

January 19, 2017

SPSP Media Psychology Preconference



Emotional benefits from social media use: results from the ReDefTie project

Prof. Dr. Sonja Utz

Leibniz-Institut für Wissensmedien Tübingen

s.utz@iwm-tuebingen.de



Redefining tie strength:
How social media (can) help us to get non-redundant information and emotional support

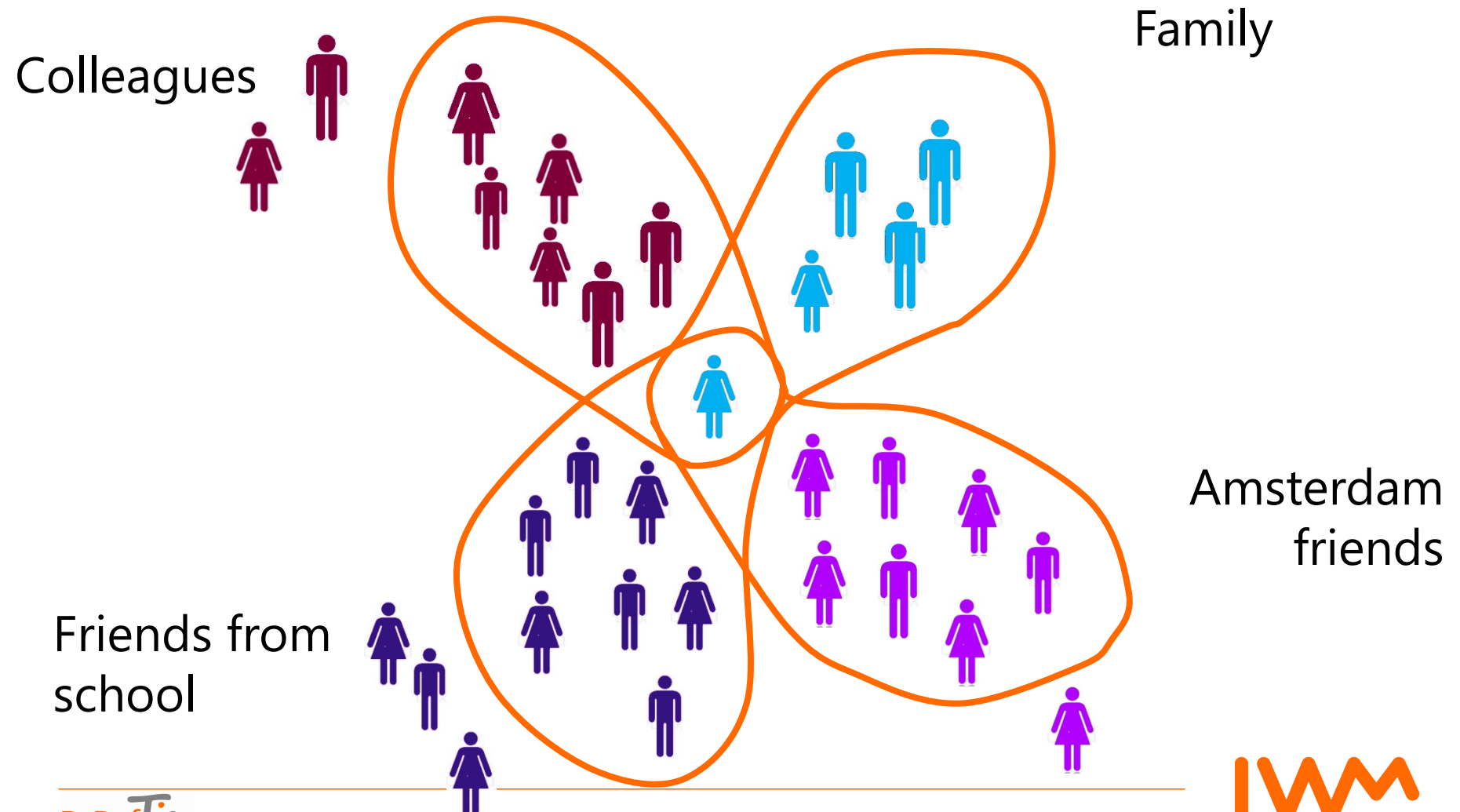
FUNDED BY



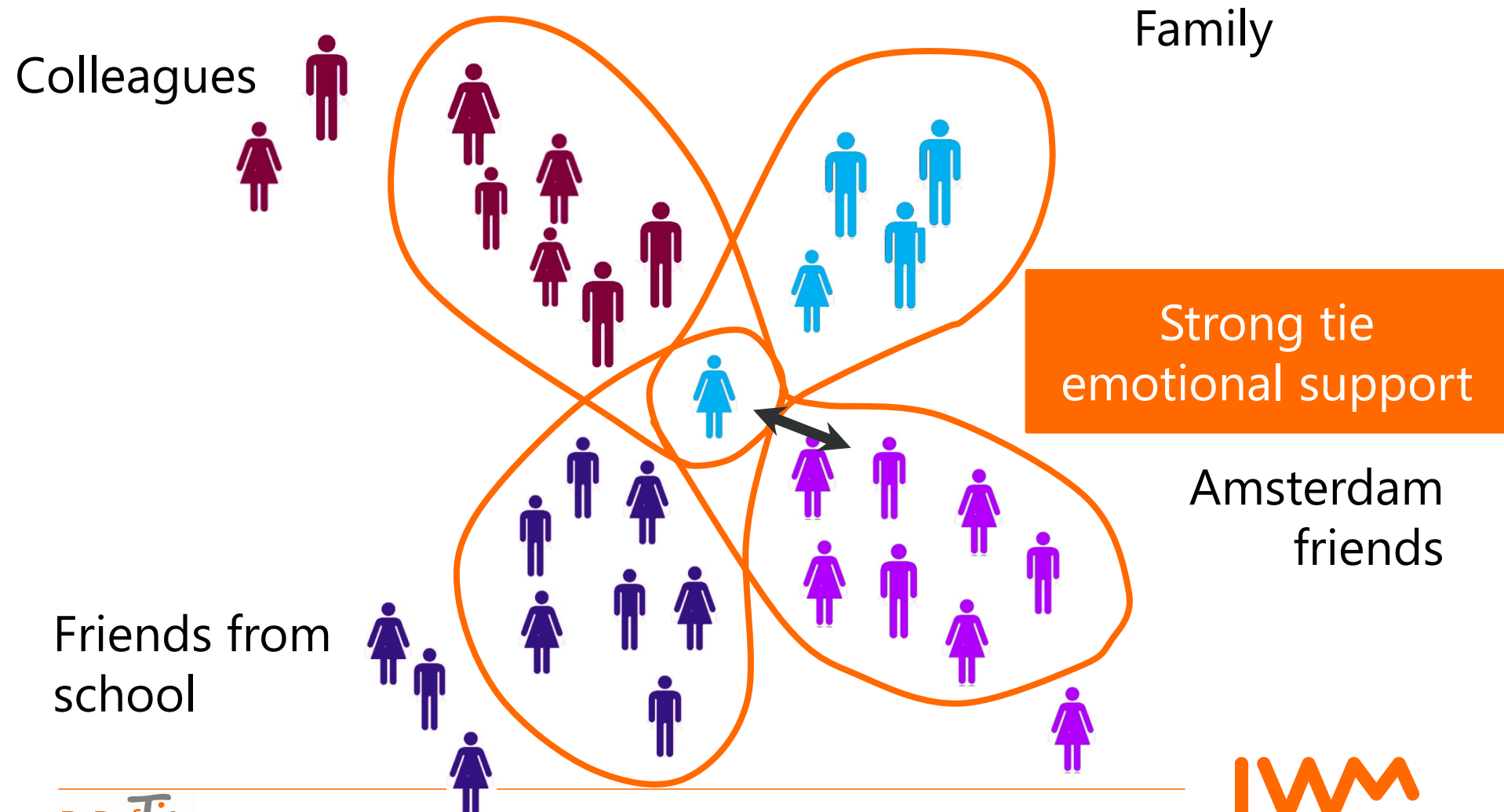
European Research Council
Established by the European Commission
**Supporting top researchers
from anywhere in the world**



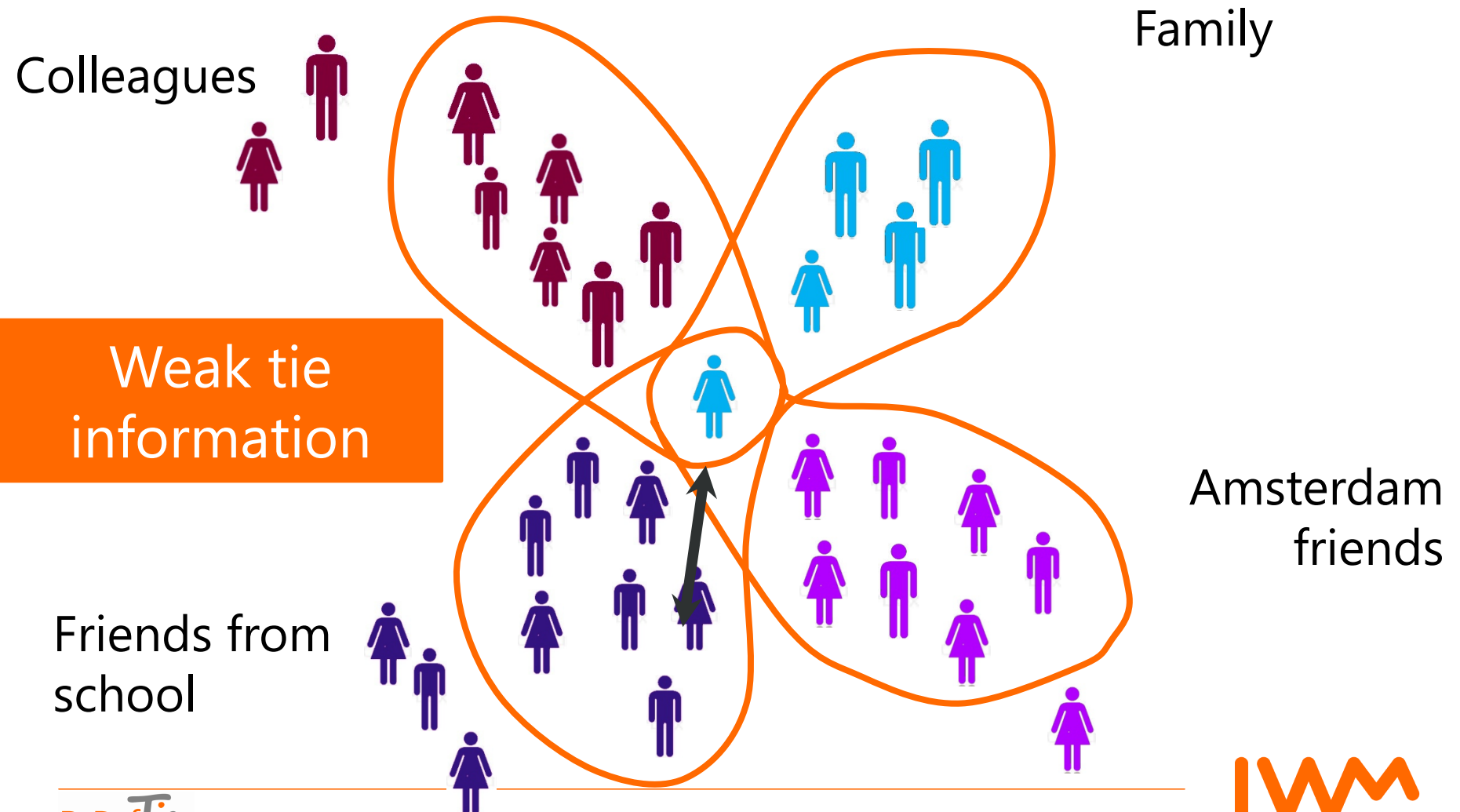
HOW MY SOCIAL NETWORK USED TO BE



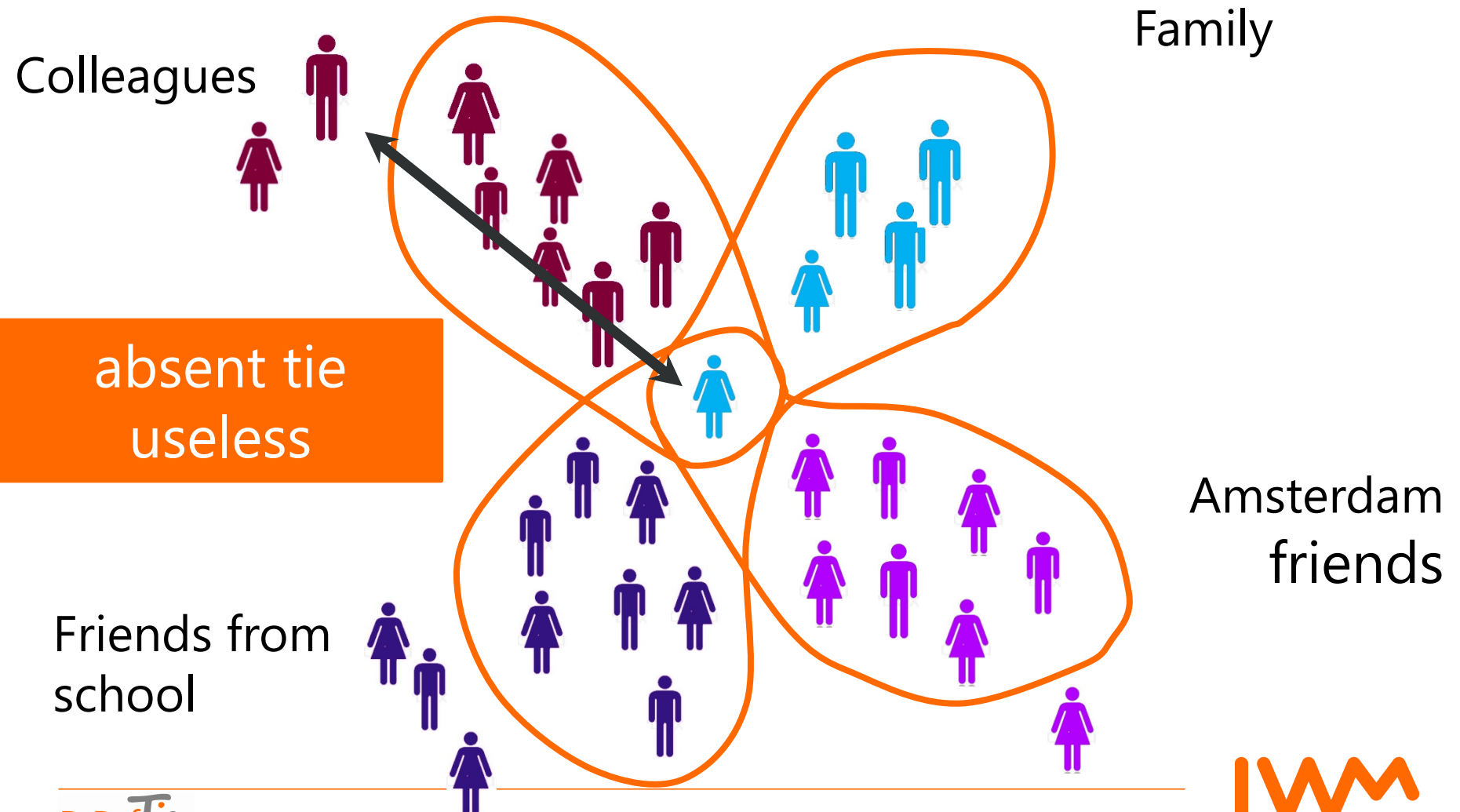
HOW MY SOCIAL NETWORK USED TO BE



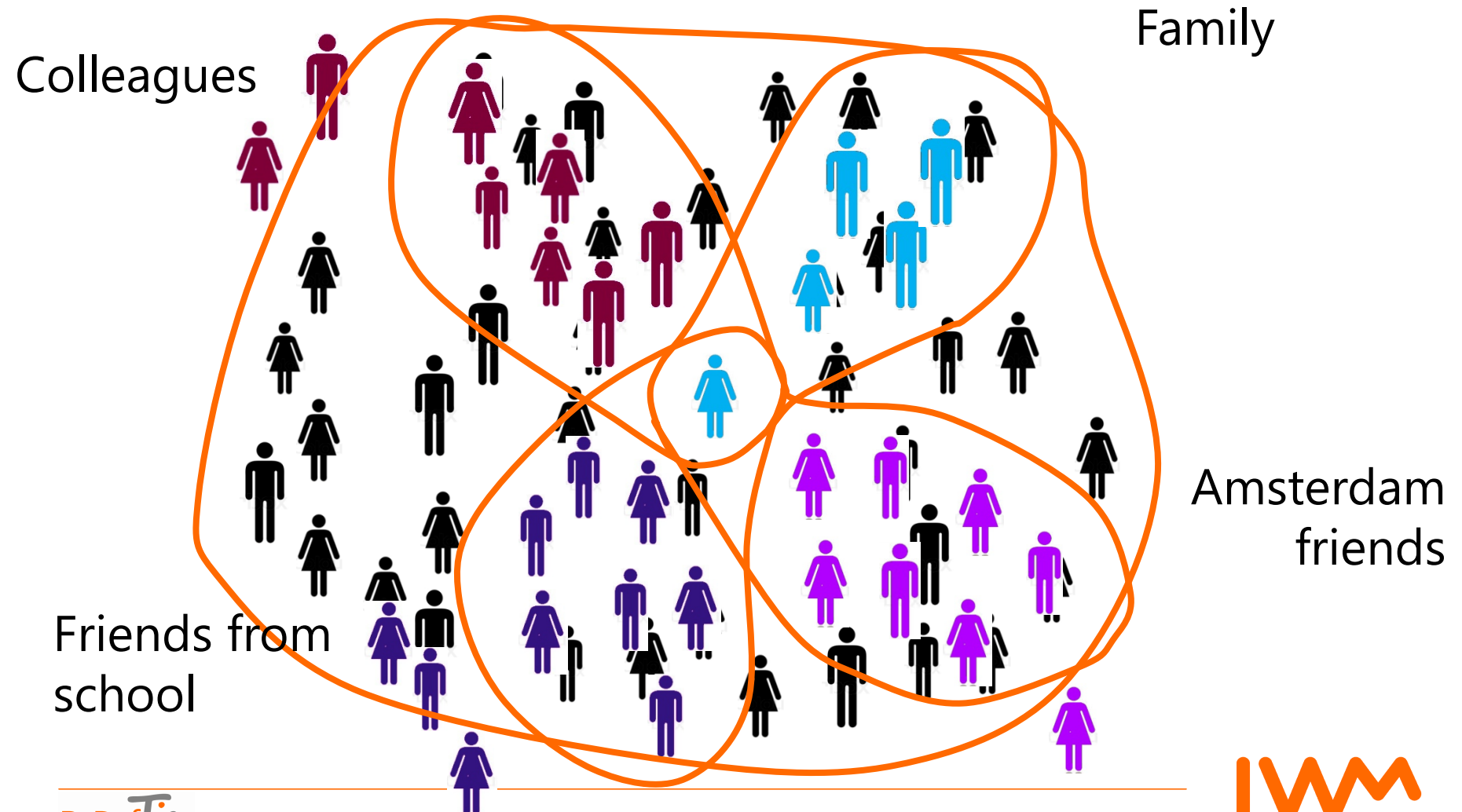
HOW MY SOCIAL NETWORK USED TO BE



HOW MY SOCIAL NETWORK USED TO BE



MY SOCIAL NETWORK TODAY

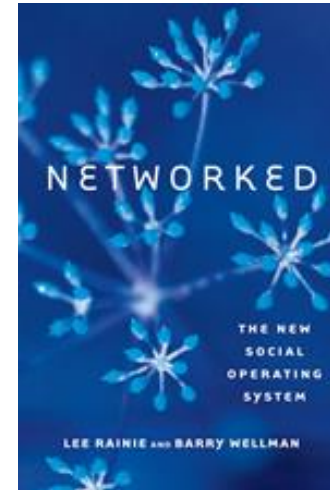
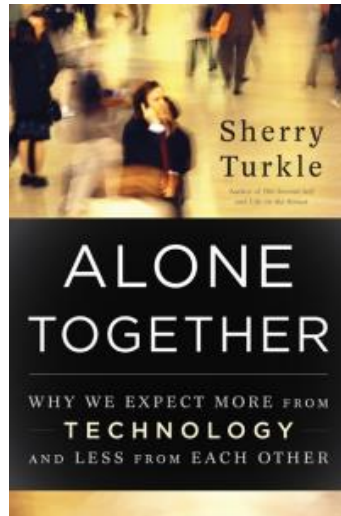




Informational
support

Emotional support

EFFECTS OF FACEBOOK-USE



- Short term effects: browsing social media posts
 - Envy or happiness?
 - Relationship maintenance
- Long term effects: social support

SHORT TERM EFFECTS: ENVY OR HAPPINESS

Lin & Utz (2015)

EMOTIONAL CONTAGION VS. ENVY



- happy?
- envious?

- Close friend vs. acquaintance?

THEORETICAL BACKGROUND

- Positivity bias => majority of status updates positive + entertaining, not very intimate (Barash et al., 2010)

Potential effects:

- emotional contagion (Hatfield, 1994)
 - Shown in laboratory studies
 - Facial expression => imitation => mood change
 - Stronger effects in close relationships
- social comparison => upward comparison => envy (Festinger, 1957; Smith, 1994; Crusius & Lange, 2014)
 - Benign vs. malicious envy

RESEARCH QUESTIONS AND METHOD

- Which emotions are most prevalent?
- Does relationship strength matter?

Method

- Study 1: **Survey**
 - rating of actual status updates
- Study 2: **Experiment**
 - given status updates: vacation pictures vs. iPhone

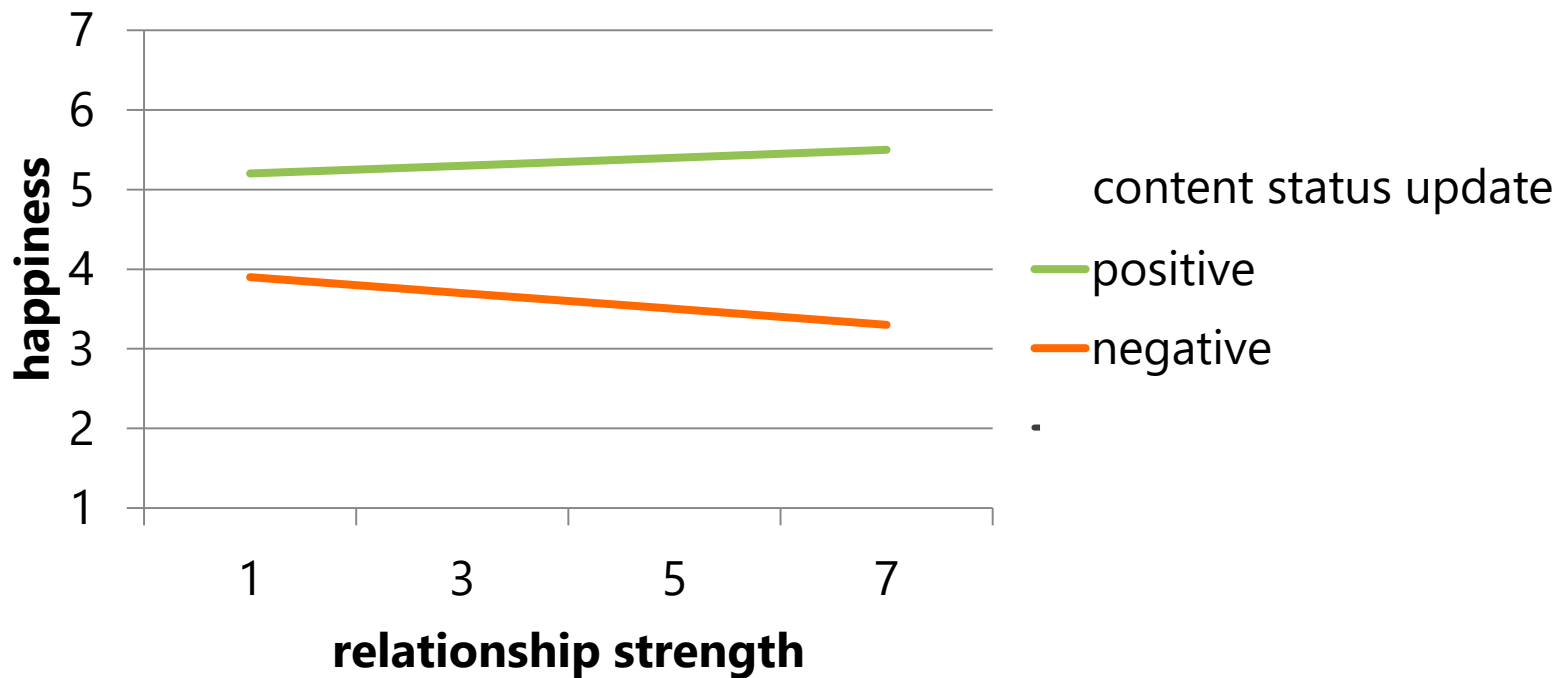
STUDY 1: FREQUENCY OF EMOTIONS

- Study 1 - 207 participants from the US
- 598 status updates from Facebook friends

connected	66.4%	} Positive emotions
happy	64.2%	
informed	63.7%	
entertained	53.7%	
envious	12.4%	} Negative emotions
jealous	11.0%	
annoyed	10.0%	
frustrated	9.7%	

STUDY 1: HAPPINESS

- The more positive the update, the higher happiness
- Effect of content stronger for close relationships



STUDY 1: ENVY

- The more positive the update, the higher envy
- No effect of relationship strength
but:
- Low self-esteem => more envy
- Survey!

STUDY 2: EXPERIMENT

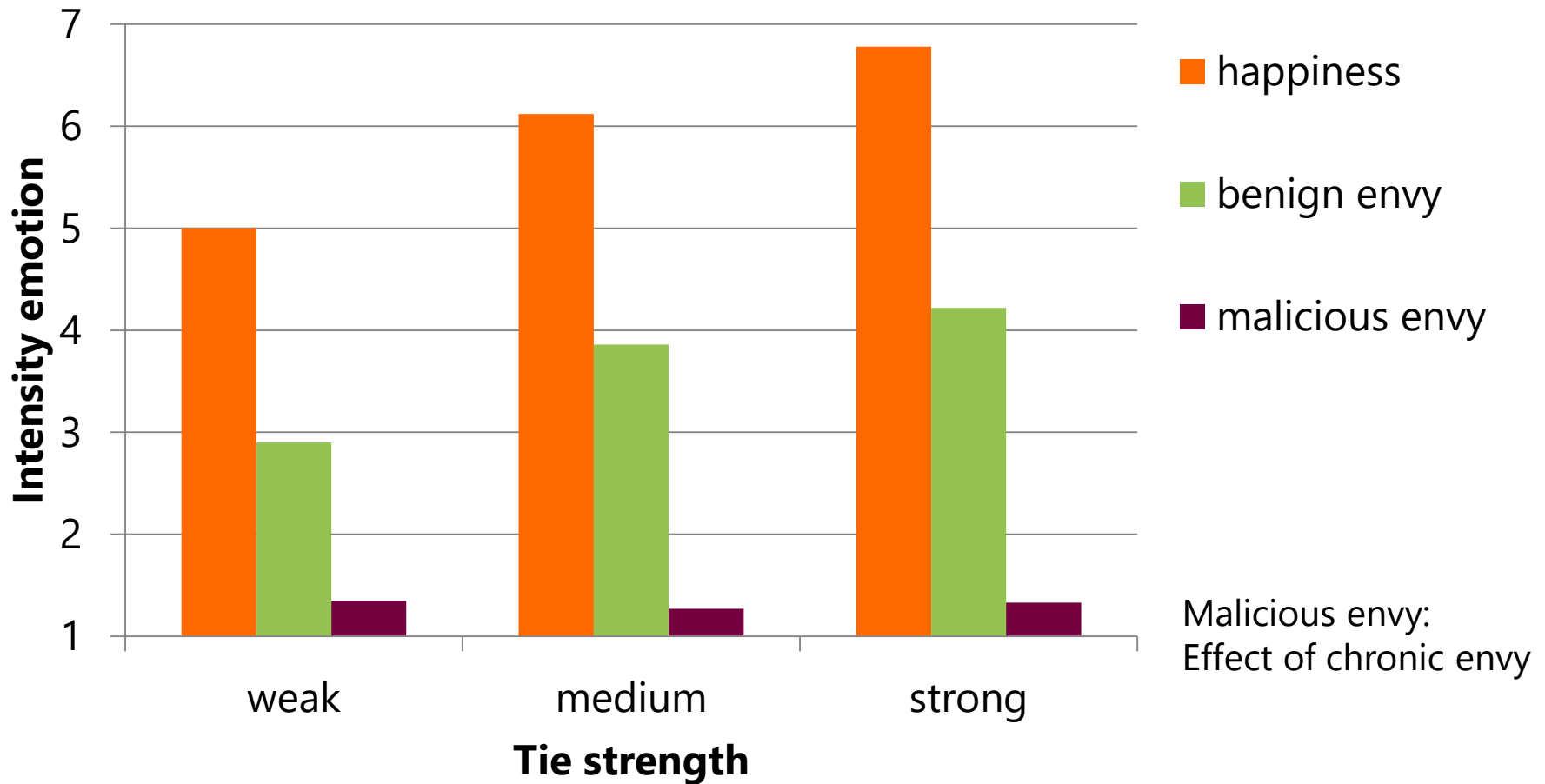


- happy?
- envious?

- Close friend vs. friend vs. acquaintance

STUDY 2: EFFECTS OF TIE STRENGTH

(VACATION PICTURE)



SUMMARY

- Positive emotions more prevalent: happiness, benign envy
 - The closer the relationship, the stronger the emotion
- but:
- SNS use can trigger negative emotions
 - Depends on personality!
 - Low self-esteem, trait envy

RELATIONSHIP MAINTENANCE

Utz (2015)

SNS AND SOCIAL RELATIONSHIPS

Paradox:

- Main motive for SNS use relationship maintenance
- central role of intimate self-disclosure for relationship building (Collins & Miller, 1994)
- ⇔ public self-disclosure on SNS mainly positive and entertaining, but not intimate (Barash et al., 2010)

- How can SNS foster relationships?

ALTERNATIVE MODELS

Capitalization (Gable & Reis, 2010)

- Sharing positive news has positive interpersonal consequences

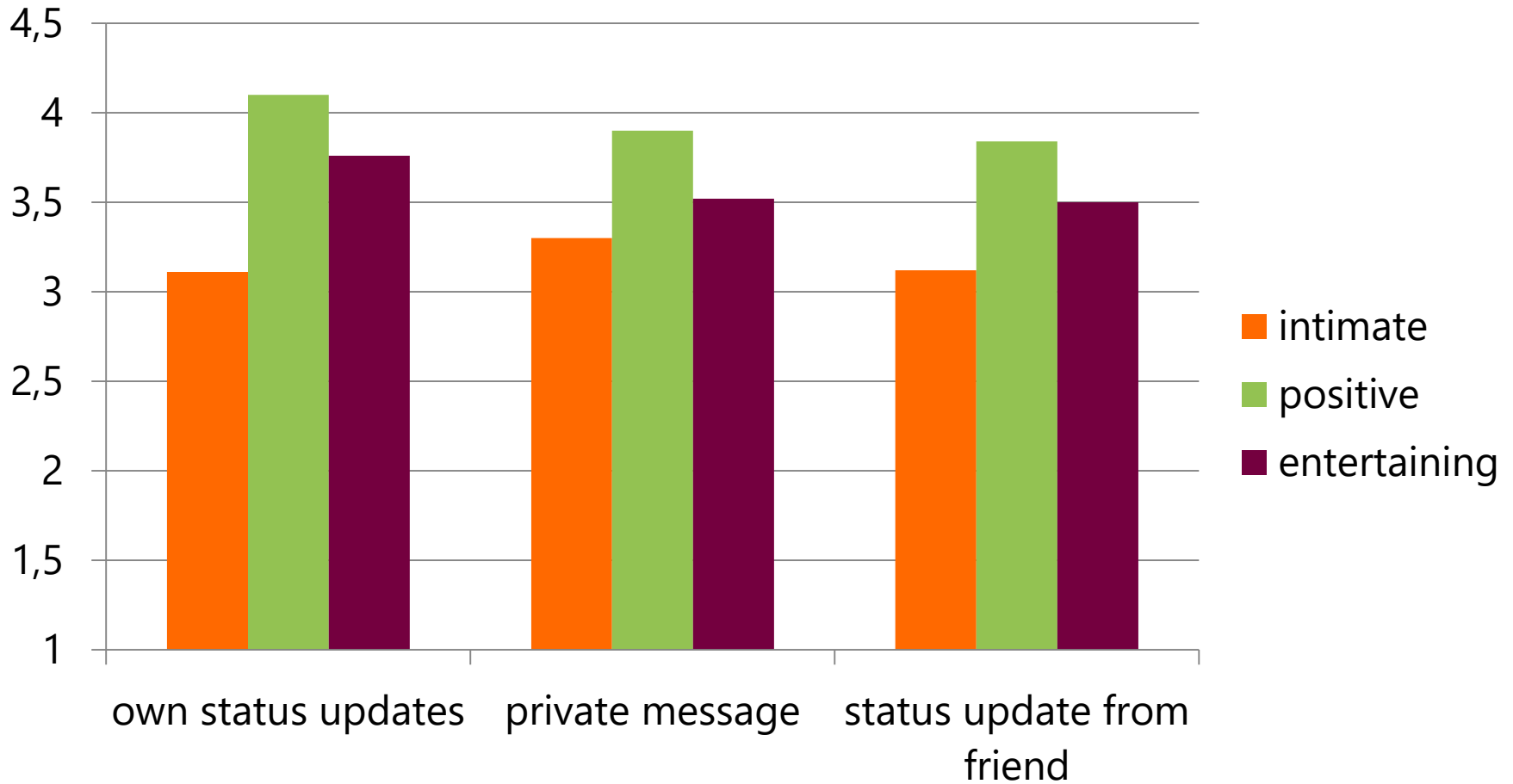
Entertainment/humor

- Treger (2013):
 - we like people who use humor more
 - we use more humor when we like people

METHOD

- rate 7 own status updates, 7 private conversations, 7 updates on timeline => 21 messages (n = 60)
 - content: intimacy, positivity, entertainment value
 - effect: feeling connected
 - number of likes and comments

CONTENT: INTIMATE COMMUNICATION TAKES PLACE IN PRIVATE CHANNELS



EFFECT: ENTERTAINING UPDATES ALSO INCREASE FEELING OF CONNECTION

	own update B (SE B)	private messages B (SE B)	statusupdate from friend B (SE B)
Intercept	3.18 (0.11)***	3.72 (0.08)***	2.78 (0.13)***
intimate	0.26 (0.06)***	0.38 (0.06)***	0.11 (0.05)*
entertaining	0.14 (0.07)*	0.21 (0.08)*	0.22 (0.06)**
positive	0.05 (0.03)	0.19 (0.09)*	0.17 (0.07)**

FURTHER EVIDENCE FOR ROLE OF ENTERTAINMENT

- In study on development of ambient intimacy on Twitter (Lin, Levordashka, Utz, 2016)
- In experiments on role of intimacy & narrativity on perceived closeness
 - narrativity => entertainment => closeness (Lin & Utz, in press)

LONG TERM EFFECTS

Utz & Breuer (R&R)

PRIOR WORK ON FACEBOOK-EFFECTS - MIXED RESULTS

- Negative effects: lower life satisfaction; more depression (Krasnova, Wenninger, Widjaja, & Buxmann, 2013; Kross et al., 2013; Tandoc, Ferrucci, & Duffy, 2015), more stress (Chen & Lee, 2013; Fox & Moreland, 2015)
- Positive effects: higher life satisfaction; less depression (Grieve, Indian, Witteveen, Anne Tolan, & ↓Marrington, 2013; Valenzuela, Park, & Kee, 2009) and stress (Nabi, Prestin, & So, 2013; Wright, 2012)
- => mostly crosssectional studies

LONGITUDINAL STUDIES

- Reinecke and Trepte (2014):
 - positive effect of authenticity in Facebook-selfpresentation at time t on well-being at $t+1$
 - But also reversed effect significant
⇒ third variable, selection effect?
- Dienlin, Masur, and Trepte (2016)
 - positive effect on life satisfaction
 - no effect on loneliness
- Burke and Kraut (2016)
 - Facebook data + panel data
 - targetted communication from *strong ties* => higher well-being
 - No other effects

- Only SNS-users!

GOAL OF THE PRESENT STUDY

- Users and non-users:
Are there differences in social support (online), stress, and life satisfaction?
- Longitudinal design:
Can these differences be explained by Facebook use (within a wave; across time)?

UNDERLYING PROCESSES

Negative effects

- Mainly from passive use (reading)
- Positivity norm => upward social comparisons => envy => stress => lower life satisfaction

Positive effects

- Mainly from active use
- Maintenance of social relationships => social capital/social support => less stress, higher life satisfaction

LONGITUDINAL STUDY

- Planned: 8 waves, every 6 month
- currently: 7 waves

Sample

- Wave 1: $n = 3367$
- Wave 6: $n = 1330$
 $n=624$ Facebook user in all 6 waves
- Dutch online users
- Representative for Dutch online users with regard to sex, age, education, urban vs. rural place of living

VARIABLES

- Facebook use: yes vs. no

Use

- Passive use: How often do you read/look at the posts of others? (1 = rarely, 5 = very often)
- Active use, asking for advice: How often do you post about the following topics: (...) asking for advice in private matters

Network

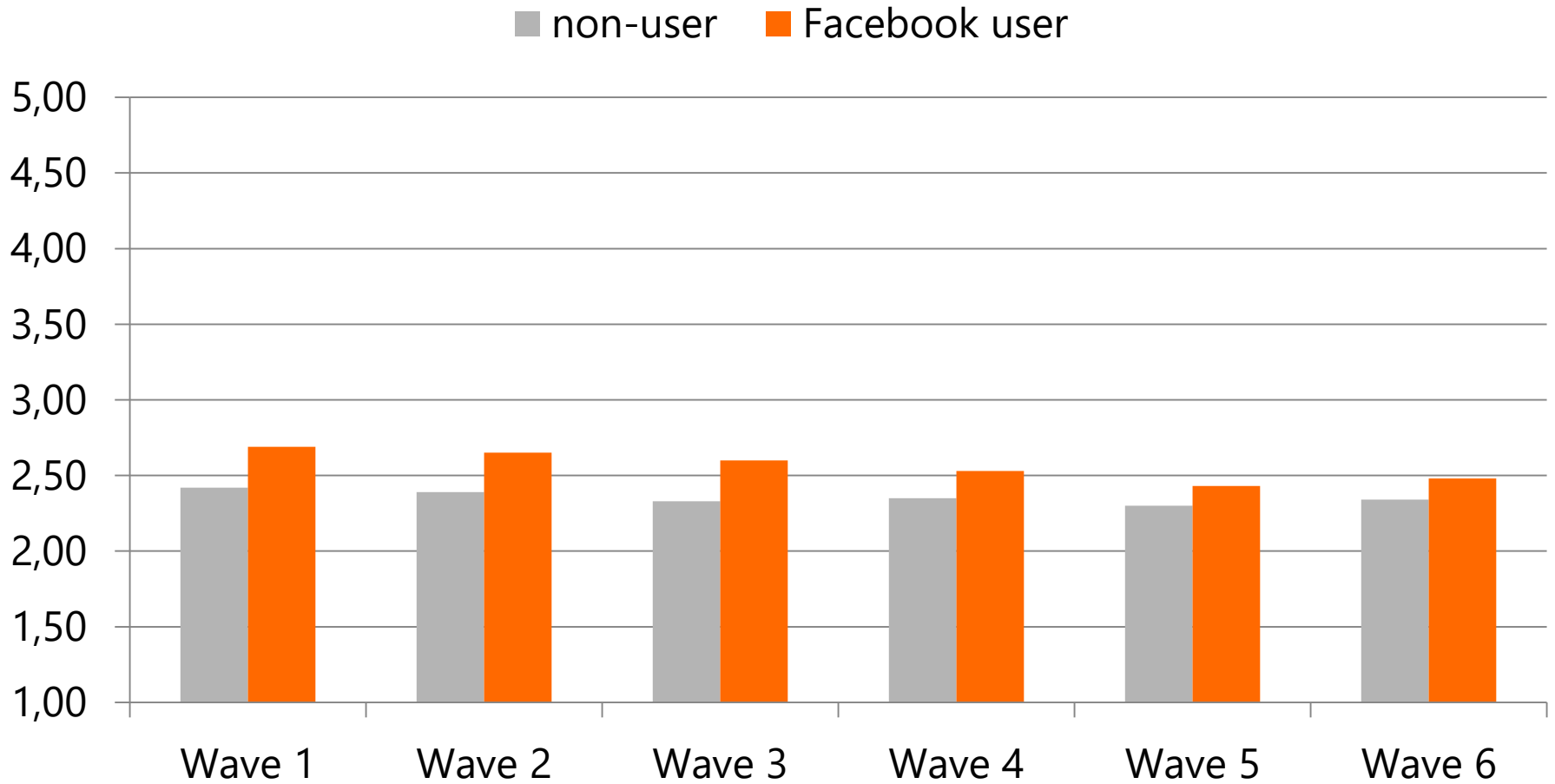
- Number of Facebook friends; proportion strong ties/weak ties/absent ties

VARIABLES

Well-being

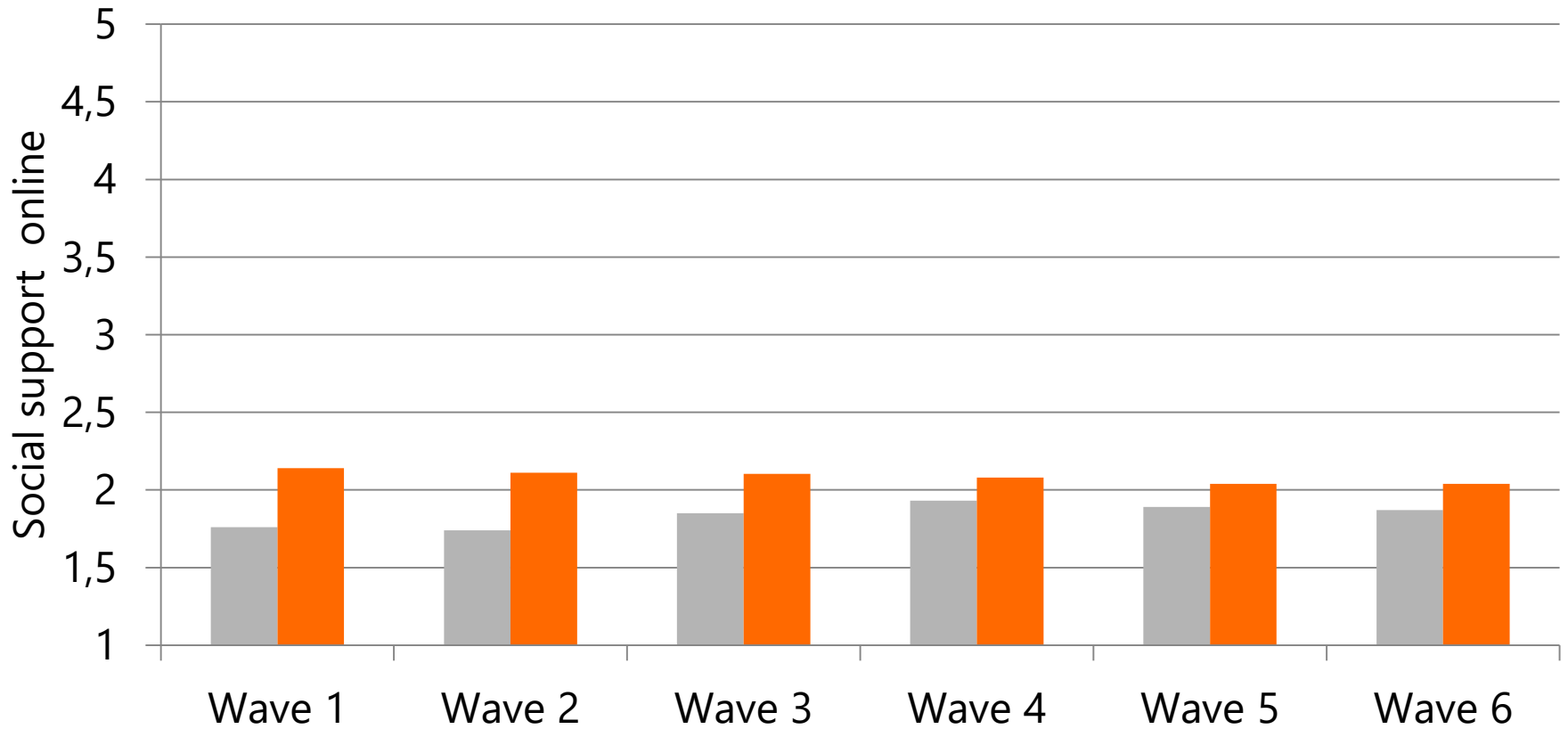
- Social support (online): adaption of the UCLA (Dunkel-Schetter, Feinstein, & Call, 1986)
- Stress (Cohen, 1983)
- Life satisfaction: How satisfied are you with your life in general? 1 = very unsatisfied, 7 = very satisfied (Priebe, Huxley, Knight, & Evans, 1999)

FACEBOOK USERS REPORT A BIT MORE STRESS

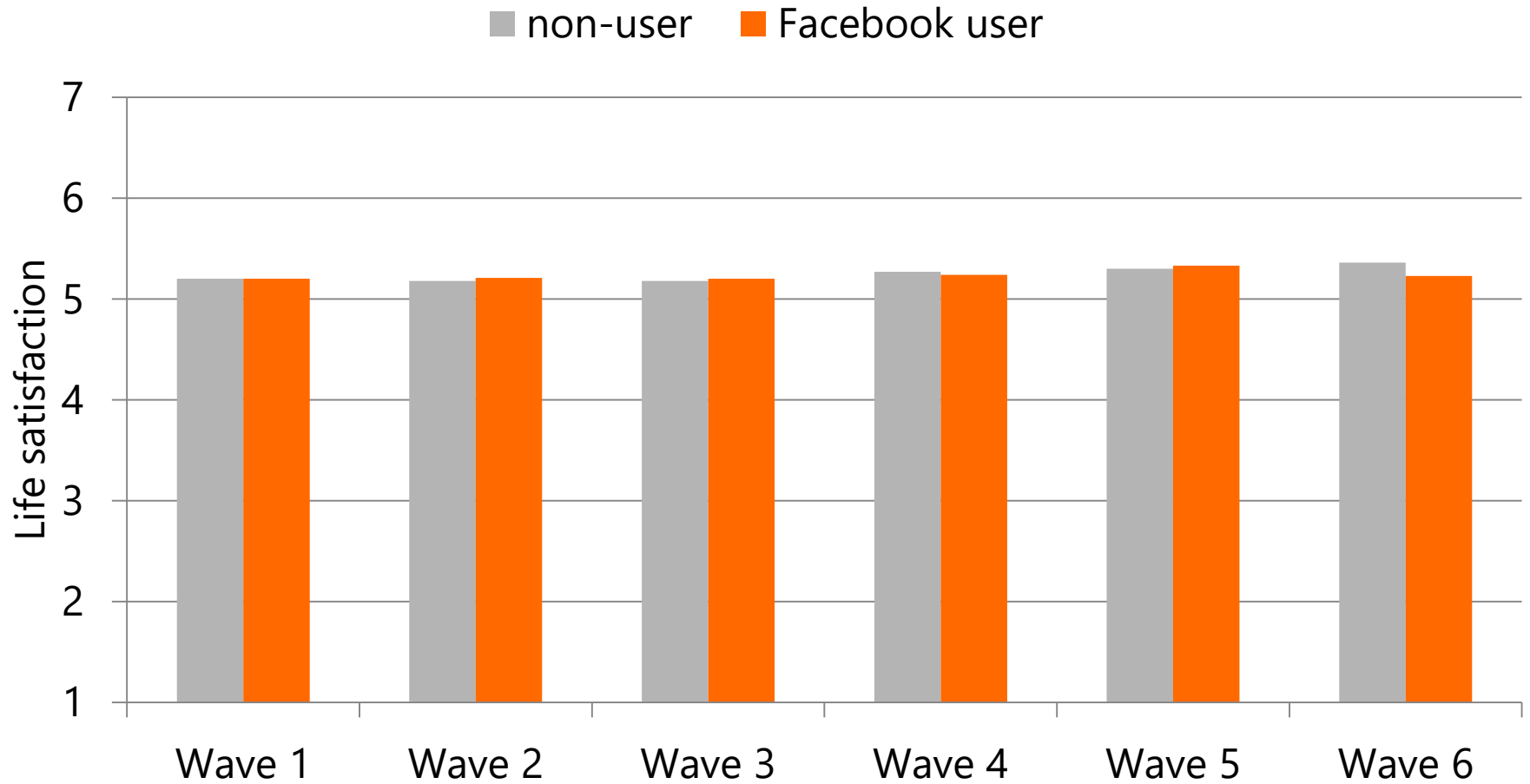


FACEBOOK USERS: MORE SOCIAL SUPPORT ONLINE

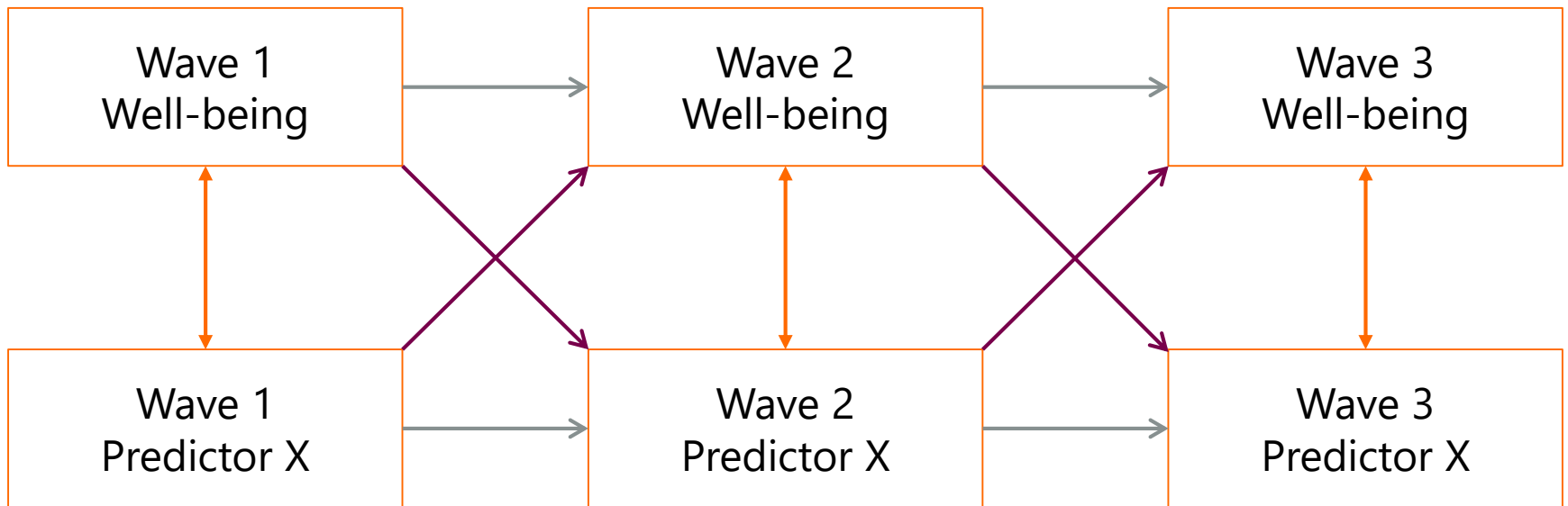
■ non-user ■ Facebook user



SAME LIFE SATISFACTION



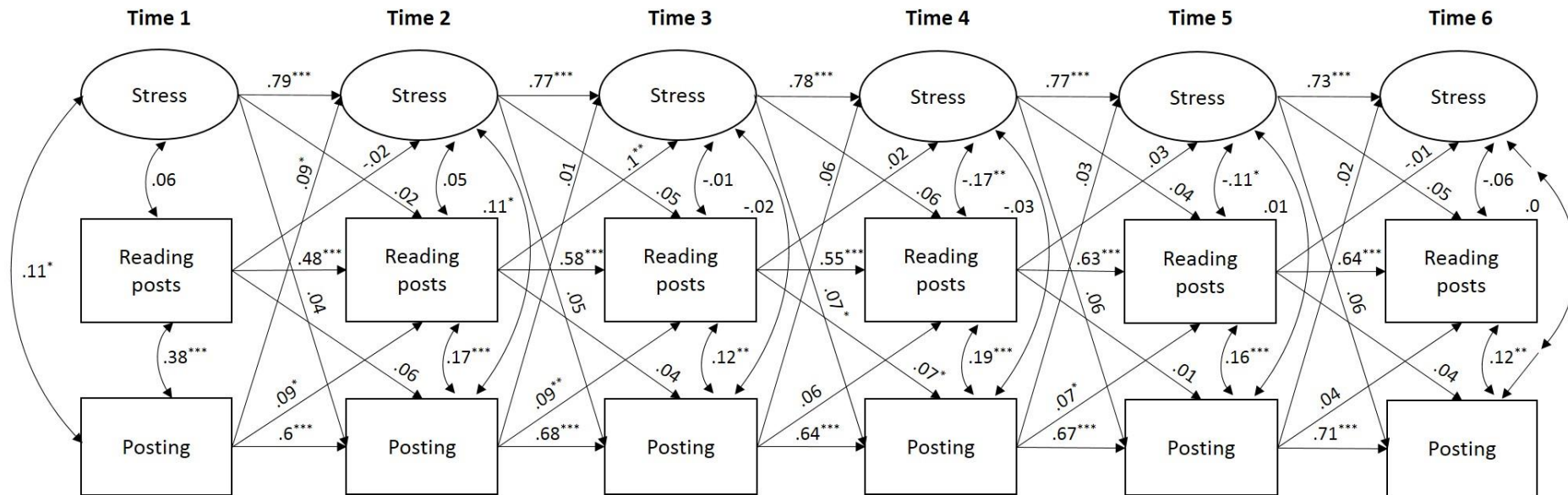
CROSS-LAGGED PANEL- MODELS



control for stability across time
effects within a wave
effects across time

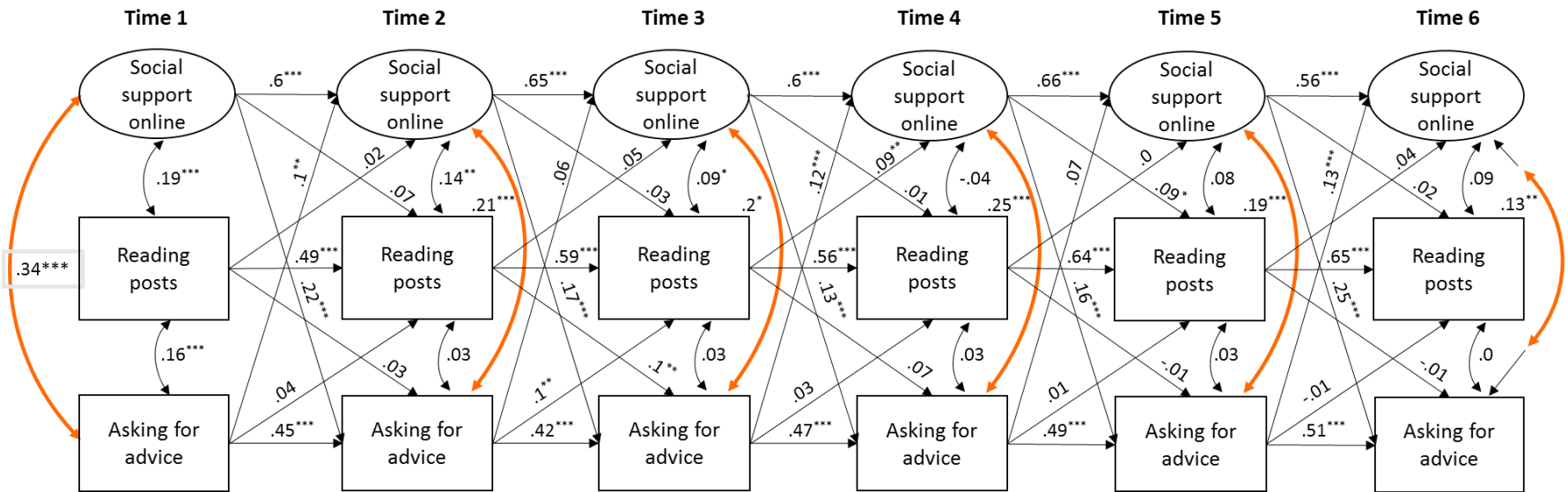
STRESS + LIFE SATISFACTION

NO CONSISTENT EFFECTS!



Note. Standardized coefficients, * $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$, ML estimation, $\chi^2(d.f. = 319, N = 624) = 1439.54, p < .001, CFI = .9, TLI = .87, RMSEA = .08.$

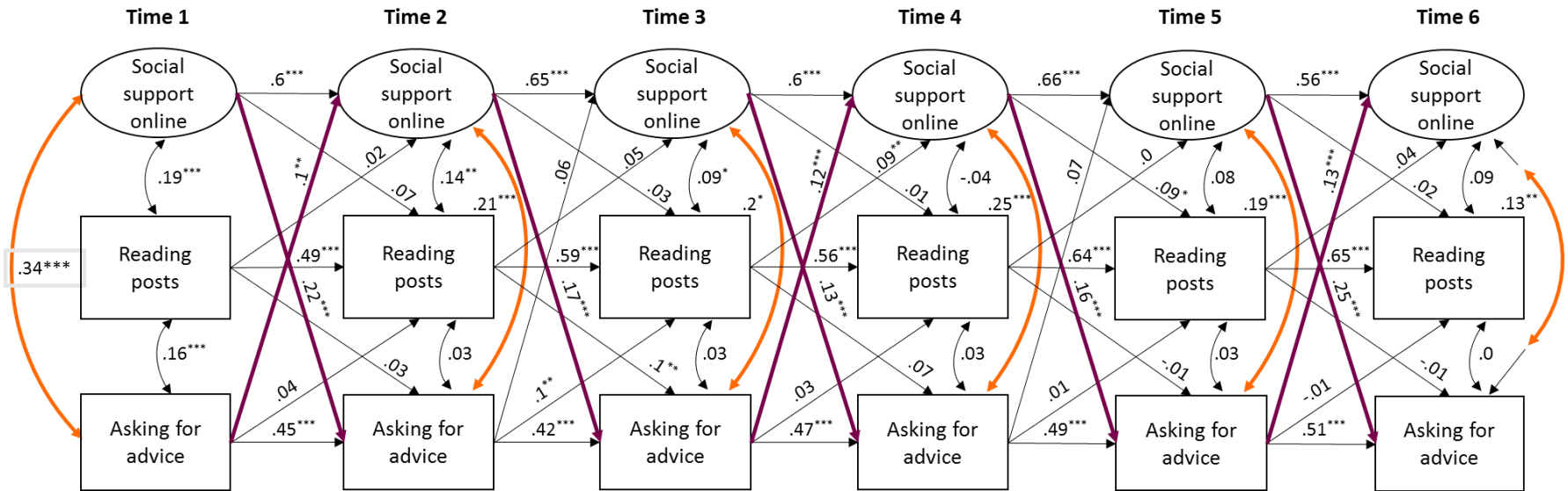
EFFECTS OF USE ON SOCIAL SUPPORT ONLINE



Note. Standardized coefficients, * $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$, ML estimation, $\chi^2(d.f. = 319, N = 624) = 1345.64, p < .001, CFI = .91, TLI = .88, RMSEA = .07$.

All waves: asking for advice <-> social support
 In W1 – W3 also effects of reading

EFFECTS OF USE ON SOCIAL SUPPORT ONLINE



Note. Standardized coefficients, * $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$, ML estimation, $\chi^2(d.f. = 319, N = 624) = 1345.64, p < .001, CFI = .91, TLI = .88, RMSEA = .07$.

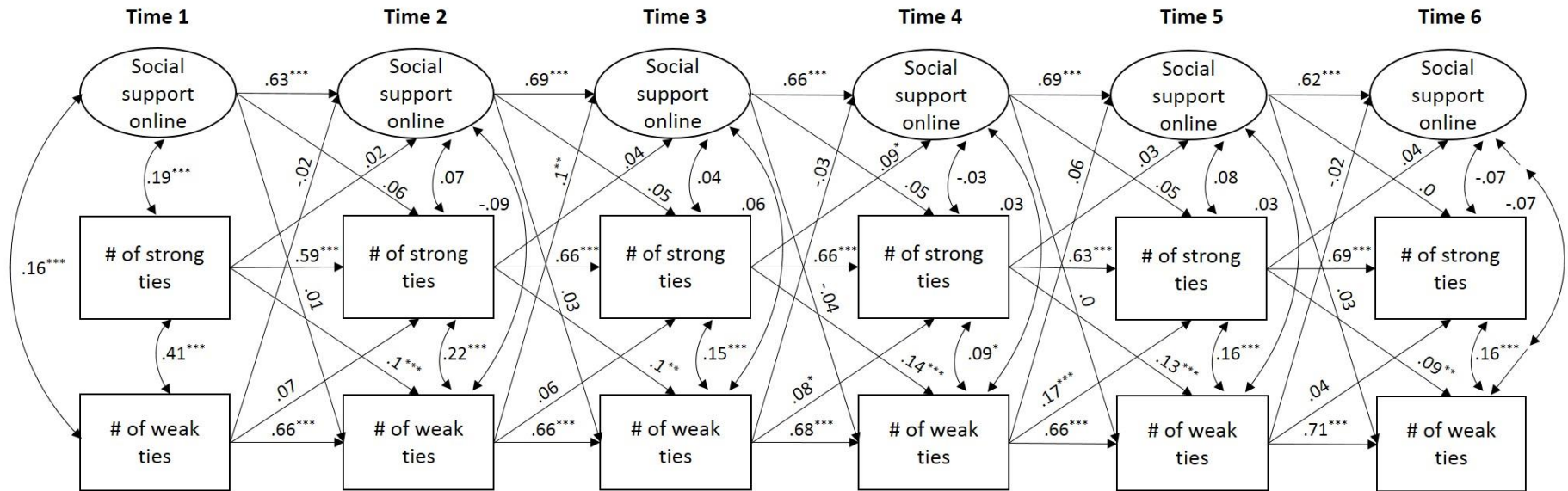
All waves: asking for advice <-> social support (H2)

In W1 – W3 also effects of reading

All waves: more social support => more asking for advice

W1=>W2, W3=>W4, W5=>W6: more asking for advice => more social support

EFFECTS OF NETWORK ON SOCIAL SUPPORT ONLINE



Note. Standardized coefficients, * $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$, ML estimation, $\chi^2(d.f. = 319, N = 624) = 1663.8, p < .001, CFI = .9, TLI = .86, RMSEA = .08$.

in W1 positive relationship with #strong ties and with #weak ties
 only W2 => W3 weak ties => more social support => not consistent

DISCUSSION

- Overall only small differences users vs. non-users
- No consistent media effects for stress and life satisfaction

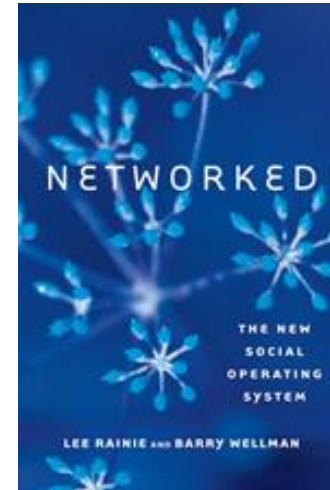
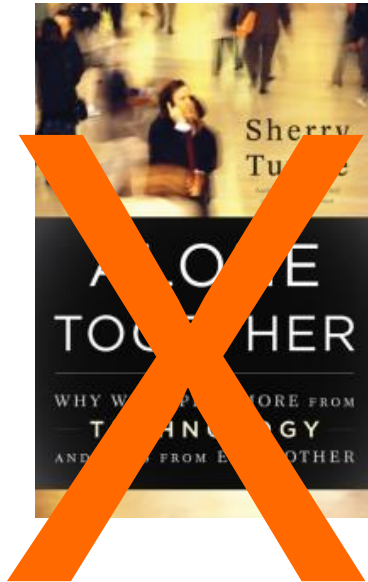
Social support (online)

- active use (asking for advice) more than network
- Learning process/positive reinforcement
- => media effect!

LIMITATIONS AND STRENGTHS

- Model fit not optimal
 - Often single item measures
 - Only proxy for network composition
-
- Longitudinal
 - Representative sample; including non-users

OVERALL CONCLUSION: EFFECTS OF FACEBOOK-USE



- Short term effects: browsing social media posts
 - More happiness than envy
 - Entertaining posts strengthen relationships
- Long term effects: social support

Thank you for your attention!

Questions?

Collaborators longitudinal study welcome!

contact: s.utz@iwm-tuebingen.de

Twitter: [@sonjautz](https://twitter.com/sonjautz) [@redeftie](https://twitter.com/redeftie)

Project website: www.redeftie.eu



Leibniz-Institut für
Wissensmedien

MODEL?

- Start with overall model of ERC and say now only emotional effects & social support?
- Skip/shorten the stress/life satisfaction part
- Short term
- Reading – happiness/bit of stimulating envy
- - strengthening relationships
- Network/social capital => social support

VARIABLES

Well-being

- Social support (online): adaption of the UCLA (Dunkel-Schetter, Feinstein, & Call, 1986)

V45. Hoe vaak en op welke manier hebben de volgende mensen u in de afgelopen maand advies of informatie gegeven? (ongeacht of u hier behoefte aan had)

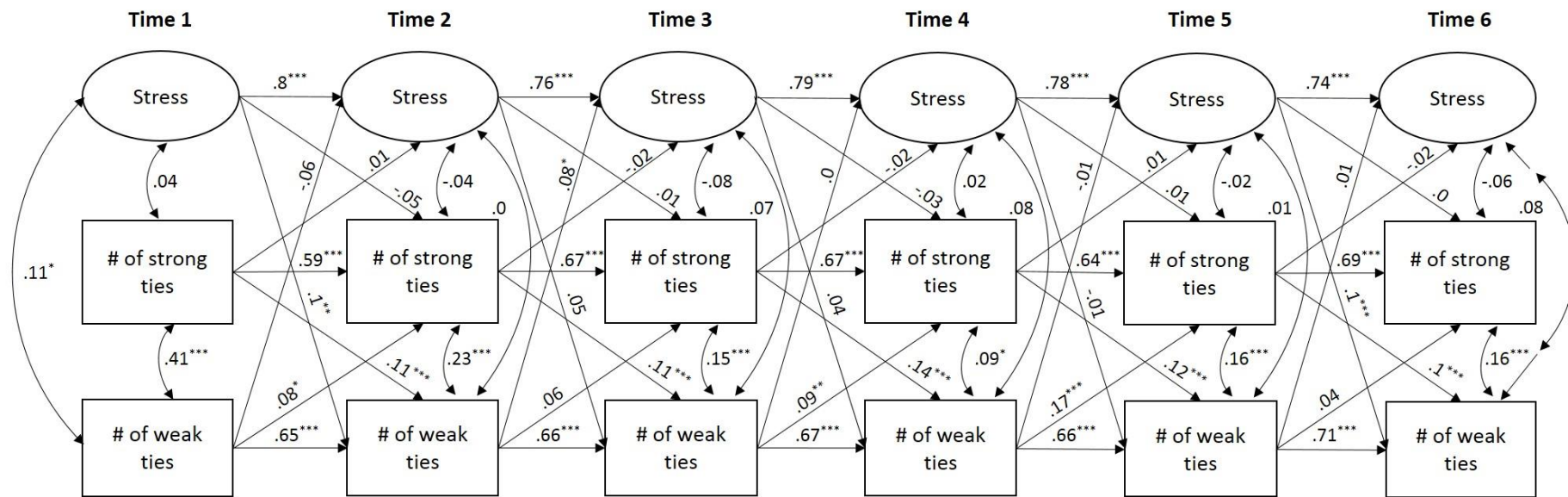
Grid, answers in columns:

1. nooit
2. zelden
3. soms
4. vaak
5. heel vaak

Rows:(random)

1. partner/goede vrienden/familieleden - offline
2. partner/goede vrienden/familieleden - online
3. kennissen - offline
4. kennissen - online
5. mensen die ik alleen online spreek

EFFEKTE DES NETZWERKS AUF STRESS



Note. Standardized coefficients, * $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$, ML estimation, χ^2 (d.f. = 319, $N = 624$) = 1558.28, $p < .001$, CFI = .9, TLI = .86, RMSEA = .08.

Kein Beleg für H3, nur in W1 positiver Zusammenhang mit #strong ties
 W1=>W2, W5=>W6 Stress => mehr weak ties
 => kein konsistentes Bild