

Problematic Personality and (Anti)Social Networks: Why a Few Impact the Many

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OUTLINE

- ▶ Brief CV
- ▶ Example: Adolescent Antisocial Networks
- ▶ Teaching and Possible Collaborations

Developmental Perspective

- **My First Year:** Friendships & personality
- **RADAR:** Social, biological & problematic development
- **Online vs. Offline:** social relationships & personality
- **ECRP:** Social and economic networks, problem behavior & personality
- **FORMAS, PSP:** Ethnicity, networks, personality, biological development

Utrecht,
PHD



Örebro,
Marie Curie
Fellow



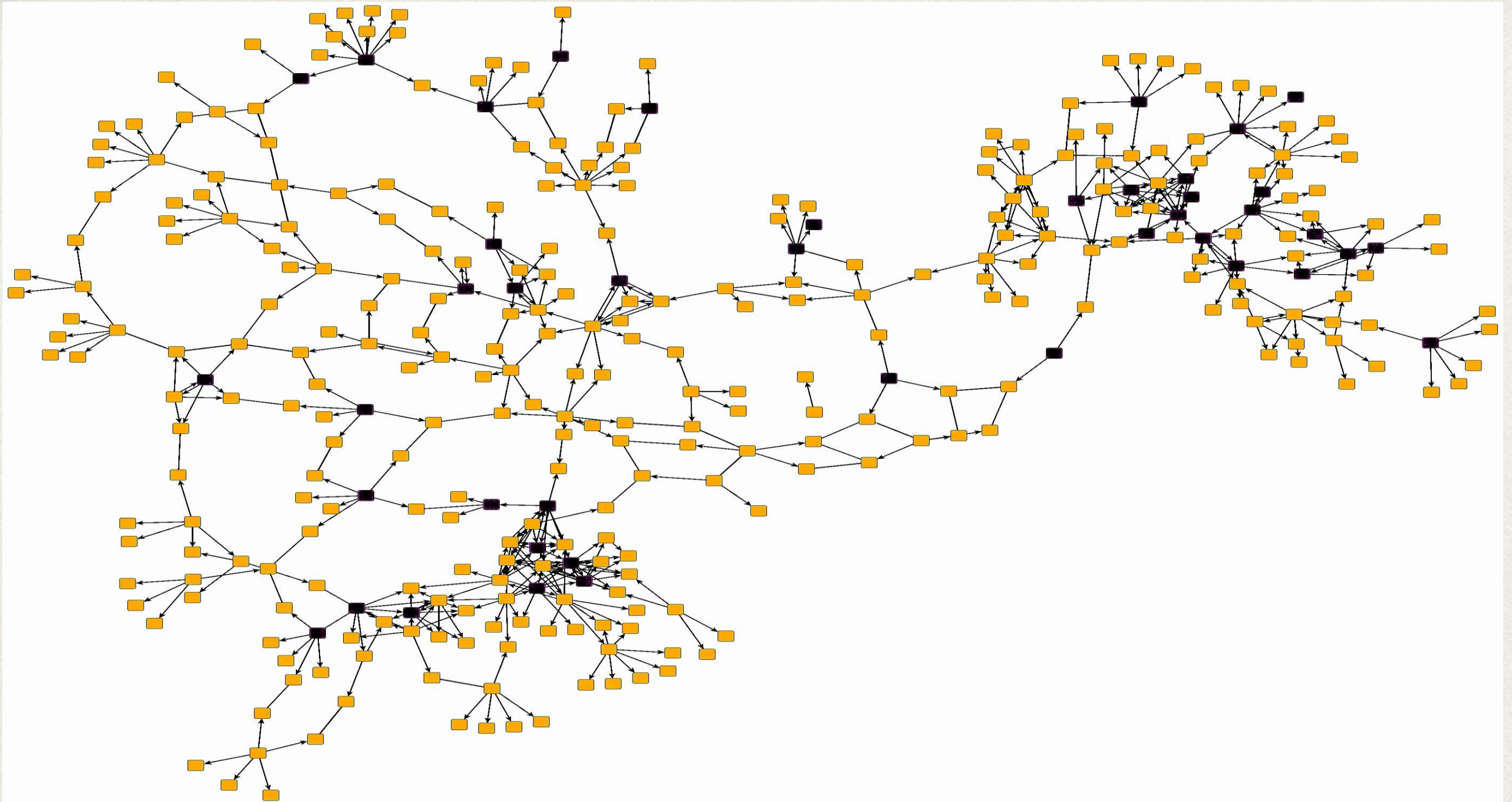
Oxford,
Visiting
Fellow



Örebro, Utrecht,
Associate
Professor

Key publications

- ▶ Van Zalk, M.H.W. & Denissen, J. (in press). Idiosyncratic Versus Social Consensus Approaches to Personality: Self-View, Perceived, and Peer-View Similarity. *Journal of Personality and Social Psychology*.
- ▶ Van Zalk, M.H.W. (in press). Violent Peer Networks. *Developmental Psychopathology*.
- ▶ Zalk, M.H.W., Branje, S. Kerr, M., & Stattin, H. (2010). It Takes Three: Selection, Influence, and De-selection Processes of Depression in Adolescent Peer Networks. *Developmental Psychology*, 46, 927-938.
- ▶ Selfhout, M.H.W., Burk, W., Branje, S., Denissen, J. J. A., Van Aken, M. A. G., & Meeus, W. (2010). Emerging late adolescent friendship networks and Big Five personality traits: A social network perspective. *Journal of Personality*, 78, 509-538.
- ▶ Selfhout, M.H.W., Denissen, J., Branje, S., & Meeus, W. (2009). In the eye of the beholder: Perceived, actual, and peer-rated similarity in personality, communication, and friendship intensity during the acquaintanceship process. *Journal of Personality and Social Psychology*, 96, 1152-1165.



Example: Personality, Violence and Networks

Violent crimes

- ▶ Adolescence: minor crimes increase tenfold
- ▶ Only a small minority engages in violent crimes
- ▶ Moffitt: life-course persistent vs. adolescent-limited

The case of immigrant harassment

- ▶ Exception: Kuhn, et al., 2004; Van Zalk, et al., 2013
- ▶ Adolescent **peer groups** harass immigrants
- ▶ Friends engage in **similar** levels of harassment

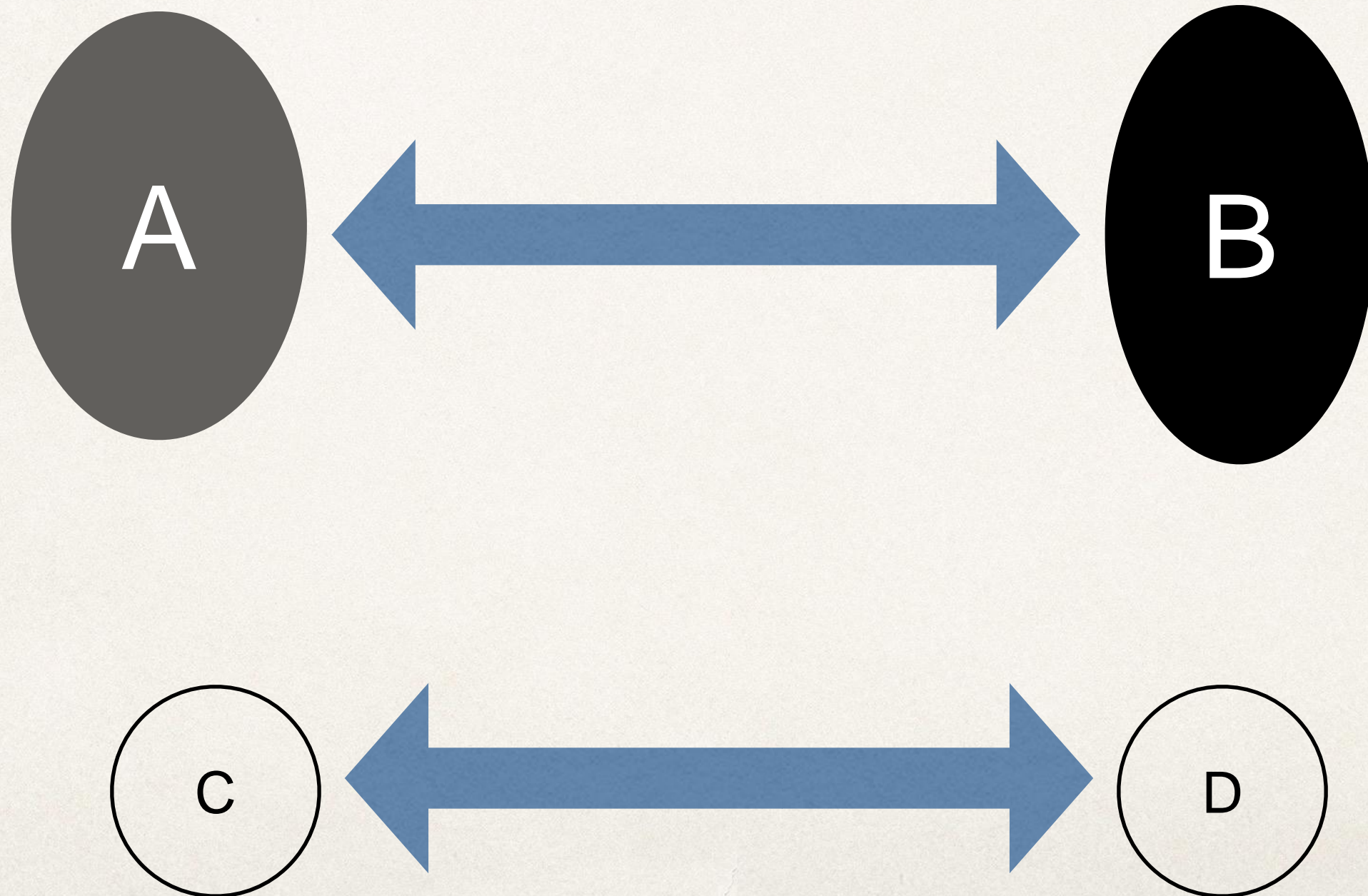
Networks

- ▶ Connections or associations between nodes
- ▶ *e.g.*, collaborations between companies, interactions between hormones, bird interactions, friendship or peer networks
- ▶ Peer networks: Crucial functions during adolescence

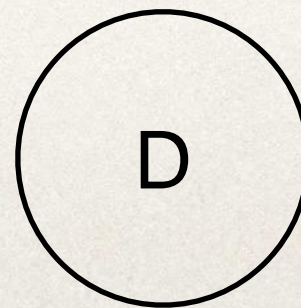
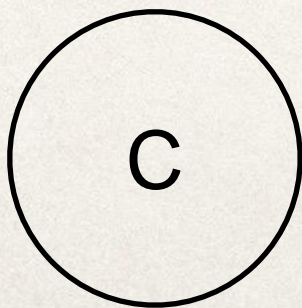
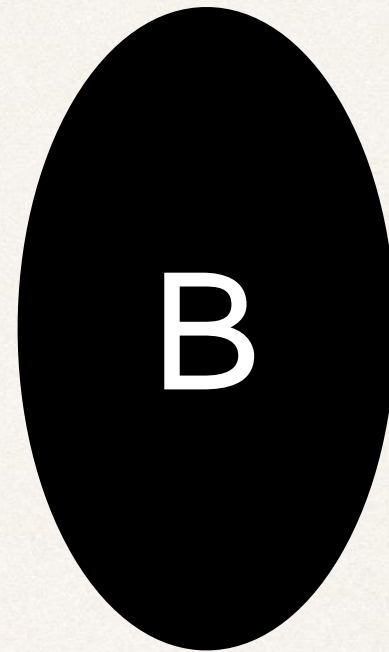
ECRP: Social Influence in Dynamic Networks

- ▶ Six EU countries: longitudinal development networks
- ▶ Friends tend to be similar in attitudes, feelings, cognitions, behaviours, problems...
- ▶ Why similarity between friends?

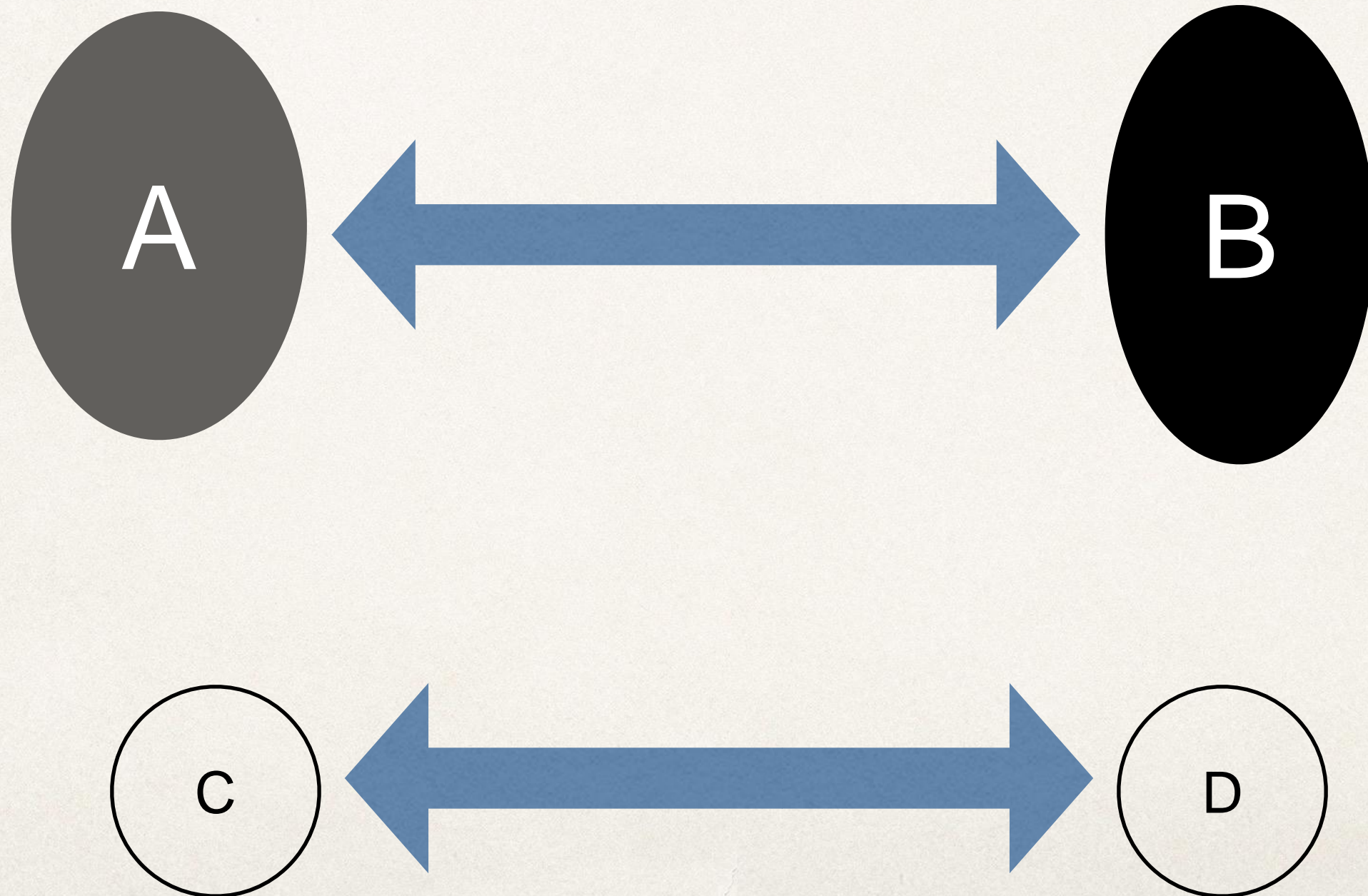
Similarity (homophily)



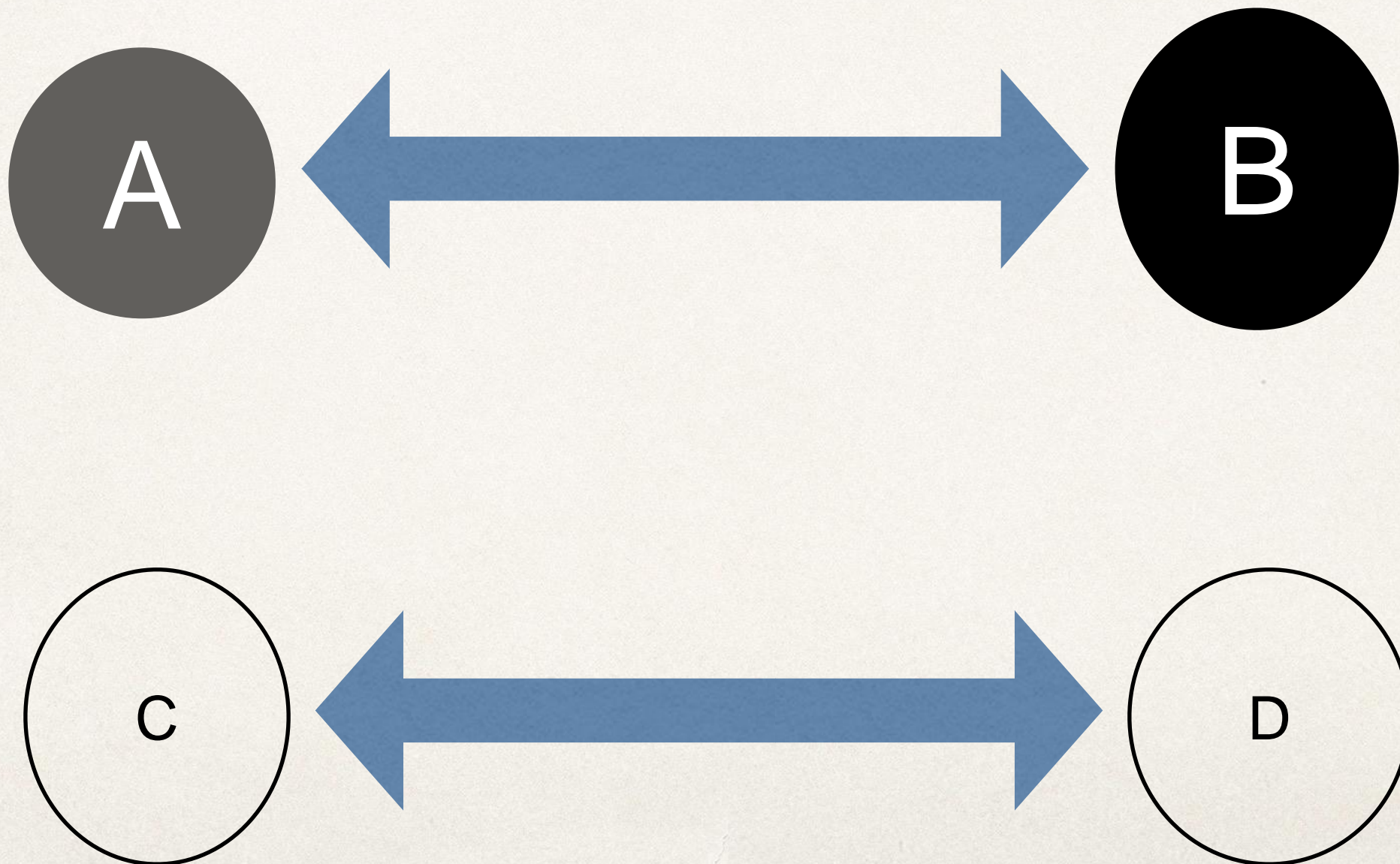
Selection: (time 0)



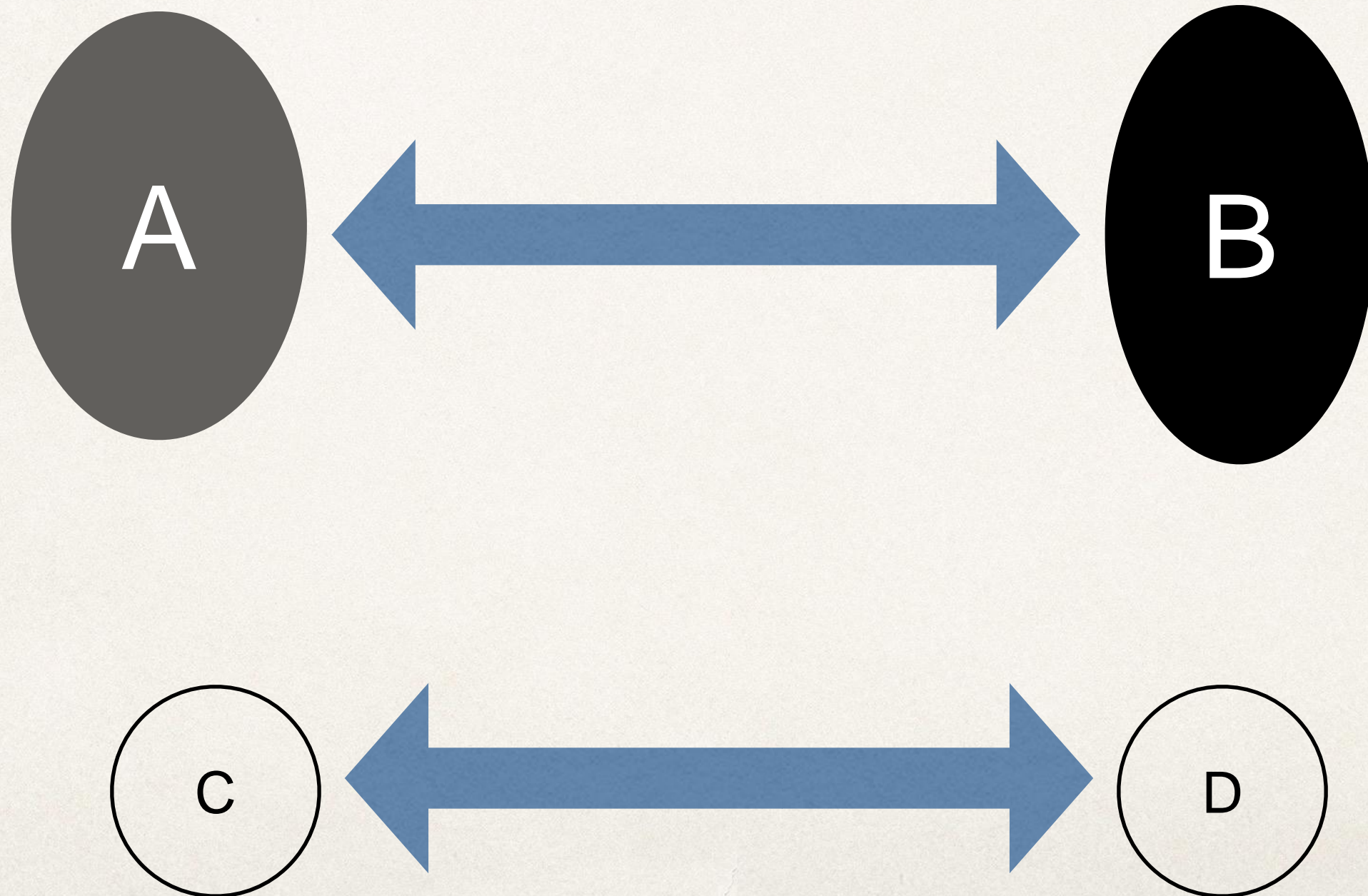
Selection: (time 0 + 1)



Influence: (time 0)



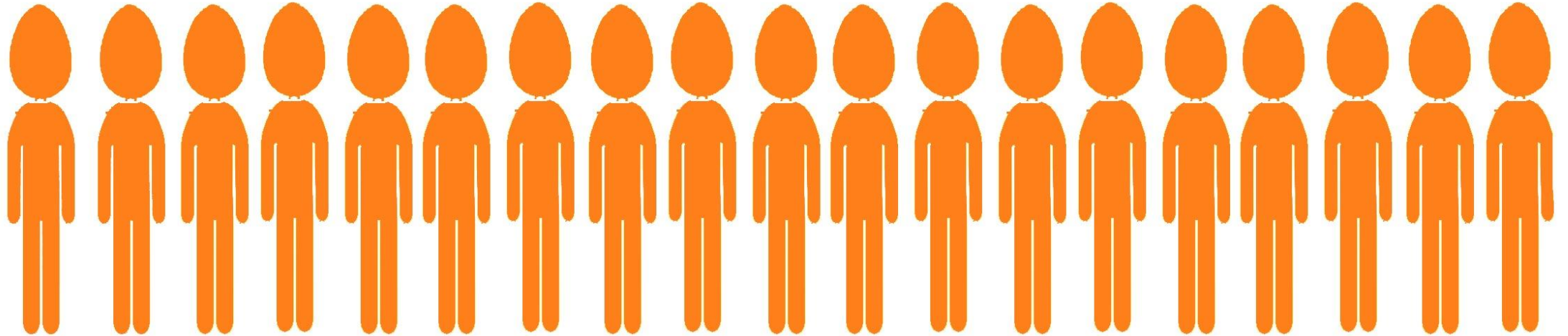
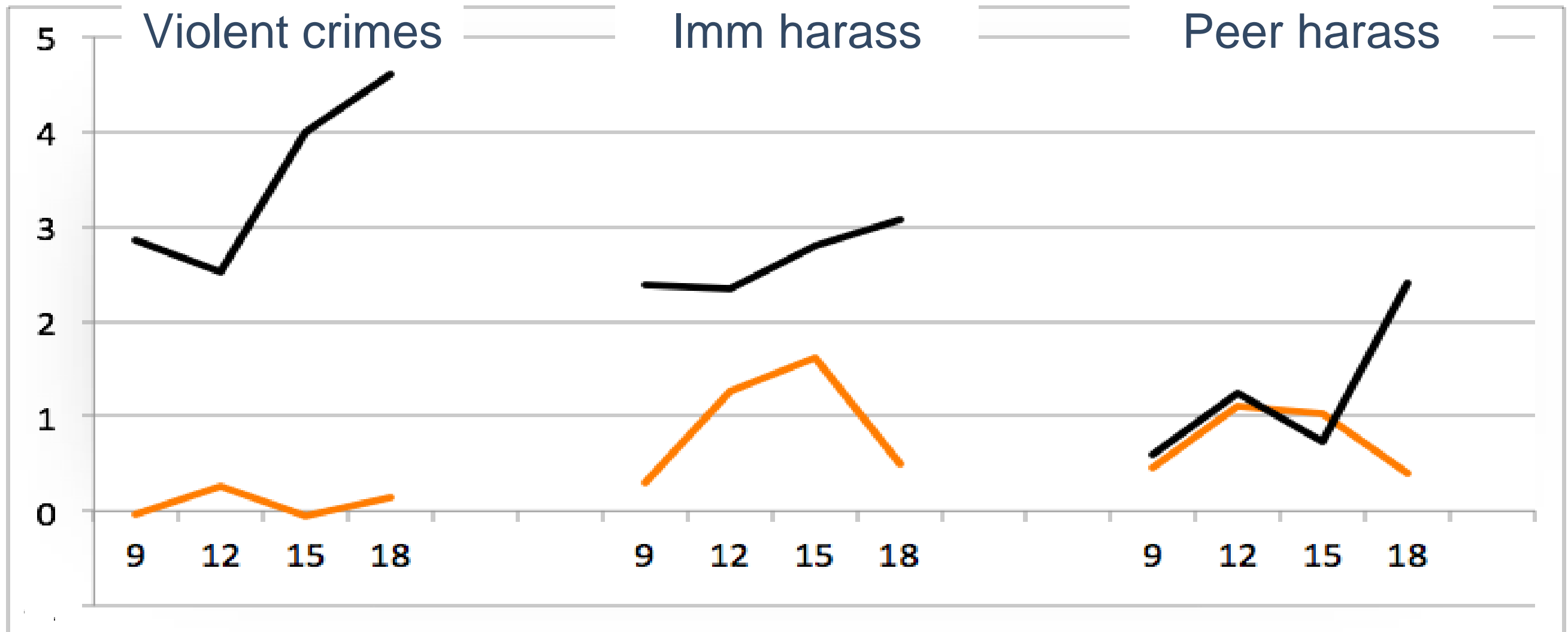
Influence: (time 0 + 1)



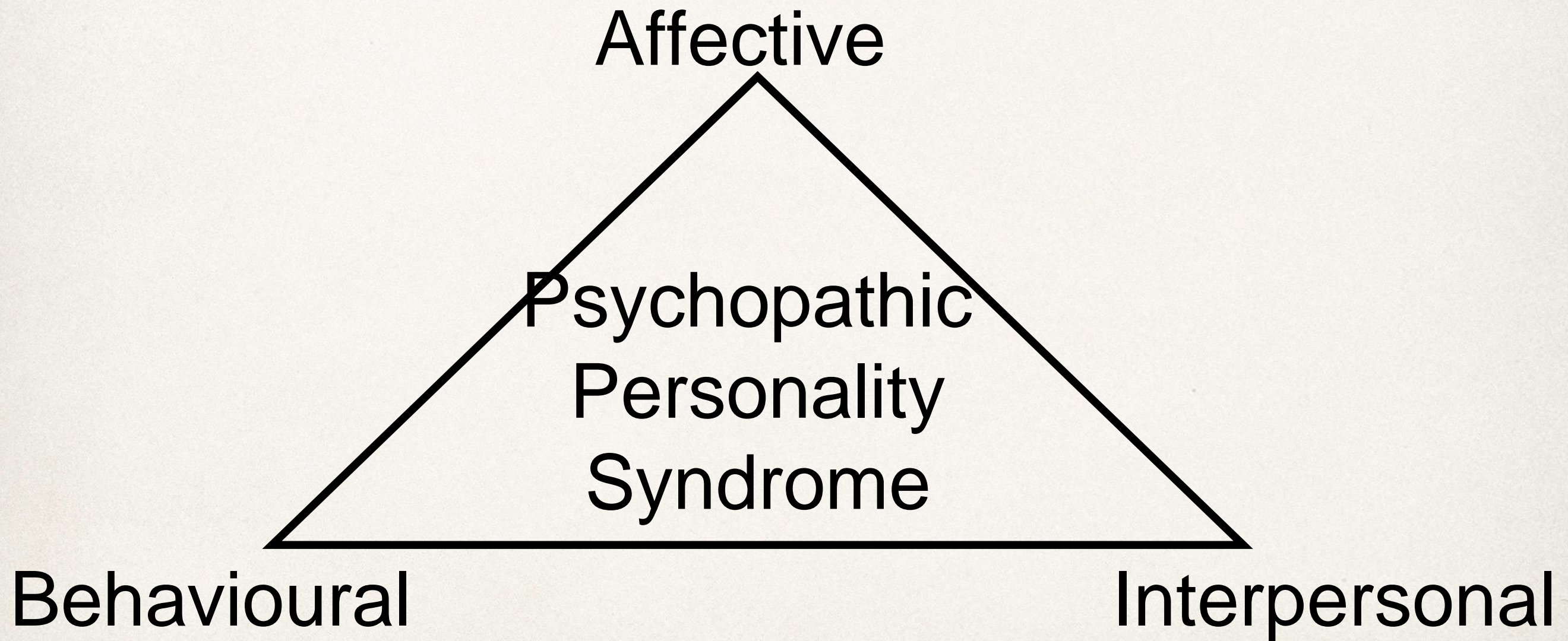
The case of immigrant harassment

- ▶ Selection vs. Influence
- ▶ Homogenous processes?
- ▶ What about propensity to engage in harassment: personality differences?

Antisocial behaviour



Psychopathic traits



Manipulative-dominant traits

- High involvement in racist peer networks
- Manipulate and dominate others to take risks and engage in violence
- Leadership positions influencing peers (e.g., Kimonis, et al., 2004; Van Zalk, et al., 2011, 2012a, 2012b, 2013)

Network processes

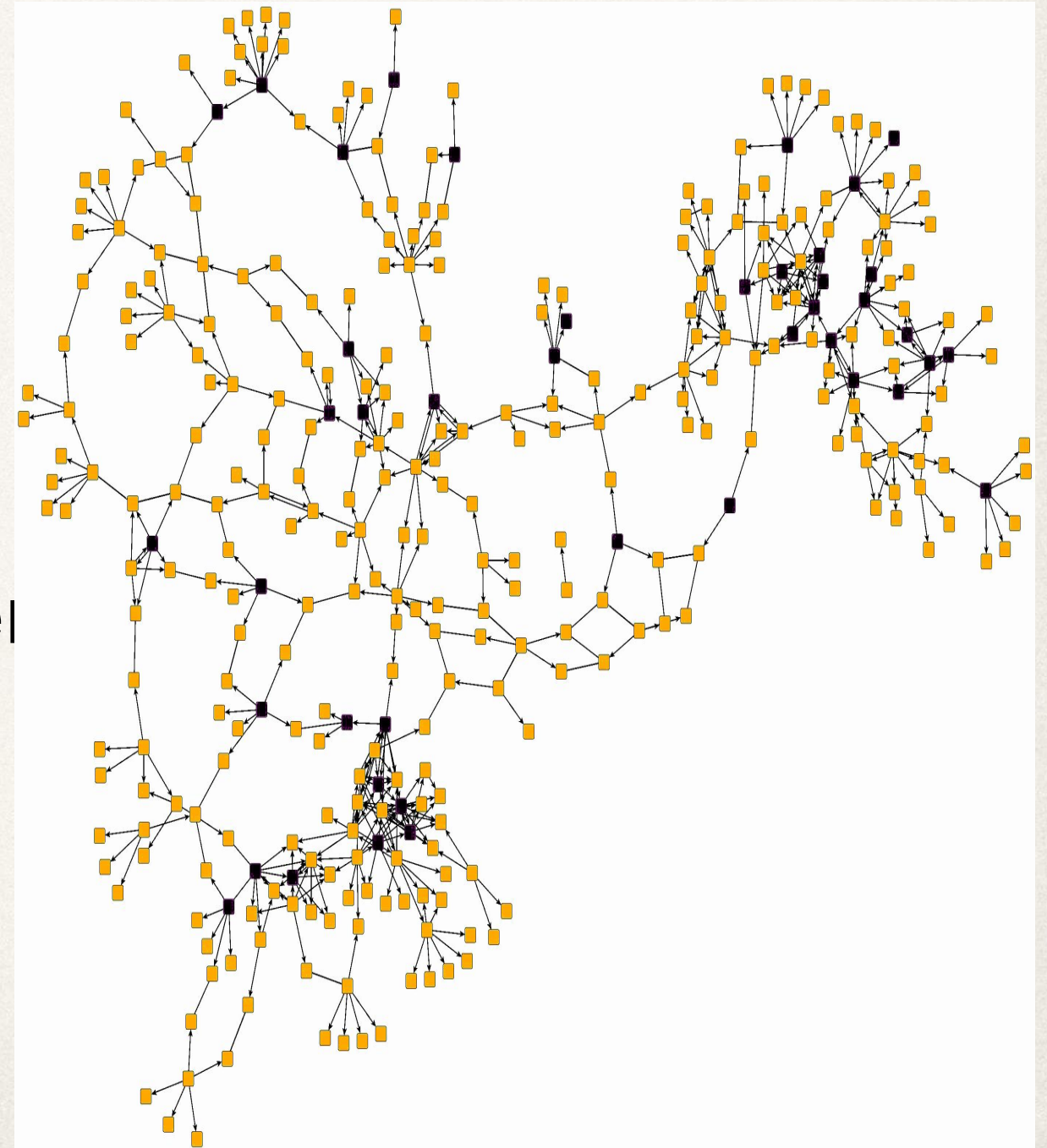
Why Homophily?

1. Selection
2. Influence
3. Moderation by
manipulative-dominant traits



Network-Person interactions

- ▶ Crime propensity: psychopathic traits
- ▶ How do they influence other adolescents?
- ▶ Peer networks



How to study?

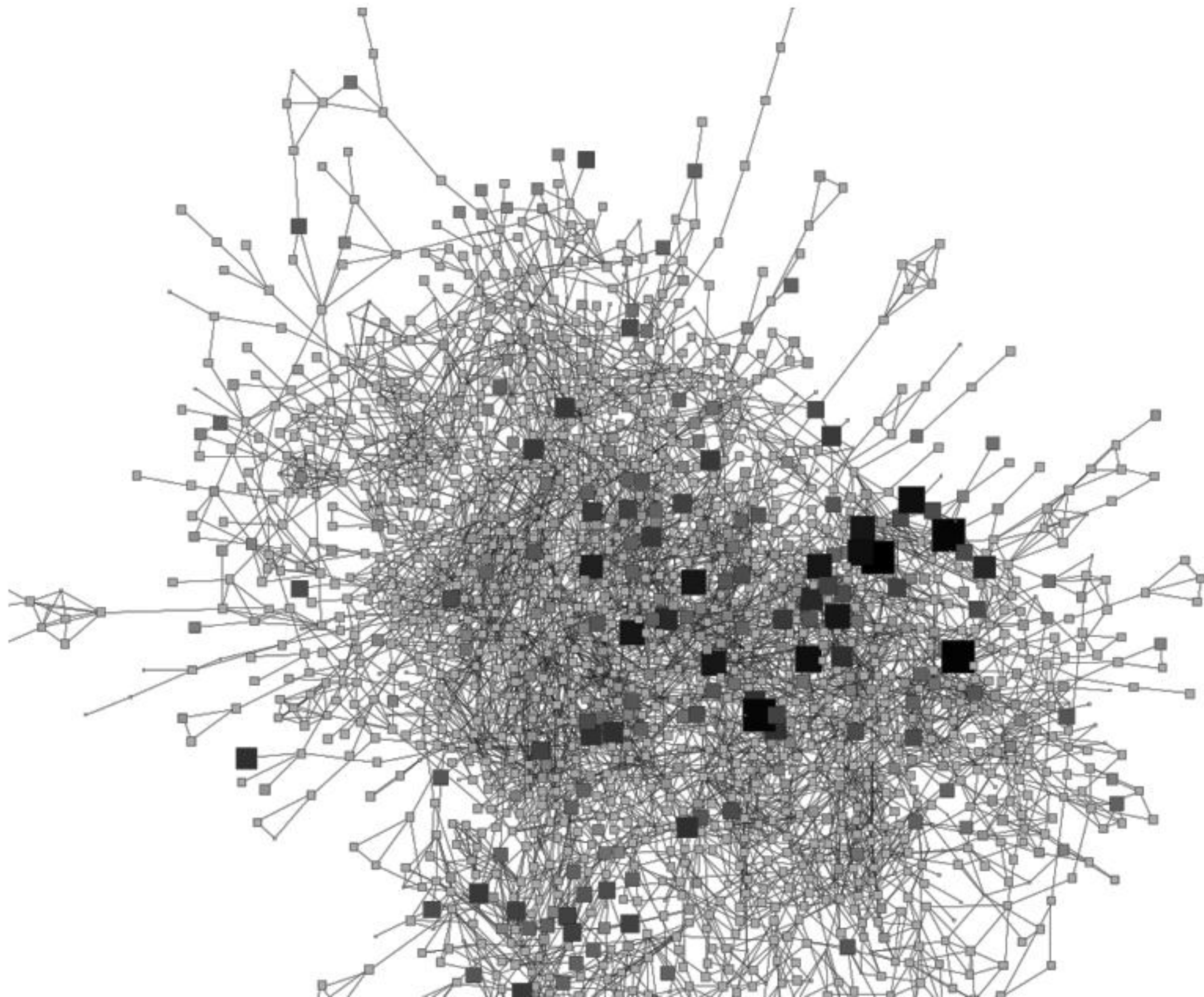
Design:

- ➡ Community design ($N = 4,621$)
- ➡ Only non-immigrants ($N = 3,922$)
- ➡ Five annual longitudinal measurements
- ➡ Multiple informers: peers, parents, teachers, police reports

How to study?

Simulation Investigation for Empirical Network Analysis:

- ➡ Longitudinal Network Modelling
- ➡ Selection & influence
- ➡ Personality-network interactions

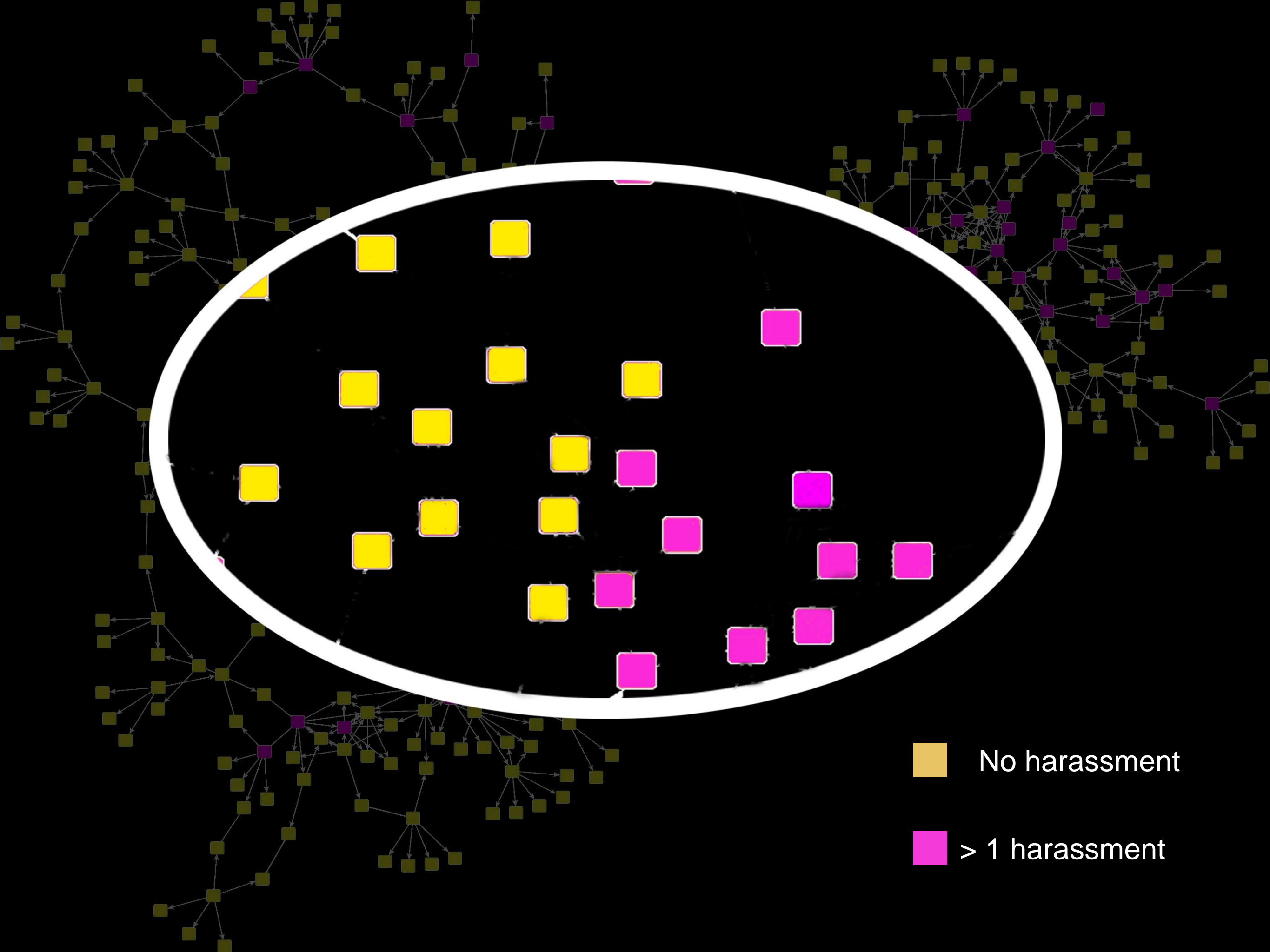


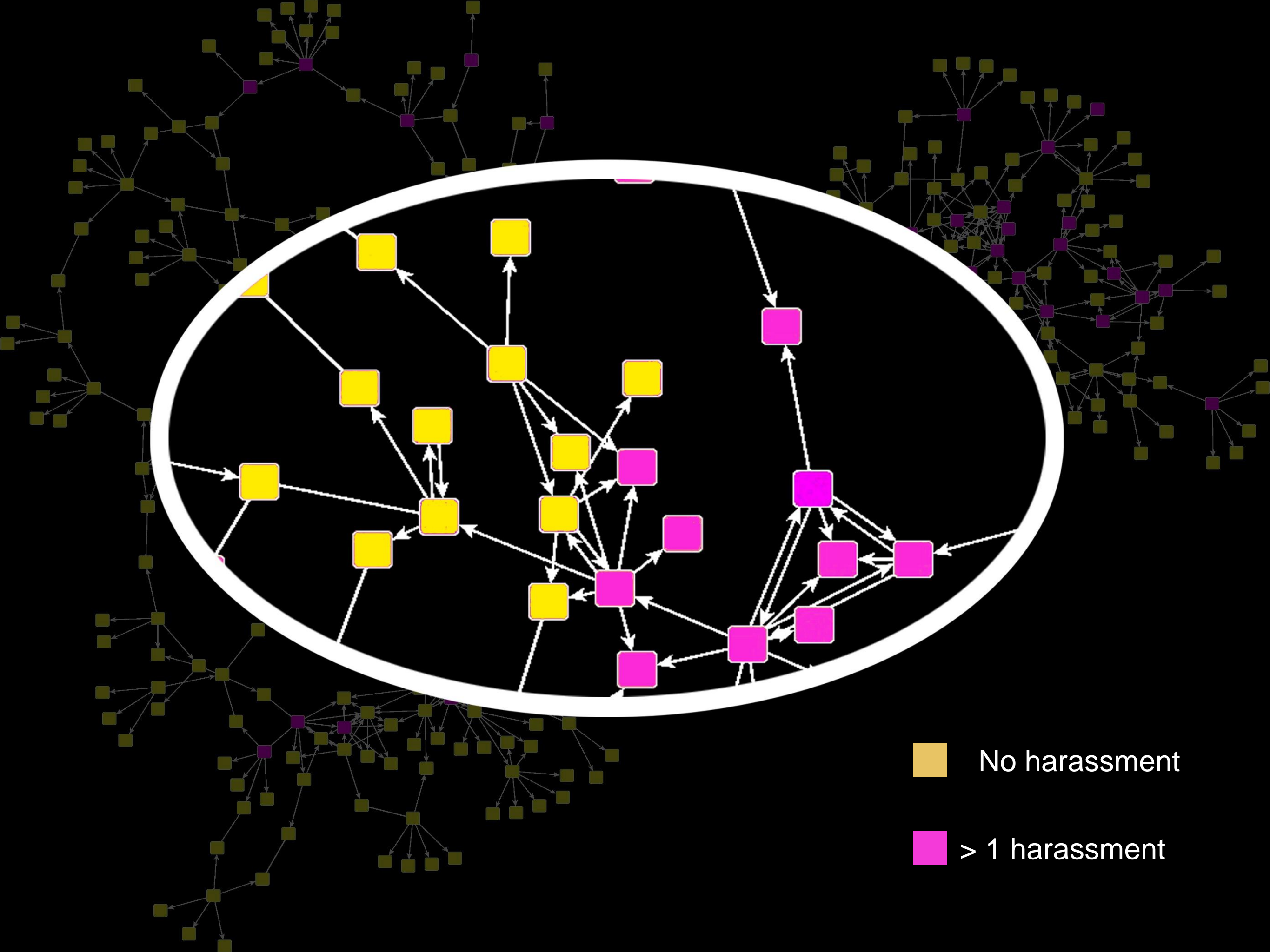
Results: Selection

	Odds Ratio	s.e.
Similar gender	8.86 ***	0.93
Similar age	2.32 ***	0.54
Similar ethnicity	1.98 ***	0.21
Similar neighbourhood	4.32 ***	0.32
Similar peer harass	3.92 ***	0.21
Similar imm harass	1.92 ***	0.56

*** $p < .0001$





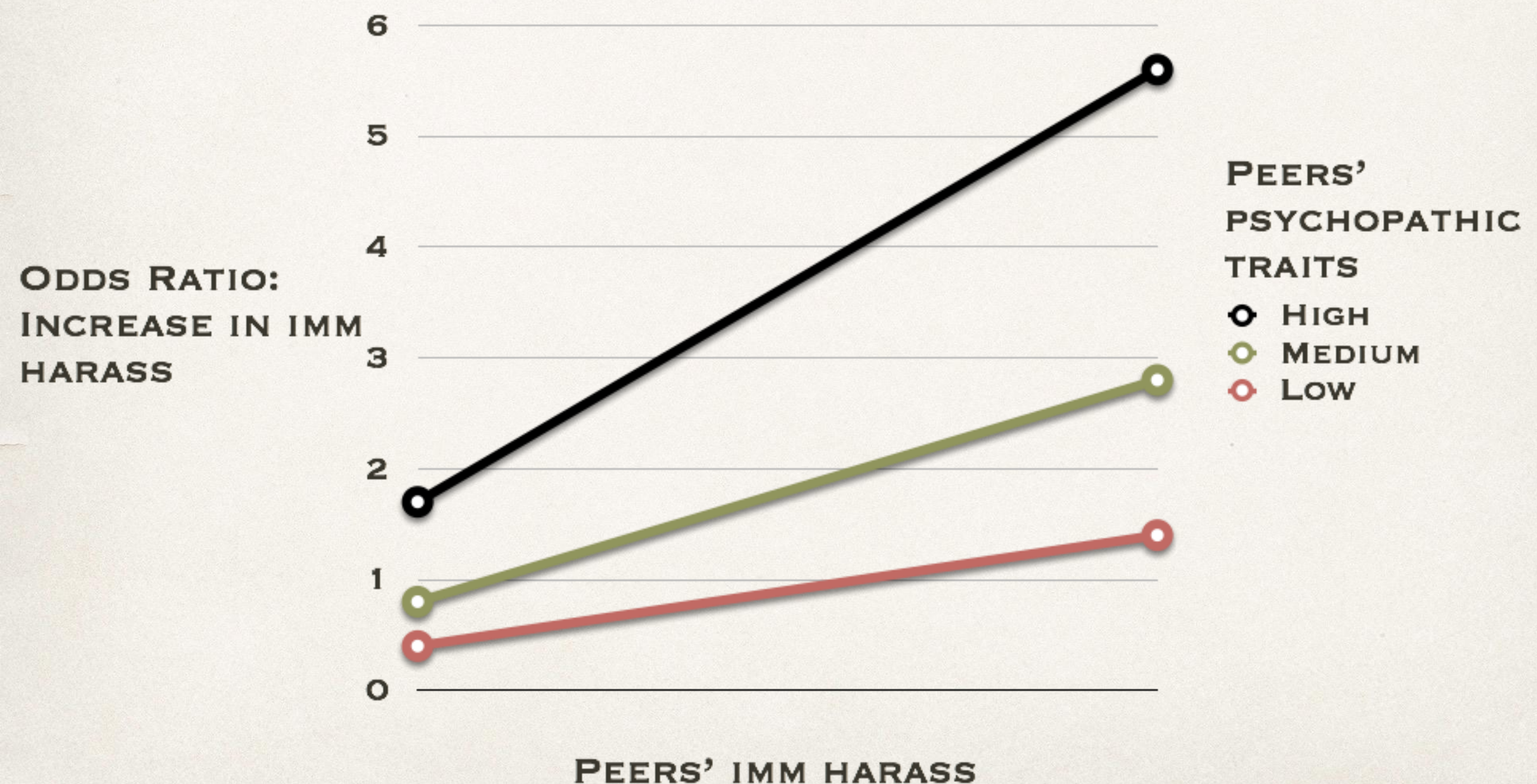


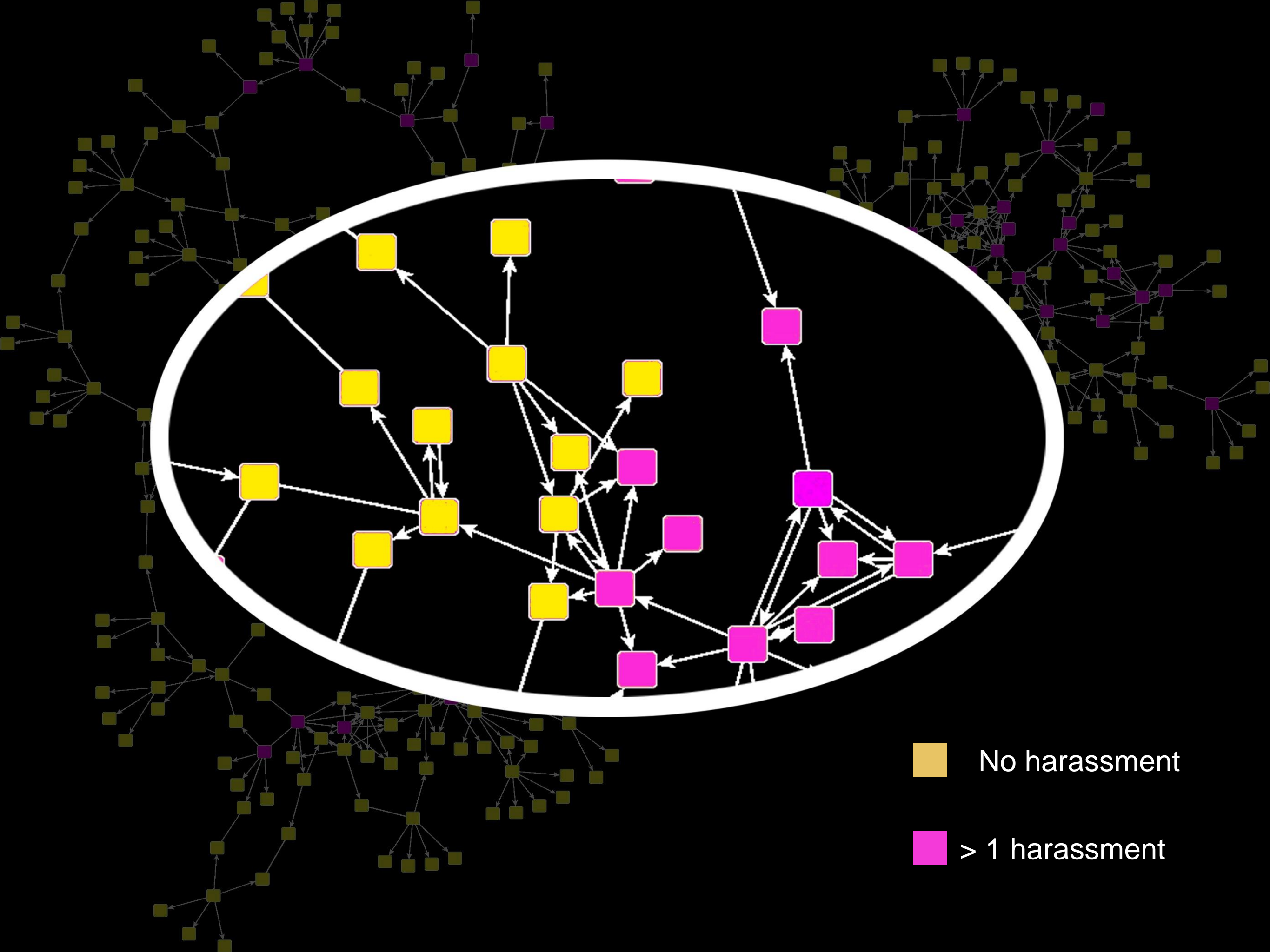
Results: Influence

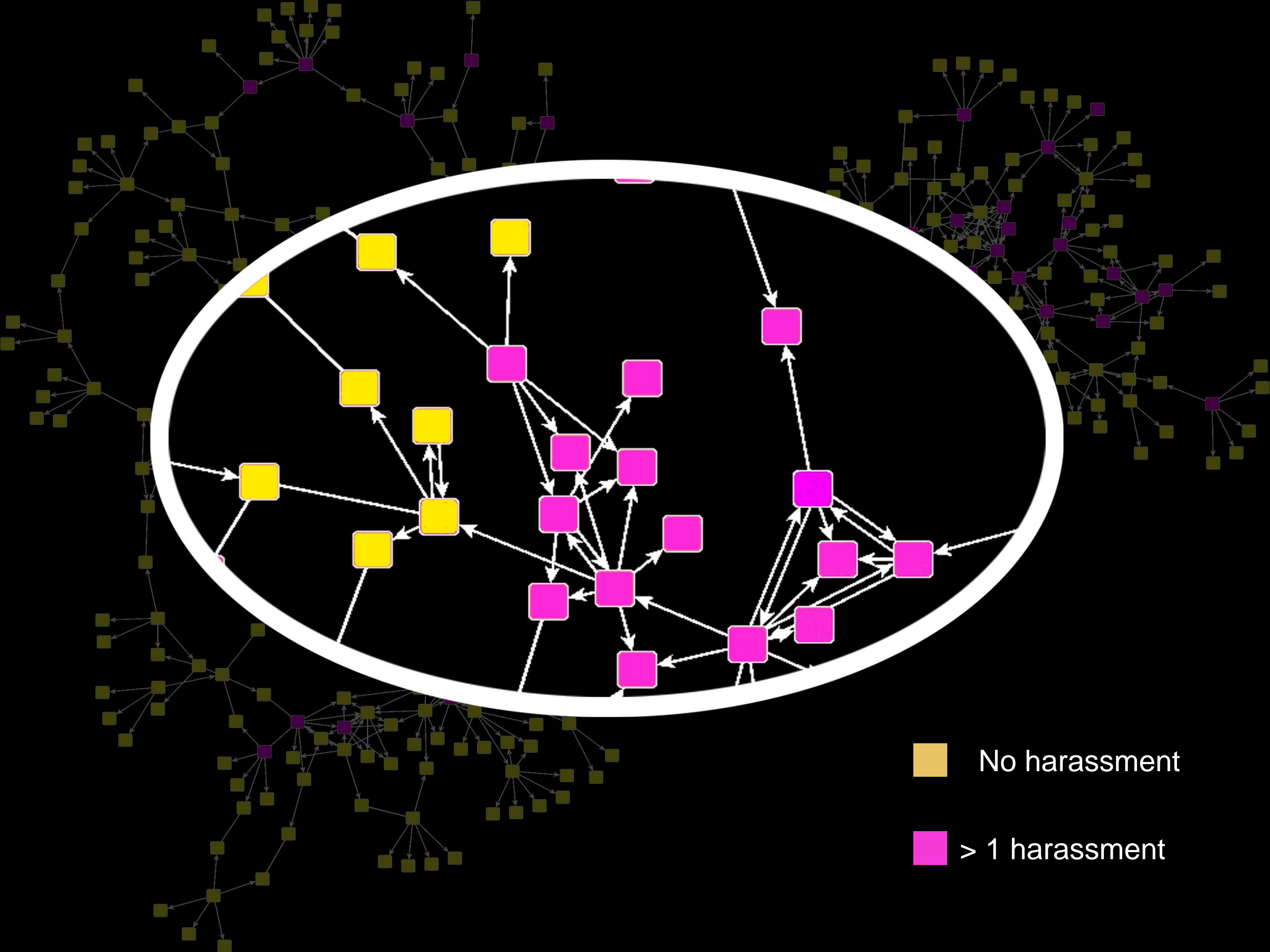
	Odds Ratio	s.e.
Linear shape	-1.23 ***	0.02
Quadratic shape	0.32 ***	0.21
Parents' prejudice	2.34***	0.15
Gender (0= girls, 1 = boys)	5.32 ***	0.21
Neighbourhood	-1.45 ***	0.11
Peers' imm harass	4.21 ***	0.08
Peers imm harass *		
peers' psychopathic traits	3.65 ***	0.21

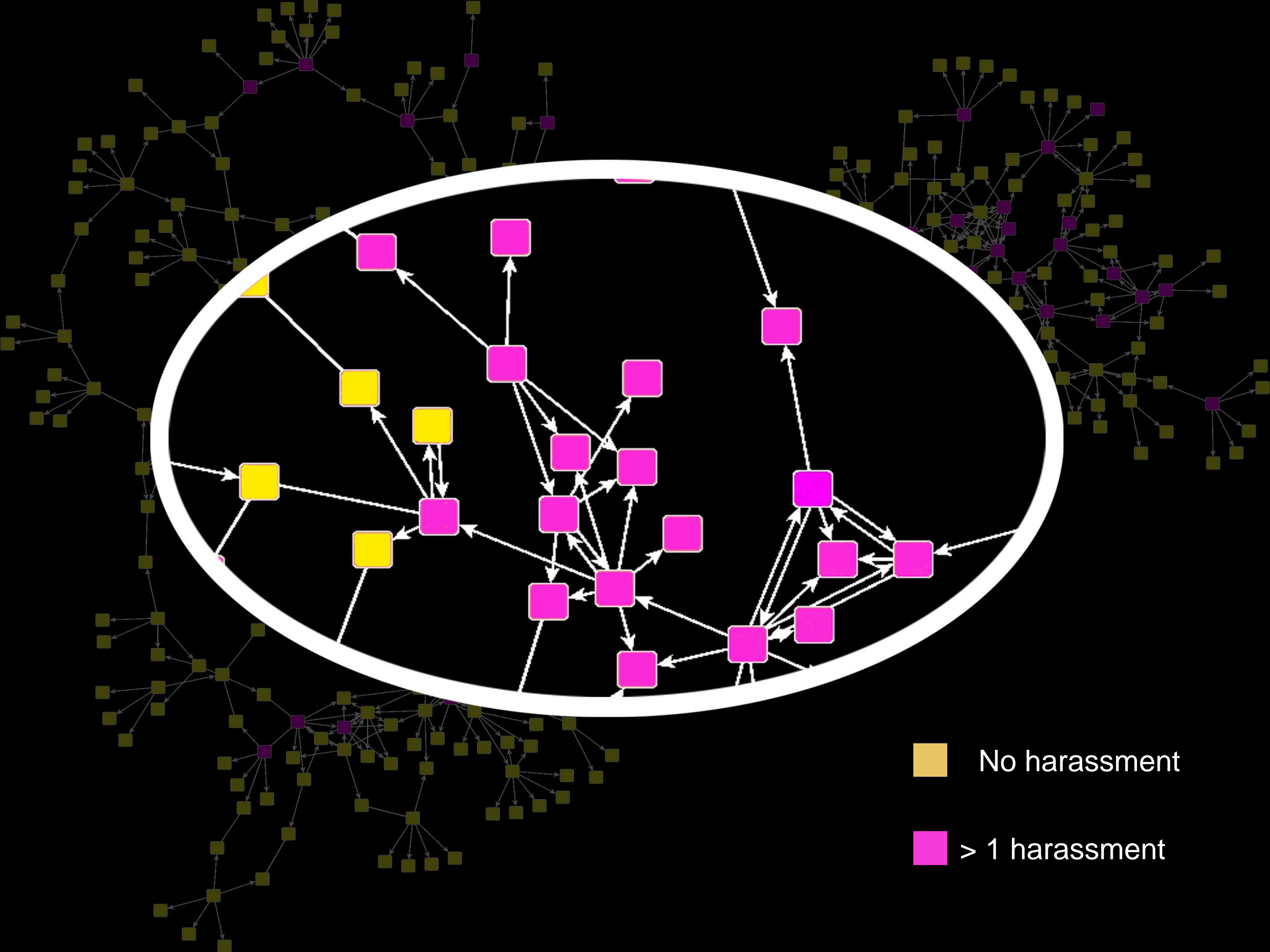
*** $p < .0001$

Results: Increases in imm harass









Conclusions

- ▶ Simultaneous network processes: Selection feeds back into influence
- ▶ Problematic personality: Manipulative-dominant traits enhance peer influence

Conclusions & Future directions

- Individual development influenced by interactions between networks and persons (e.g., personality, attitudes, behaviours, cognitions)
- Network studies provide unique insight into these interactions
- ➡ Mechanisms & processes in networks?
- ➡ Multilevel: social, personality, and physiological?

LEVEL 3:
**Social
Relationship
processes**

Antisocial friendships,
relationship with parents deteriorate

Microprocesses 1:
Manipulative
communication

LEVEL 2:
**Personality
traits**

Psychopathic personality syndrome

Microprocesses 2:
Cognitive and
emotional deficits

LEVEL 1:
**Physiological
processes**

Hormonal imbalances

TIME

The diagram illustrates a multi-level model of psychopathy. It consists of three horizontal levels, each with a series of overlapping circles connected by arrows, indicating a process over time. A large blue arrow at the bottom points to the right, labeled 'TIME'. Level 3 (top) is 'Social Relationship processes' with microprocesses of 'Manipulative communication' and outcomes of 'Antisocial friendships, relationship with parents deteriorate'. Level 2 (middle) is 'Personality traits' with microprocesses of 'Cognitive and emotional deficits' and the outcome of 'Psychopathic personality syndrome'. Level 1 (bottom) is 'Physiological processes' with the outcome of 'Hormonal imbalances'.

Plans for Münster

- Problematic development: extend beyond adolescence; longitudinal community, experimental interventions targeting antisocial behavior
- Intercultural communication and contact: CONNECT, MOPED, online vs. offline project
- Personality and social relationships: Professor Back's group
- Interdisciplinary projects: network approaches

Teaching

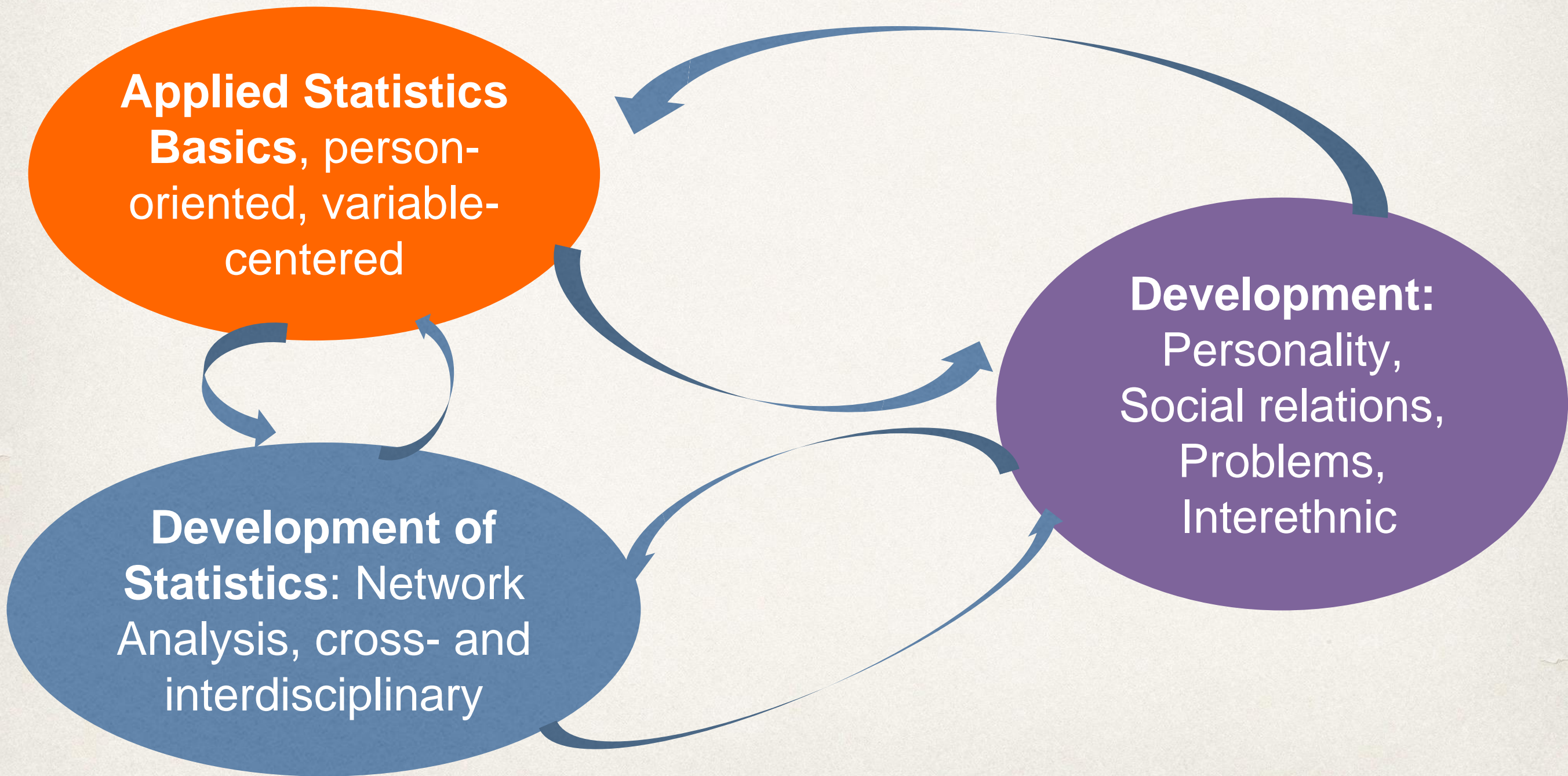
- **Developmental/Clinical Psychology:** Personality, Social Relationships, Mental Health
- **Basic Statistics:** SPSS, R
- **Structural Equation Modeling:** AMOS, Mplus
- **Network Analysis:** SIENA, ERGM

Future & Collaboration

Applied Statistics
Basics, person-oriented, variable-centered

Development of Statistics: Network Analysis, cross- and interdisciplinary

Development:
Personality, Social relations, Problems, Interethnic



Developmental Psychology

- Possibilities for Collaboration

1. Relationship interaction and communication: intercultural perspectives (e.g., Kärtner)
2. Study of prosocial vs. antisocial behavioral development (e.g., Nass); Sexual violence (e.g., Muck)
3. Individual, family-focused, peer-focused and societal interventions targeted at antisocial kids and adolescents (e.g., Kärtner, Schiller, Nass)

Statistical methodology

- Possibilities for Collaboration
 1. Multilevel network processes: cellular > individual > group (e.g., Holling, Doebler)
 2. Brain networks, bioactivity > social networks? (e.g., Doebler, Kuhn, & Holling)
 3. Longitudinal mediation models: bridging continuous with discrete time-modelling approaches

Cognitive and Neuropsychology

- Possibilities for Collaboration

1. Biological correlates and determinants of problematic traits in youth: Roles of cortisol, testosterone, dopamine and reactivity? (e.g., Otto Creutzfeldt Center; Schubotz, Trempler)
2. Interplay of neural hormonal, behavior and social processes in real-life social contexts

Social/Organizational Psychology

- Possibilities for Collaboration

1. Social influence: longitudinal network approach (e.g., Echterhoff, Kopietz, Hertel, Thielsch)
2. Online and offline communication processes within relationships and groups (e.g., Echterhoff, Kopietz, Hertel, Thielsch; "Trust and Communication in a Digitized World")
3. Group processes: combining with individual and dyad levels

Clinical Psychology

- Possibilities for Collaboration

1. Developmental psychopathology, Dark Traits (e.g., Buhlmann, Back)
2. Dysfunctional self-concept and behavioral development (e.g., Buhlmann, Back)

Planned workshop: MSC, PhD, Post-doc

- FOR WHOM: For various levels: MSC, PhD, Post-doc
- CONTENT: Theory and application of SEM, longitudinal analysis, network analysis
- WHEN: This term and this fall
- TIMEFRAME? 4 to 5 days: one block or split-up

Thank you!

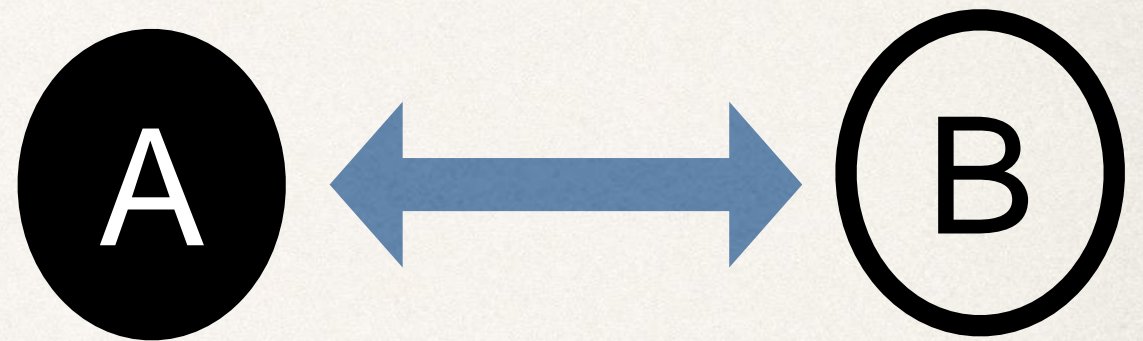
► Questions?

Tolerance toward immigrants

- Cognitive, emotional, and political components
- Sweden: long history of high tolerance
- Latest elections: Sverigedemokraterna (SD) 9.67% and 12.87%
- Voters mostly outside of urban areas, less contact immigrants

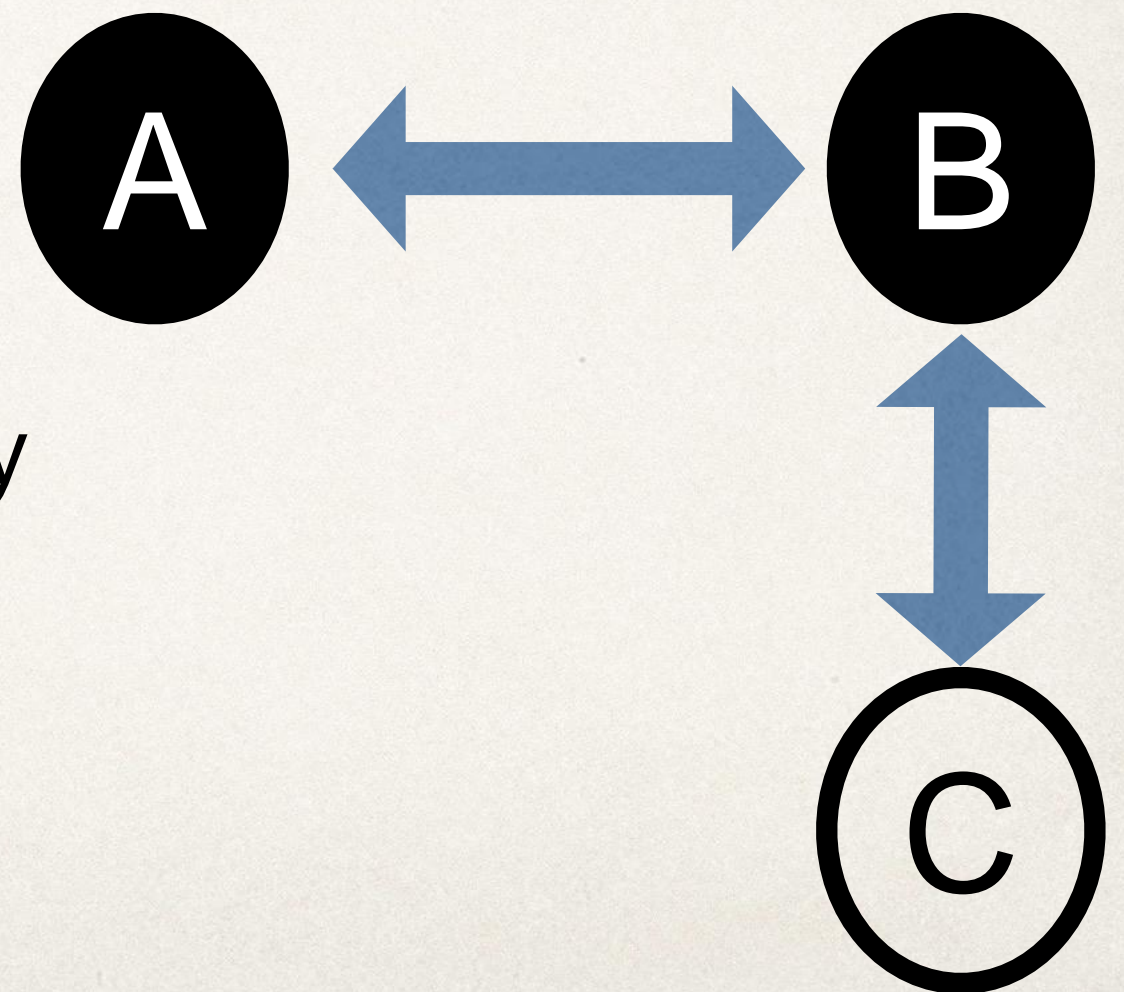
Tolerance toward immigrants

- Contact Theory (Allport, 1954):
contact is a necessary condition to
improve tolerance
- Intergroup Friendships
- Empathy, knowledge, anxiety
reduction



Extended contact

- ▶ Extended Contact Theory (Wright, et al., 1997): indirect contact is a necessary condition to improve tolerance
- ▶ Knowledge, signals positive ingroup-outgroup norms, anxiety reduction



Example longitudinal SEM

Combination person-oriented with variable centered approach

Aims

1. To what extent do direct and extended contact predict tolerance development...
2. ...and to what extent does tolerance predict direct and extent contact development?

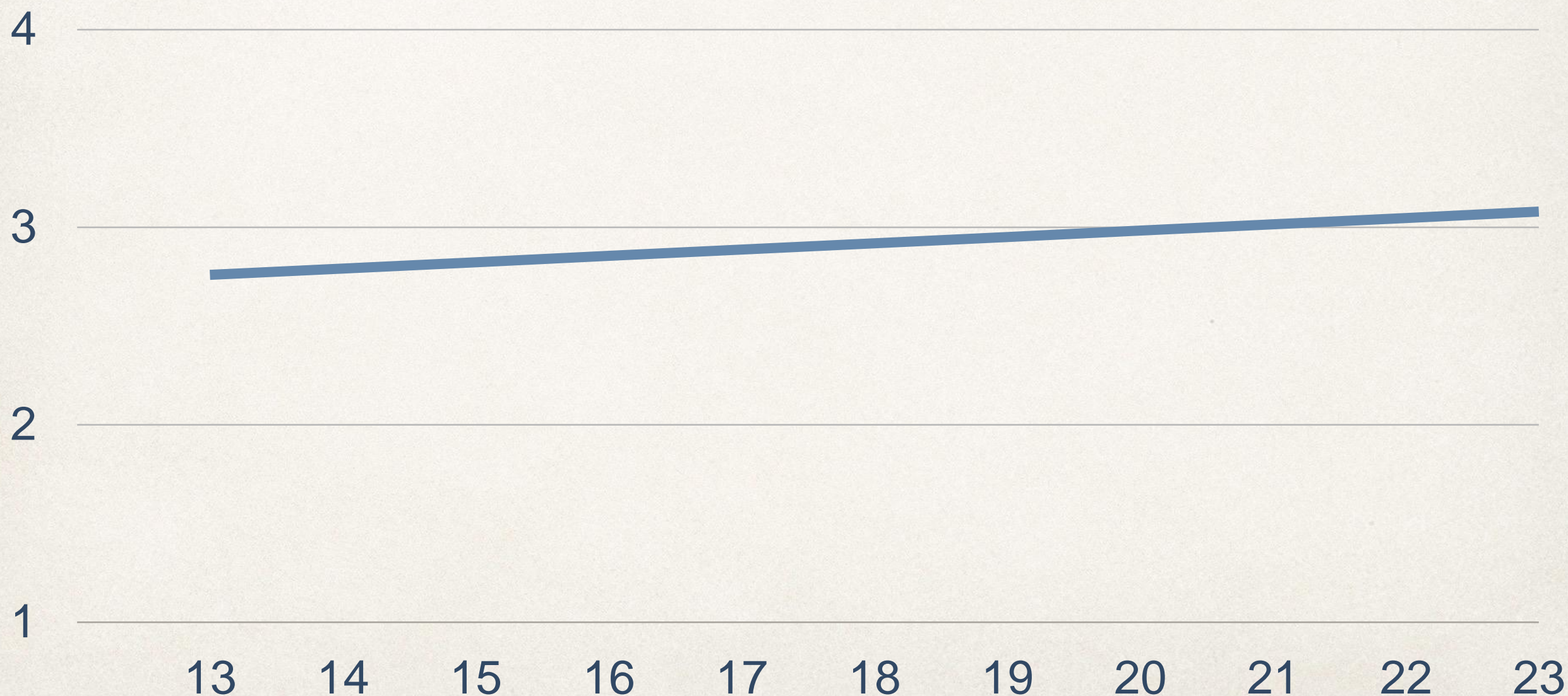
Sample

- Political Socialisation Project (2010-present; $N = 5,021$)
- Community design: independent reports
- Four cohorts: 13, 16, 20, and 23 year-olds
- Followed up to 4 years
- Only non-immigrants ($N = 3,815$)

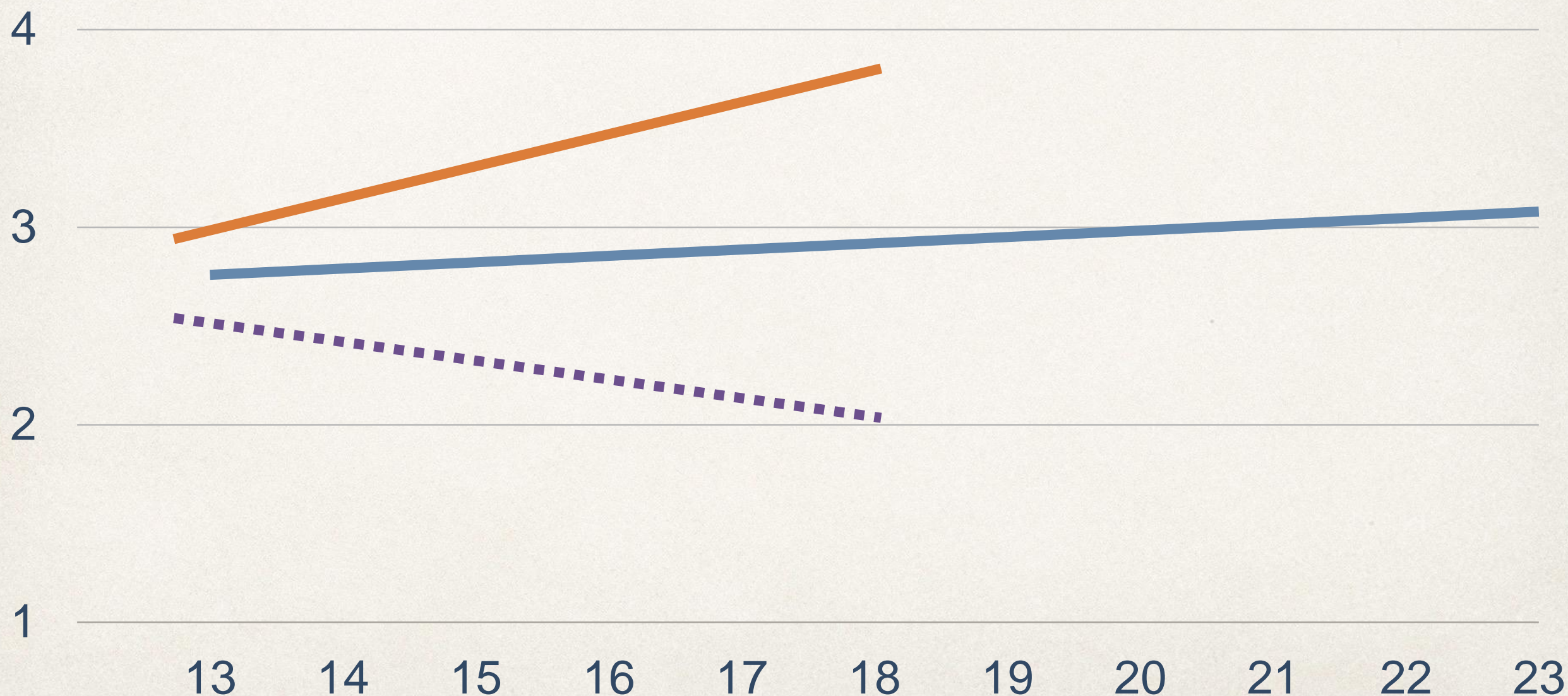
Strategy of Analysis

- Accelerated Longitudinal Growth Modelling
- Use age as indicator for starting levels (Intercepts) and changes (Slopes)
- For tolerance, direct contact, and extended contact

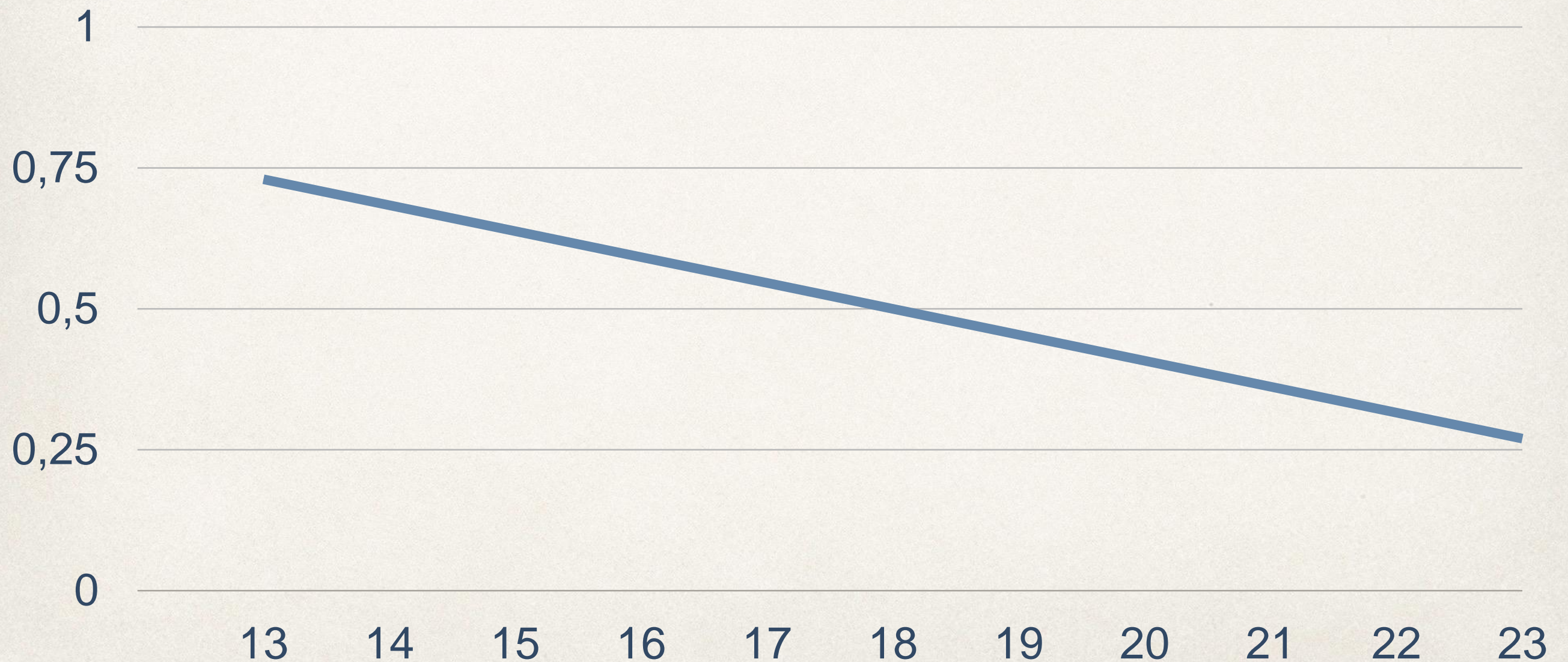
Tolerance toward immigrants



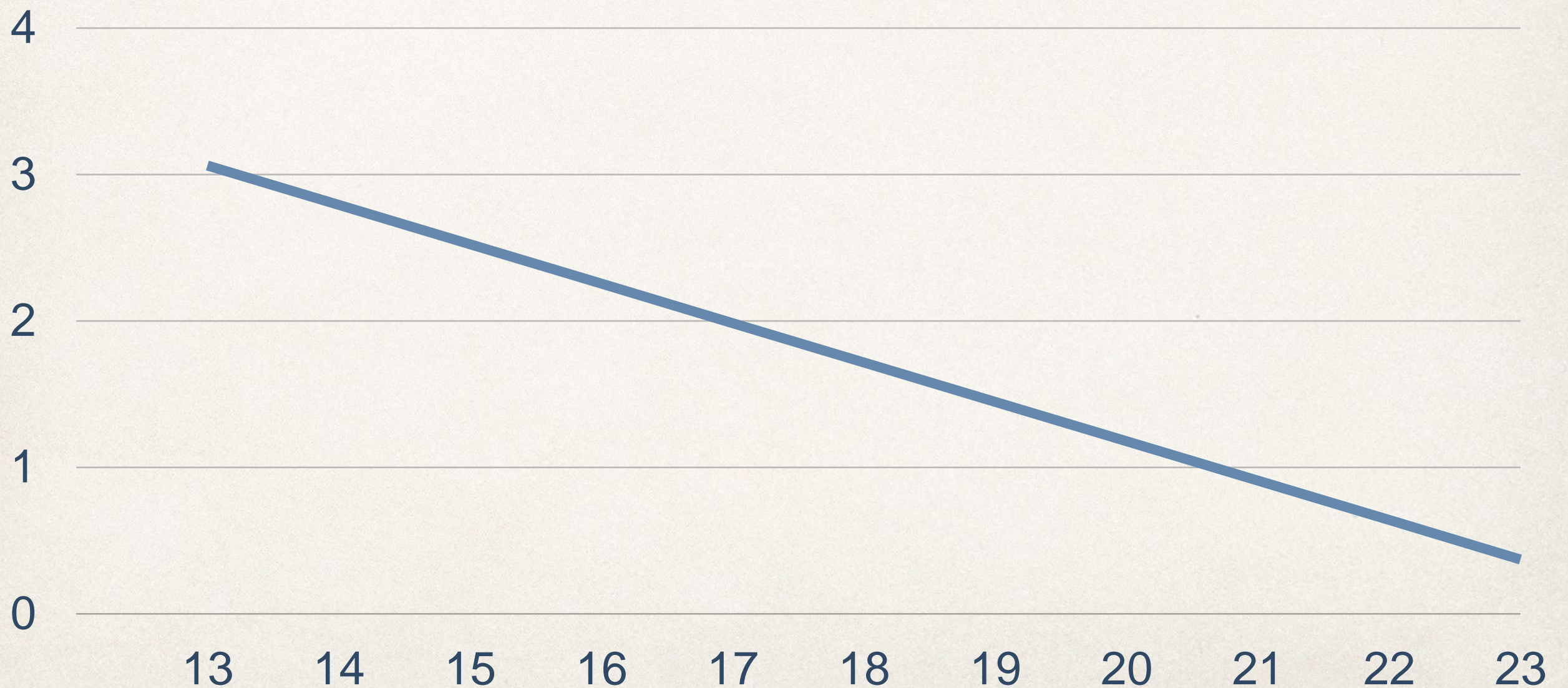
Tolerance toward immigrants



Direct contact



Extended contact



13 – 18 years

Itol

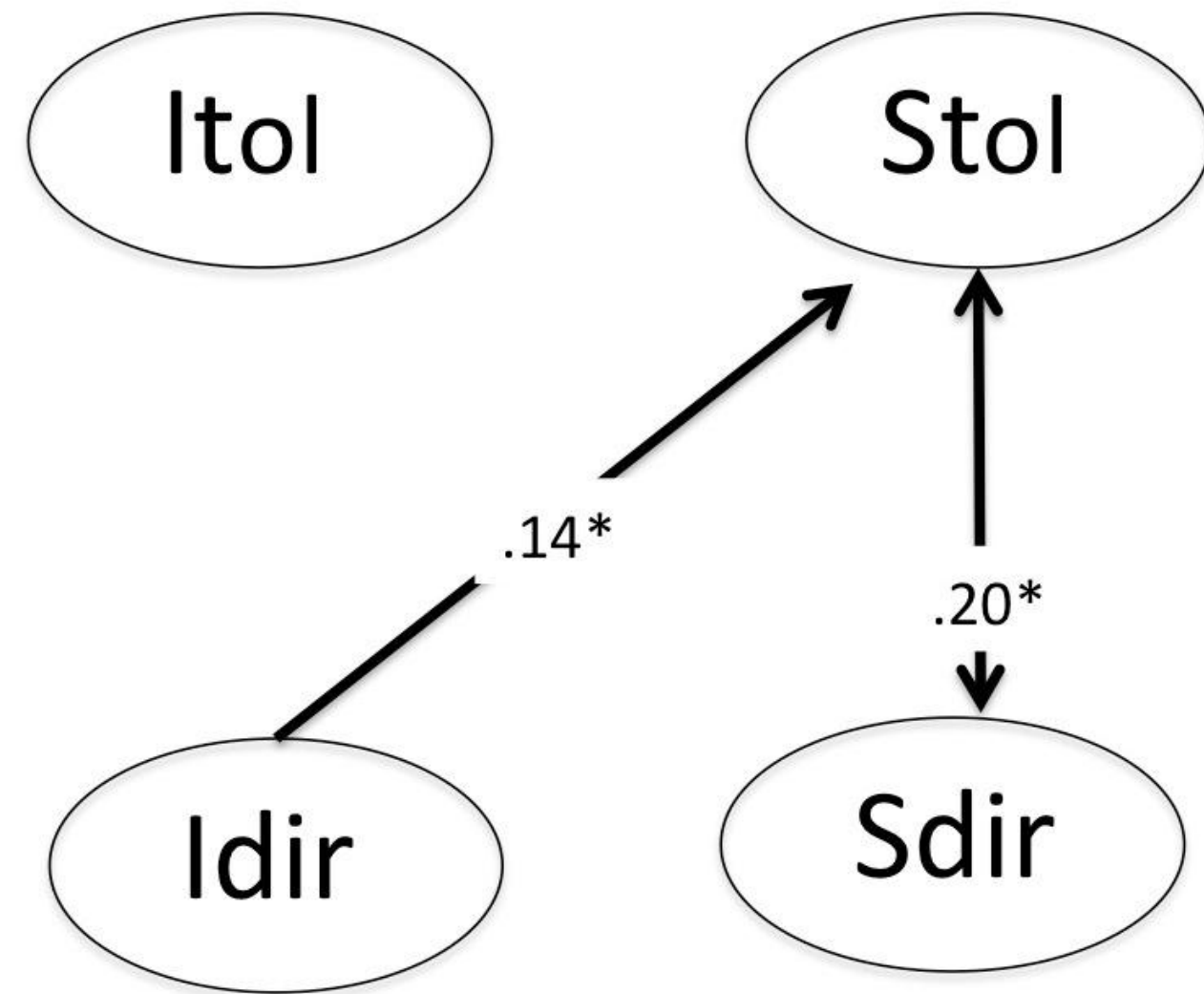
Stol

19 – 24 years

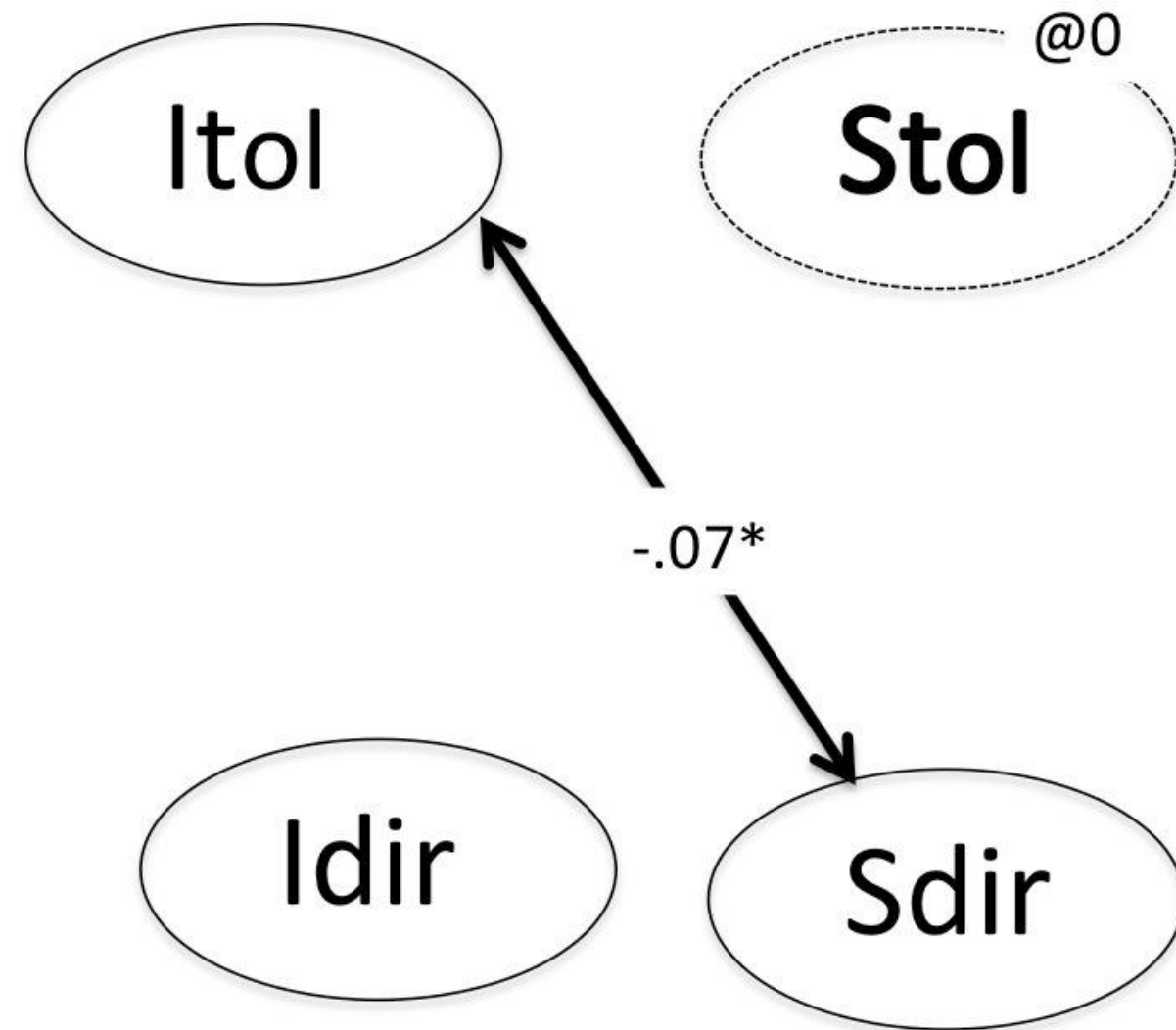
Itol

Stol^{@0}

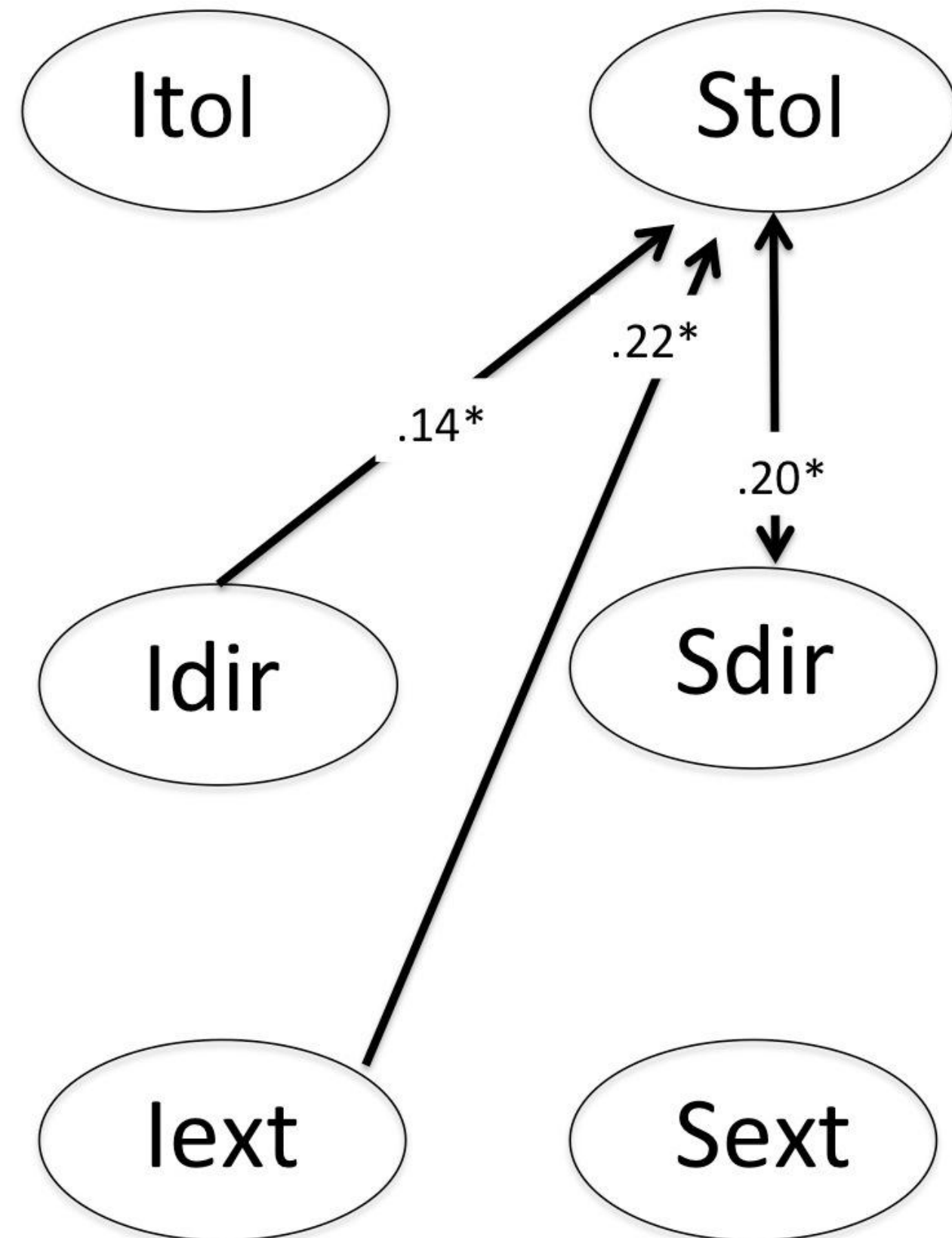
13 – 18 years



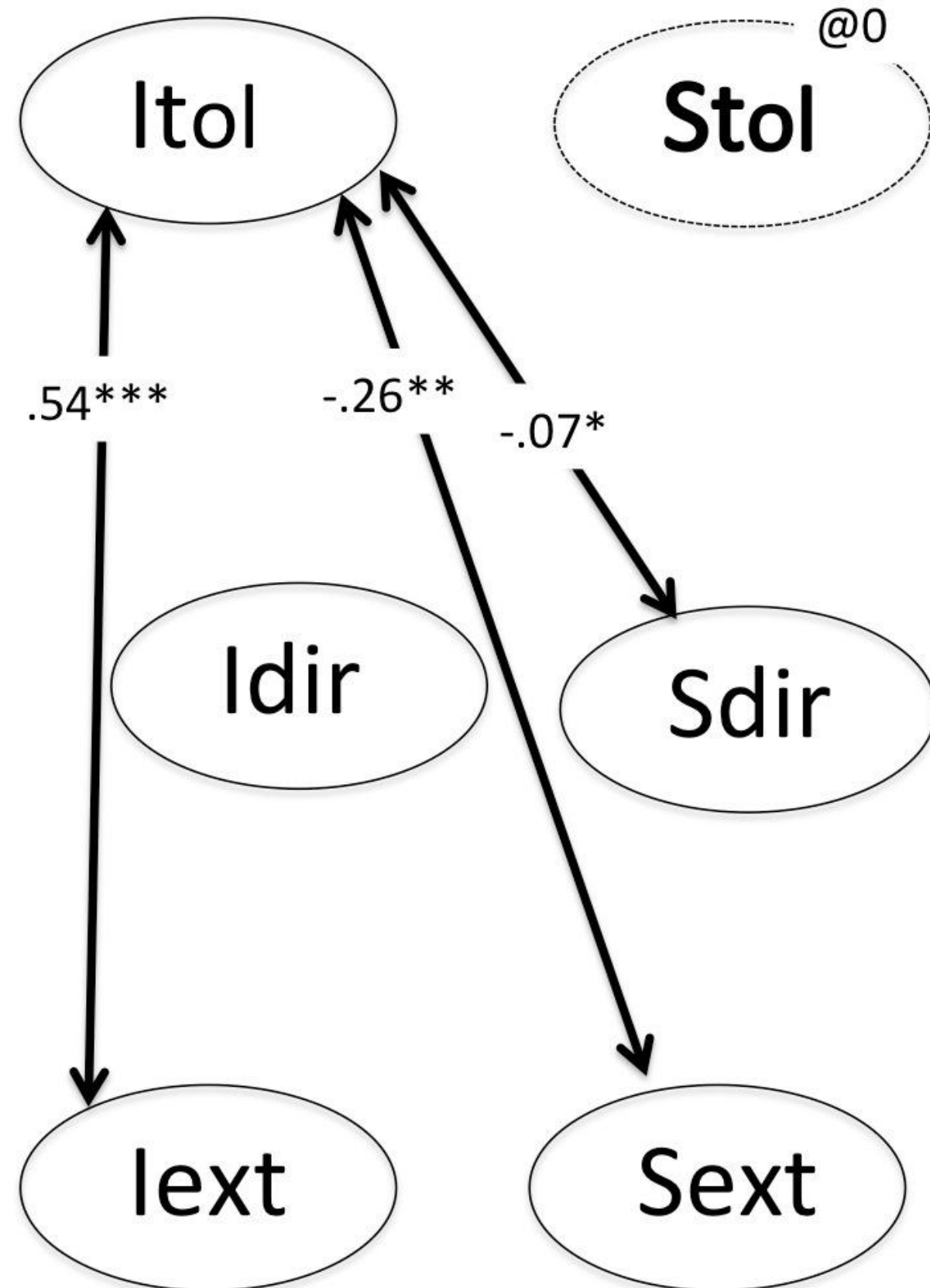
19 – 24 years



13 – 18 years

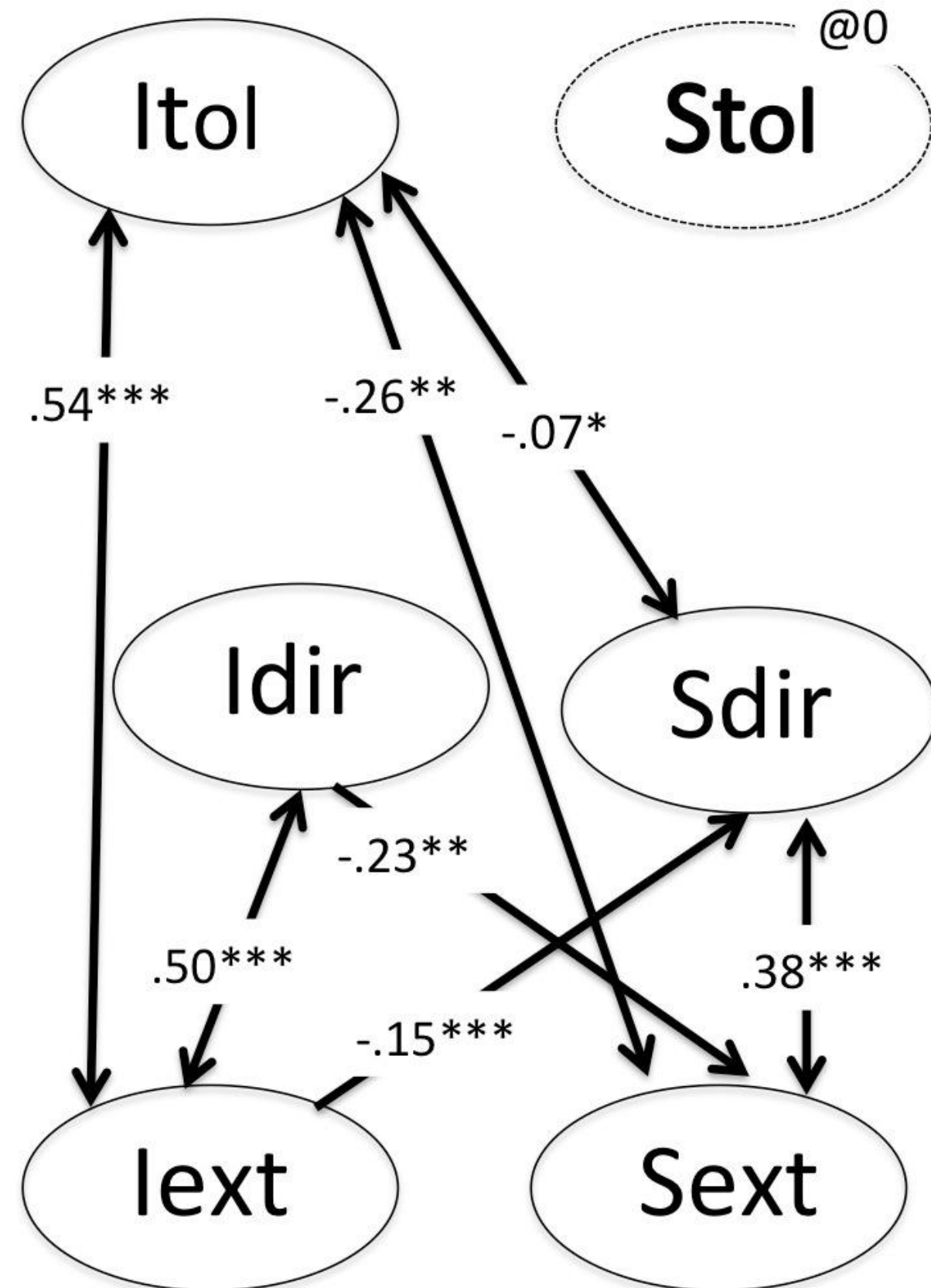
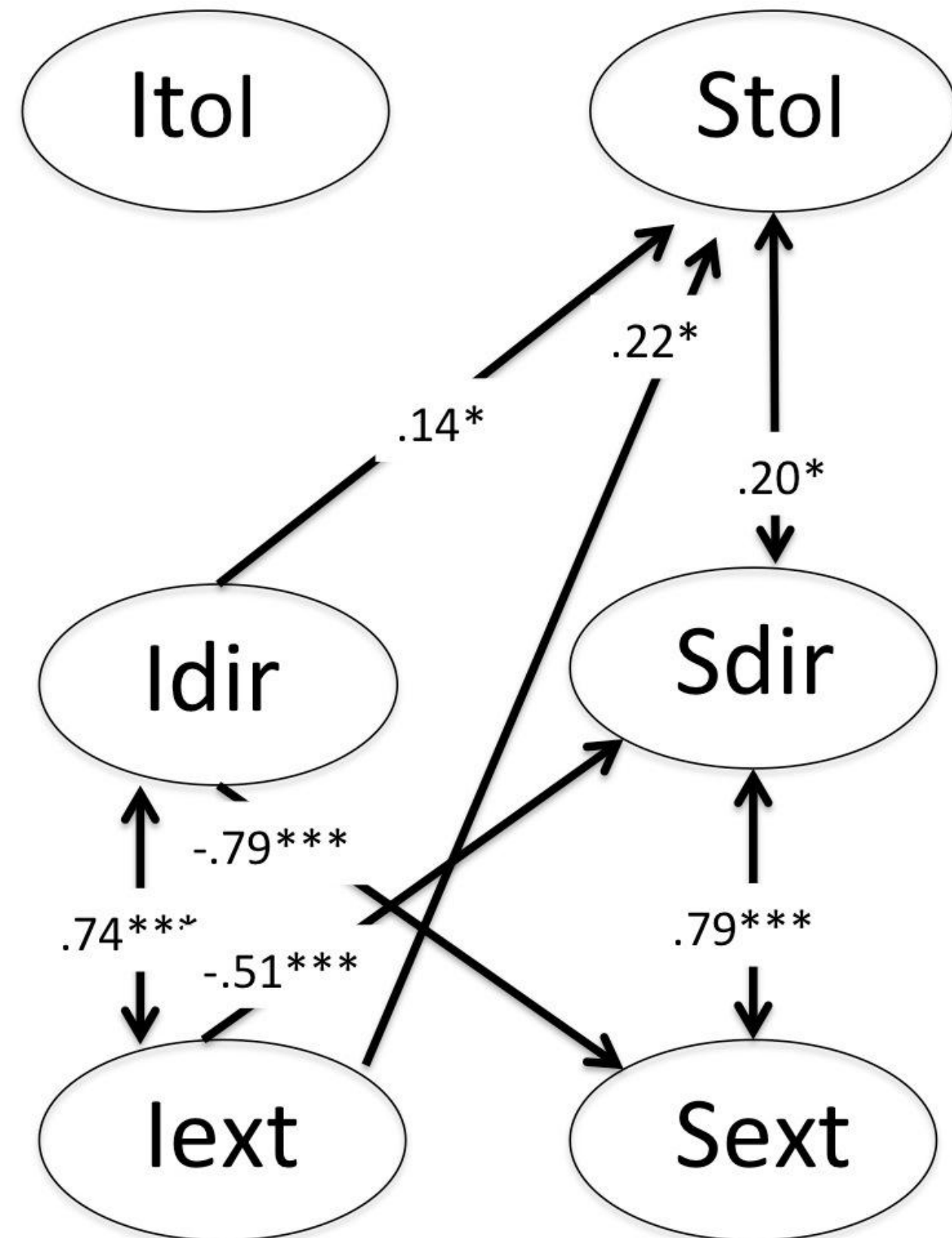


19 – 24 years



13 – 18 years

19 – 24 years



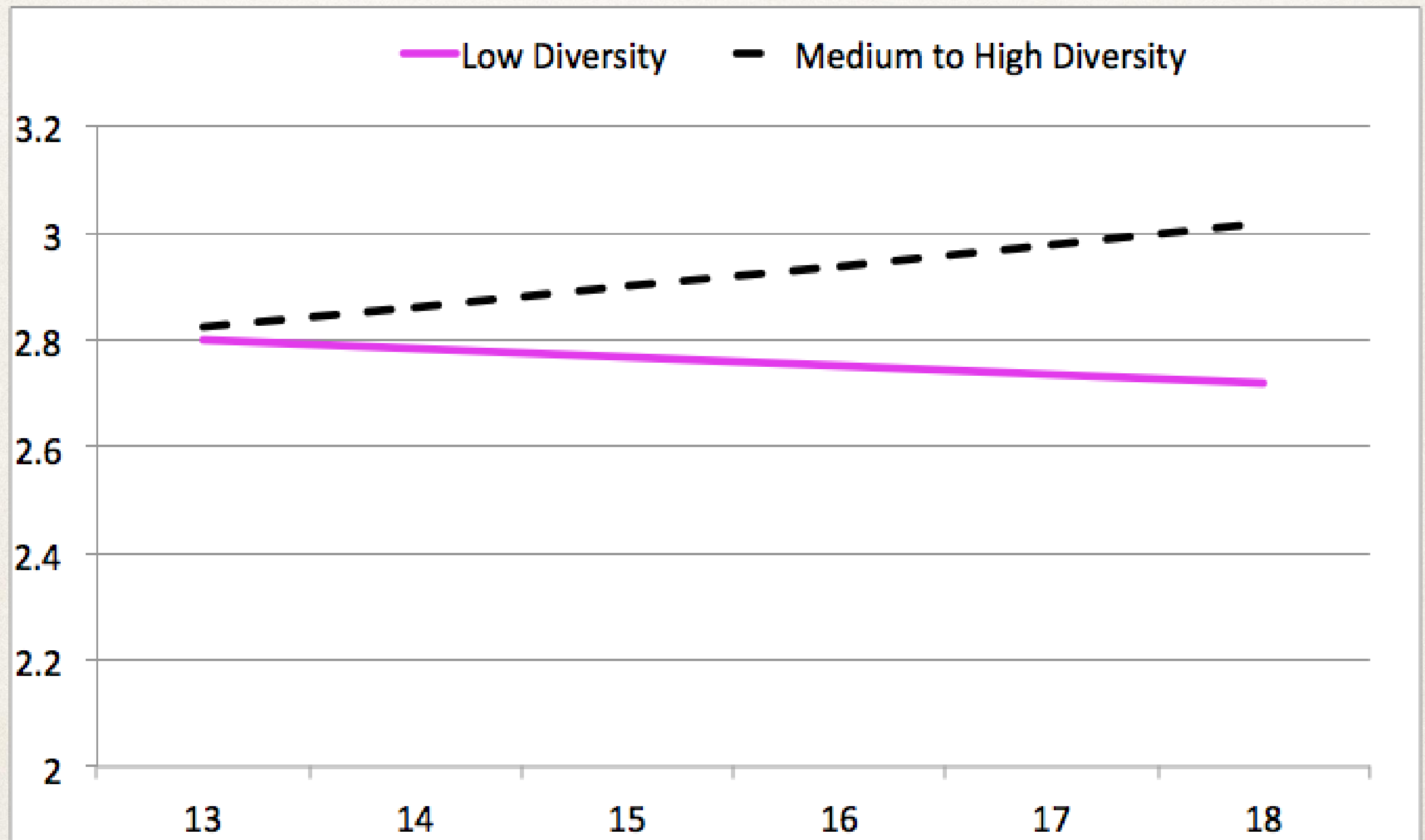
Conclusions

- Tolerance increases slightly: cultural norms
- Contact decreases rapidly: ethnic homophily, segregation
- Contact only boosts tolerance for adolescents
- Extended contact enhances direct contact, which, in turn, increases tolerance

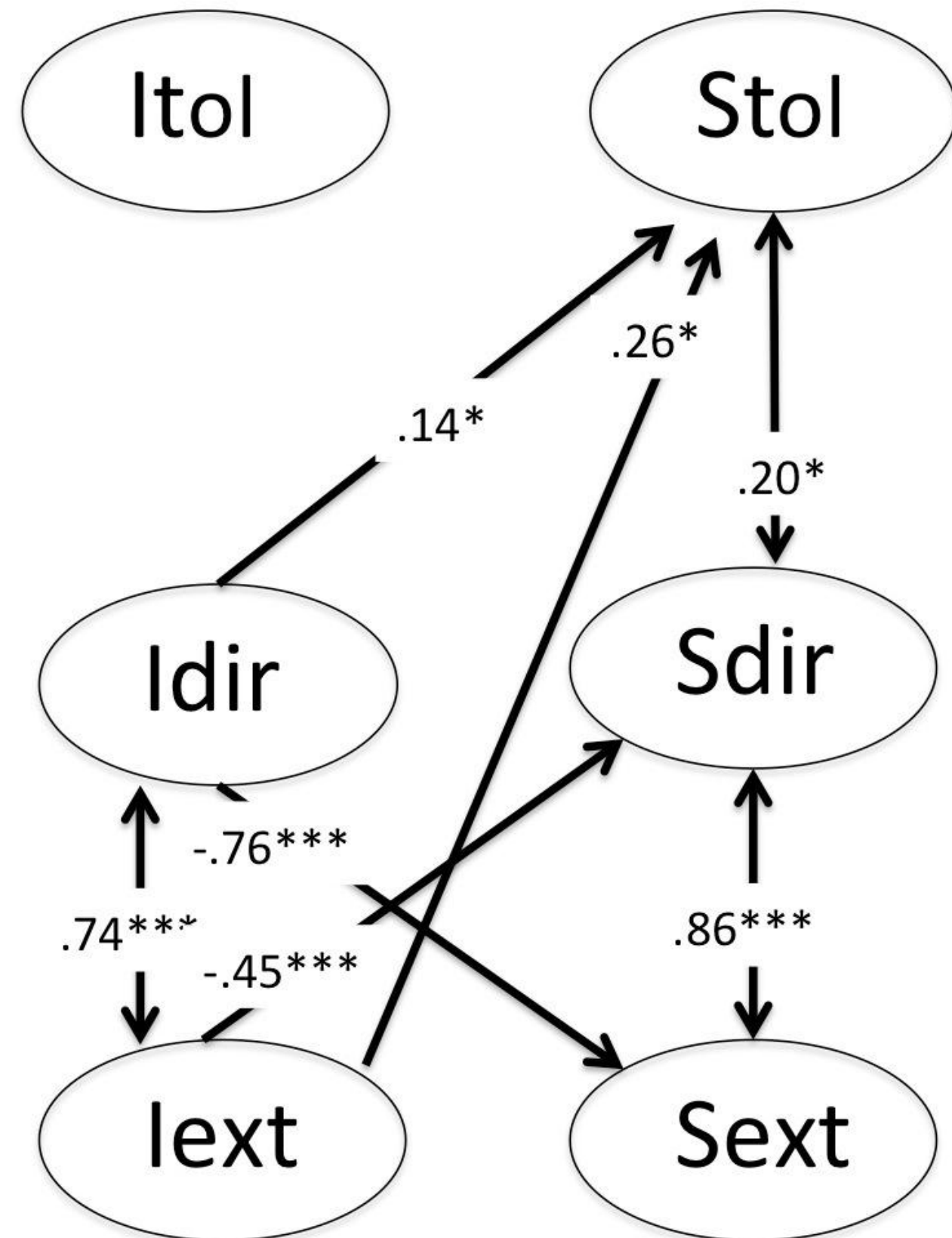
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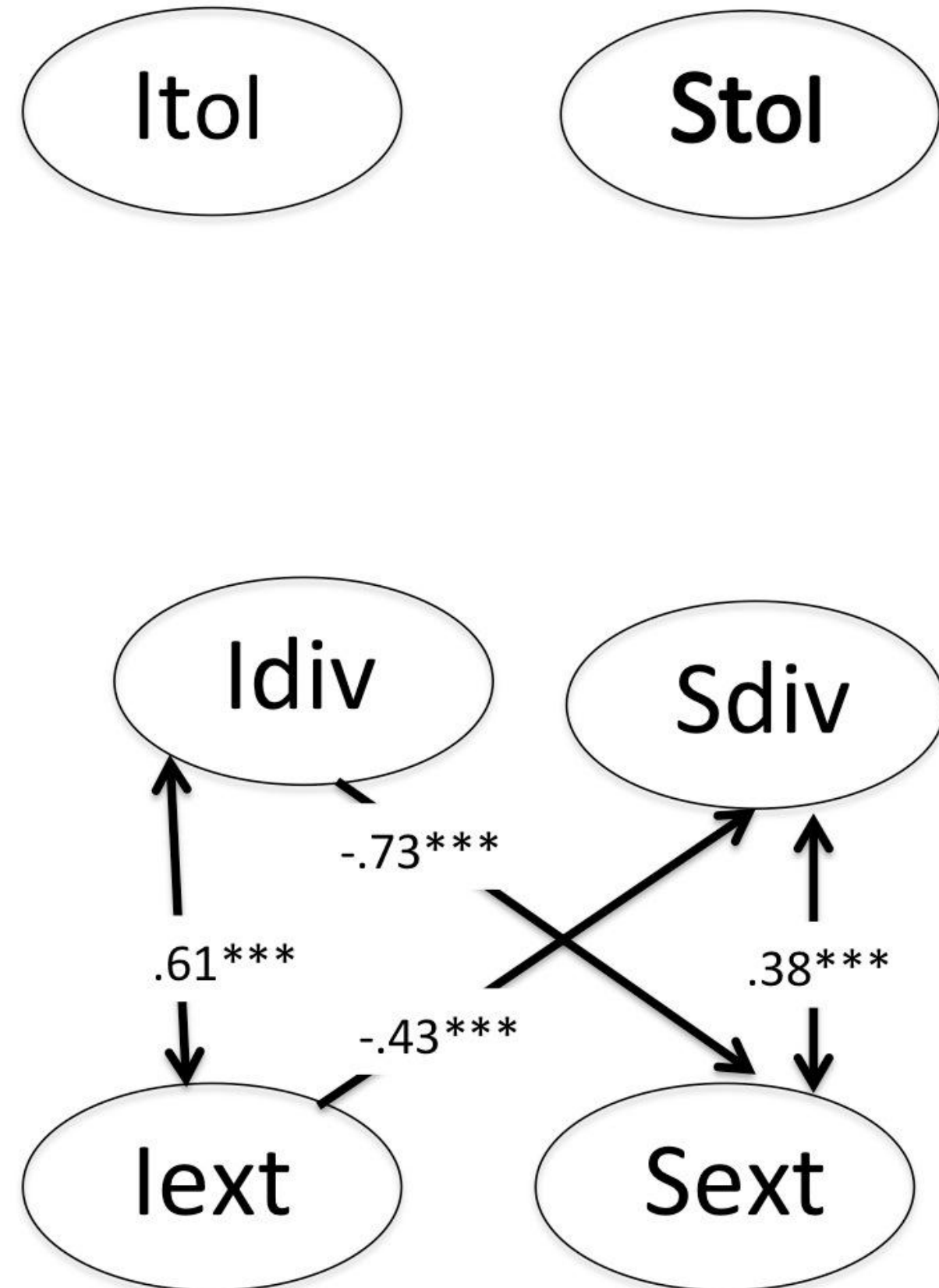
Context: Diversity



Low diversity



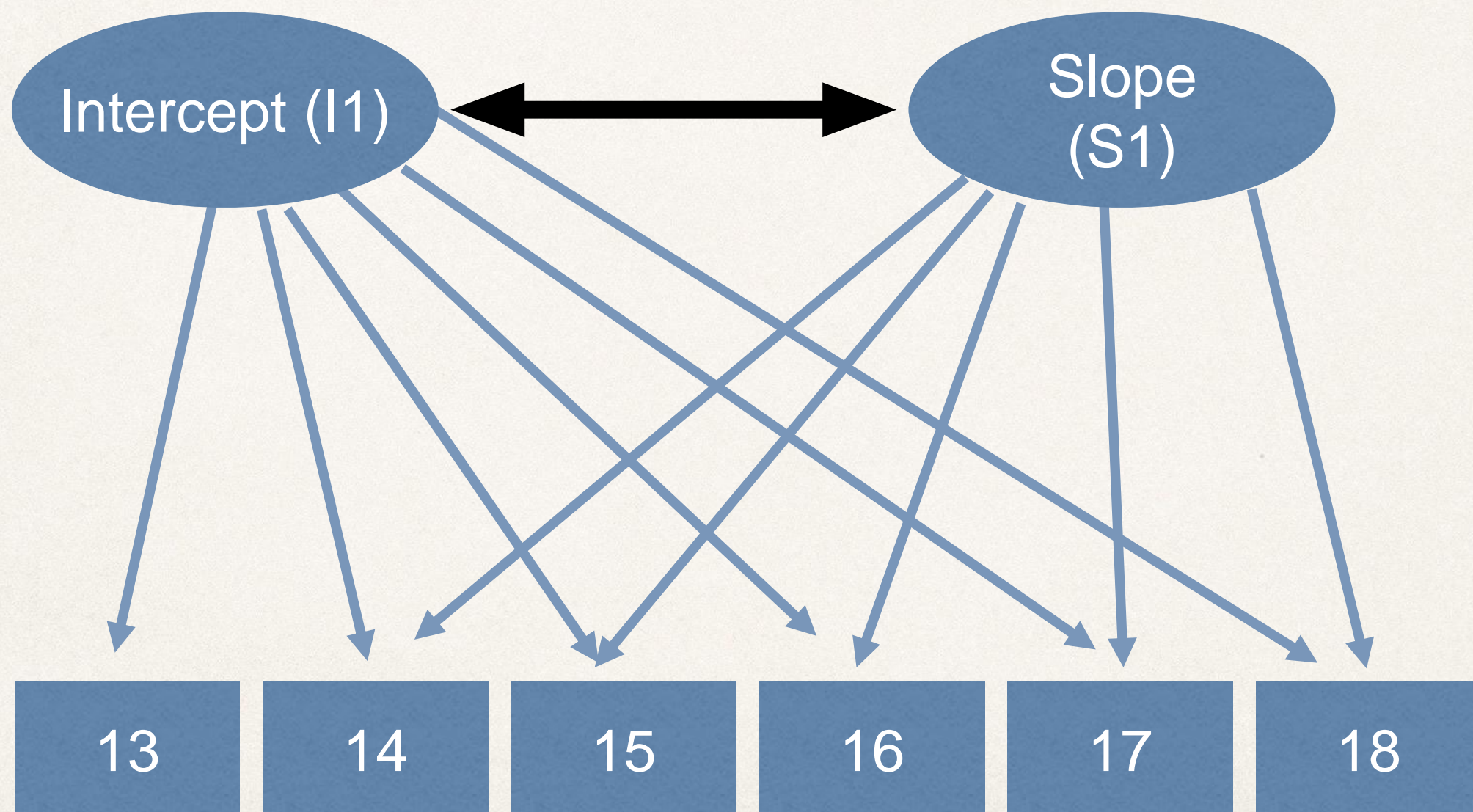
Medium/High diversity



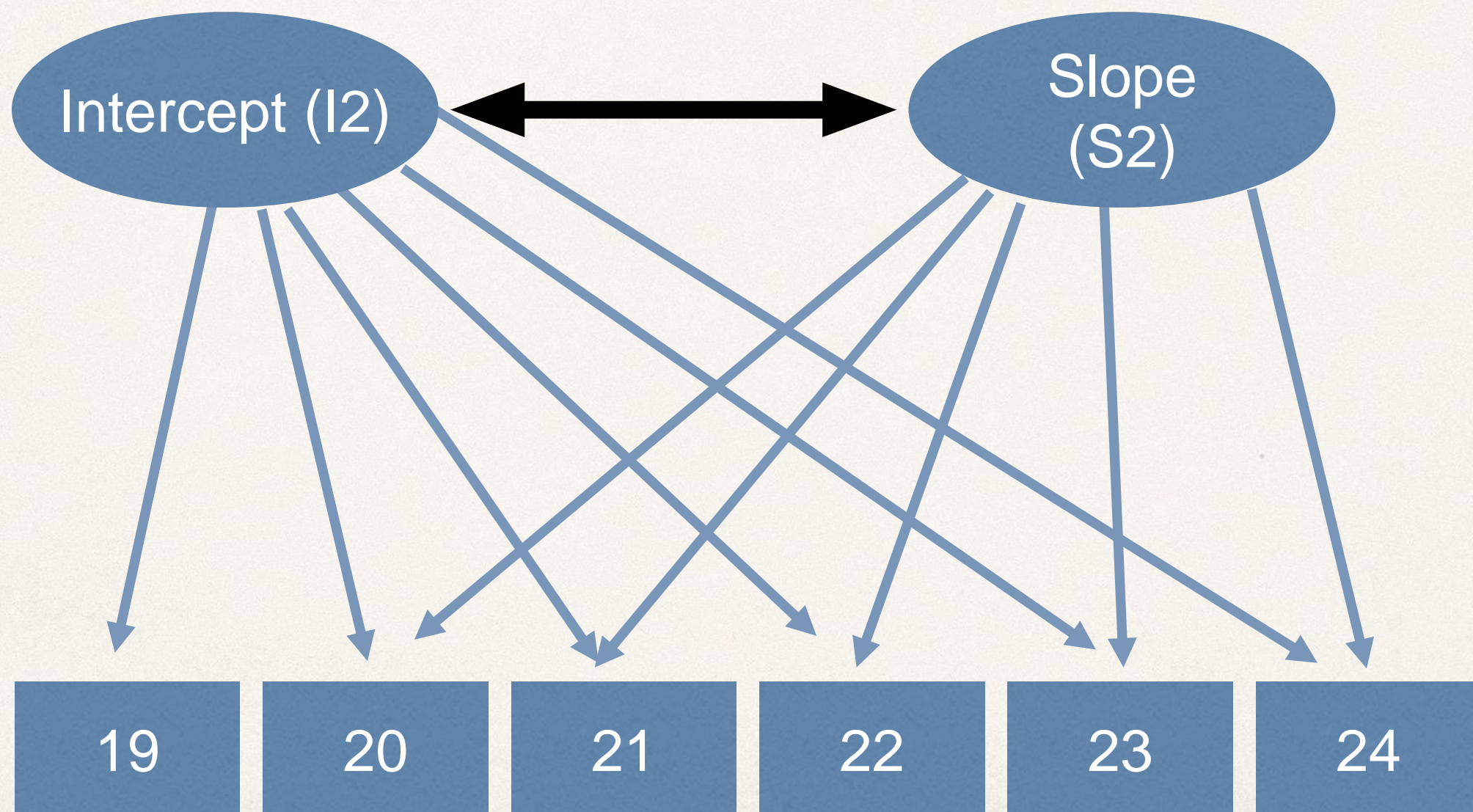
Diversity and contact

- Extended contact from a network perspective
- Young adults: fewer opportunities for contact
- Interventions: promote contexts in low diversity

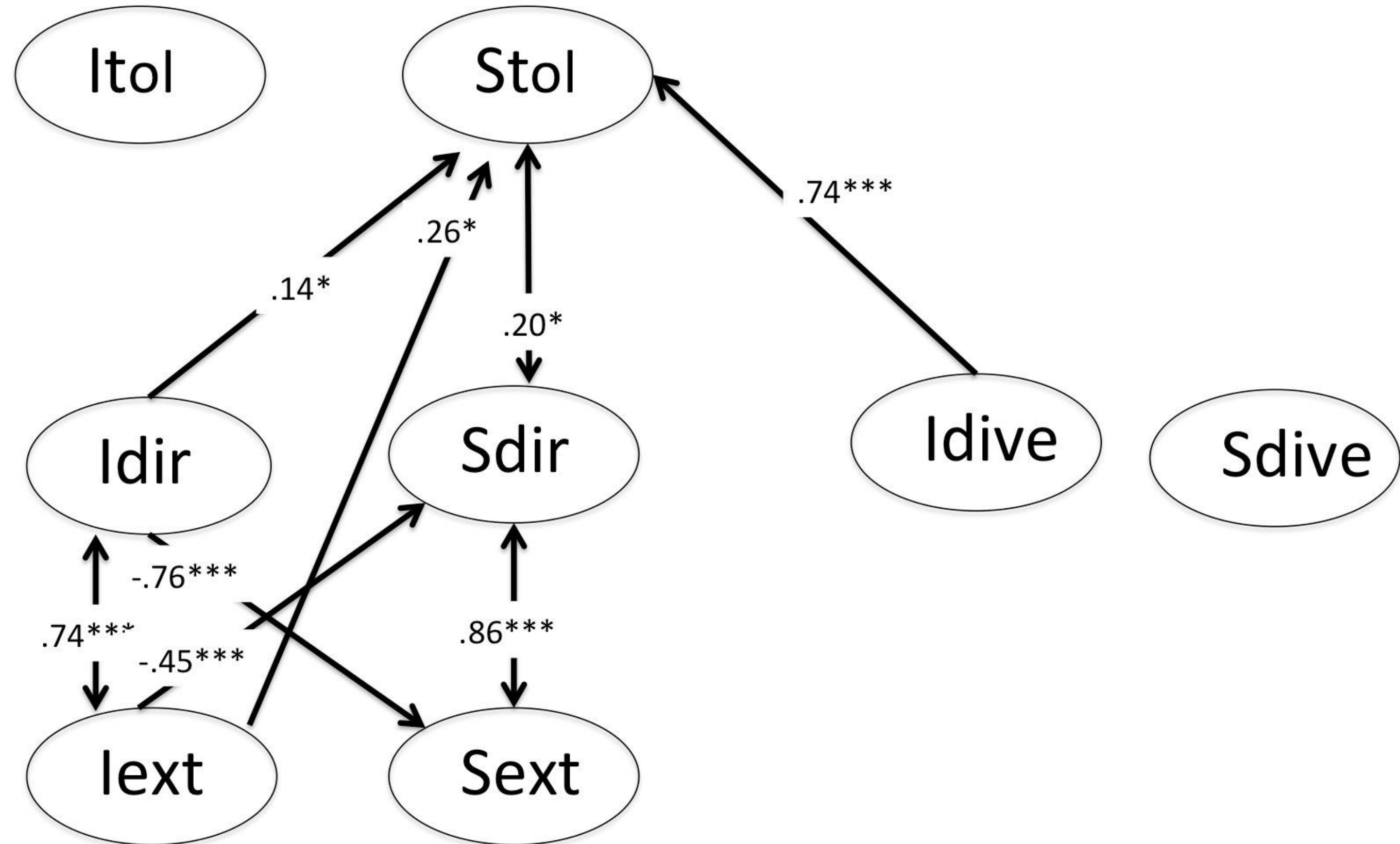
Strategy of Analysis: ages 13-18



Strategy of Analysis: ages 19-24



13-18 year-olds



Results: 13 to 18 year-olds

	Unstandardized coefficients
Means	
Intercept tolerance	2.819***
Intercept direct contact	0.715***
Intercept extended contact	3.602***
Slope tolerance	0.014***
Slope direct contact	-0.046***
Slope extended contact	-0.263***

Results: 13 to 18 year-olds

	Unstandardized coefficients
Variances	
Intercept tolerance	0.228***
Intercept direct contact	0.004*
Intercept extended contact	0.231***
Slope tolerance	0.012*
Slope direct contact	0.022*
Slope extended contact	0.098***