (1.0)	.246
BMI	26.0 (6.3)	25.3 (6.4)	.412
Consumption of fruits	1.2 (1.8)	0.9 (1.1)	.292
Consumption of vegetables	0.9 (1.1)	1.2 (1.5)	.134
Smokers(%)	65.9	58.8	.294
Alcohol consumption AUDIT-C	3.4 (2.9)	2.9 (2.7)	.117
MHI-5	11.8 (3.6)	11.8 (3.5)	.948

### **iPin: Study participants**

- Average: 5,6 hours Internet use per day (Weekend: 6,8)
- Average CIUS-value: 31 points
- 47,2% females
- 25% migration background
- Health behavior insufficient
- Average number of counselling sessions in the intervention group:
  - 2,9

### **iPin: Conclusion recruitment**

•Prevalence increased in comparison with the general population

•Recruitment in the waiting area possible

Participation rates lower than in other settings > has to be improved

 Recruitment rate doubled in comparison to the prevalence in the general population

Intervention largely feasible

•Effectiveness of the intervention has to be proved in the main study

#### **Follow-up**

- 29 participants could be interviewed in the follow-up (82%)
  - Control group: 87%
  - Intervention group: 75%

(Chi<sup>2</sup>=.89, p=.426)

- → CIUS-values for follow-up were calculated with an Intention-to-treatanalysis (last observation carried forward)
- $\rightarrow$  Intervention group=

Baseline: 32.4 points (SD=9,7) Follow-up: 24.5 points (SD=10,8)

 $\rightarrow$  Control group=

Baseline: 29.2 points (SD=9.9) Follow-up: 26.7 points (SD=10.8)

**OLS-regression (controlling for CIUS baseline-score and group** 

membership) = no significant effect (p=.216)

but R<sup>2</sup>-change of  $0.34 \rightarrow$  small to medium effect

### iPin: Plan for the main study



