

Appendices



Appendices

Appendix A

Table A1. Operationalization of the three elements of unstructured socializing with space-time budget data

Three elements	Code labels in space-time budget interviews
Unstructured activities	Activities defined as unstructured are: Shopping for fun; hanging around (doing nothing, not necessarily alone, but no socializing, e.g., waiting in line)*; transport (going from A to B, including biking and walking around with friends); walking or biking around without a goal*; roller blading, skating, ice skating, skate boarding; BMX biking (for hobby, not transport); internet (surfing); moped/scooter/quad (for hobby, not transport) ^b ; playing outside on a playground, on the horizontal bar, etc.; other hobbies or games (e.g., playing with toys, dancing in the room, romping around); talking over the phone; communication by e-mail or instant messaging; texting; going to a party, including house party's*; going out (e.g., in a pub or a club)* ^a ; media consumption general; combination of socializing (e.g. by instant messaging, face-to-face communication and texting)*; watching a movie (on television, DVD, or in the cinema); reading comics; reading a magazine; reading the newspaper; reading a book (not for homework); listening to music/radio; socializing (not organized)*; talking (face-to-face), socializing*; going to a birthday party*; socializing and having a drink*; watching television; paying a visit; having break during a school day ^b .
Peers who are present	Peers (general code), partner (male), partner (female), partner and one male peer; partner and one female peer, partner and two or more male peers, partner and two or more female peers, partner and both male and female peers, one male peer, one female peer, two or more male peers, two or more female peers, both male and female peers.
Family members and other people classified as authority figures	These people had to be absent to count an hour as unsupervised: Mother, father, both parents, family (general code), other adult family members (uncle, aunt, grandpa, grandma, adult cousins, godparents), combinations of adult family members and other family members, teacher, sports trainer, other trainer, supervisor, mother or father of friend, adult neighbors, partner of parents, partner of other family member, janitor, employer, religious leader, other (e.g., doctor, dentist), parents of friends, psychologist/therapist, family member of friend, hairdresser/beauty therapist, other adults, combinations of trainers, employers or other adults.

NOTES: In Chapter 2, findings of additional models are presented in which a strict definition of 'unstructured' was applied to operationalize unstructured socializing. The included activities according to this strict definition are marked with asterisks.

^aIn the Netherlands, there are no age limits for going to a pub (although there are for ordering alcoholic beverages). Going out is therefore on itself not rule breaking behavior.

^bThe activities 'having a break during a school day' and 'riding on a moped/scooter/quad for hobby' were included in the most recent study, presented in Chapter 6. These activities were not included in the earlier studies, presented in Chapters 2 and 5.

Appendix B

Method of systematic literature review

The goal of the systematic literature review was twofold: The first goal was to investigate whether the unstructured socializing-delinquency relationship was robust across respondents from different backgrounds, based on ethnicity, country, urbanization and gender. The second goal was to explore what factors explain (mediate) and specify (moderate) the unstructured socializing-delinquency relationship.

Systematic literature search

The literature search was conducted in two steps. As a first step, in the spring of 2015, three search engines were searched through for studies with 'unstructured socializing' as a general search topic (Criminal Justice Abstracts, Web of Science, and Sociological Abstracts). These searches resulted in 37 unique studies. Based on a reading of the abstract and in some cases a scan through the main text, 21 of those studies were considered to be relevant. The other studies did not meet the inclusion criteria, often because they only concerned victimization and not delinquent behavior. As a second step, a backward search was conducted in these 21 key studies by looking up all potentially relevant studies that the key studies referred to. The new studies were also read and searched through for potentially interesting papers and so on. This process continued until no other relevant studies were found. The literature search resulted in 74 unique publications.

Inclusion criteria

- Population: All studies that empirically studied a relationship (even if only investigated as bivariate correlation) between unstructured socializing and some type of delinquency or substance use. Studies that only addressed victimization and not delinquent behavior were excluded.
- Only those studies were included that operationalized the unstructured socializing concept with at least one of the three conditions (presence peers,

absence adults, unstructured activity), while at least one other condition was implied. Studies were excluded if they measured only ‘unsupervised time’ (e.g., Coley, Morris, and Hernandez, 2004; Stoolmiller, 1994) or only ‘unstructured activities’ (e.g., Feinstein, Bynner, and Duckworth, 2006; Mahoney and Stattin, 2000; Mahoney, Stattin and Lord, 2004). A few studies measured only ‘time spent with peers’ (e.g., Agnew, 1991; Meldrum, Young, and Weerman, 2009; Vásquez and Zimmerman, 2014; Weerman, 2011; Weerman and Hoeve, 2012), which admittedly is not the same as unstructured socializing. Nevertheless, those studies were retained, as the presence of peers is an important element in the unstructured socializing concept for explaining adolescent delinquency, and because a large part of this time is expected to be unsupervised; items were included referring to whether time spend with peers was at home or away from home. Further, studies were excluded that used the unstructured socializing concept only as part of a larger (lifestyle) construct (e.g., Patterson, Dishion and Yoerger, 2000; Svensson and Pauwels, 2010; Wikström and Svensson, 2008).

- The review was limited to individual level studies: Studies where both the variable for delinquency and the variable for unstructured socializing were at a higher aggregation level than the individual were excluded (e.g., Sampson and Groves, 1989).
- The review was limited to empirical studies: Meta studies or other literature reviews were excluded.
- Only English publications were included.
- The review did not exclude studies based on the age of the respondents. Thus, studies on children and adults were explicitly ‘allowed’.
- Academic (peer reviewed and non-peer reviewed) journal articles were included, as well as academic books and book chapters. Dissertations were only included if ‘unstructured socializing’ was treated as a central topic of study, not if it was included only as control variable. Master theses were excluded.
- There was no explicit time period to which the literature search was limited, although the first step of the search strategy resulted mostly in publications that appeared after the publication of Osgood et al. in 1996, as they coined the term ‘unstructured socializing’.

Table B1. Summary of studies included in the systematic literature review

Author(s)	Research project and sample	Category of operationalization of unstructured socializing ^a	Outcome (O); independent variables if relevant (IV); mediators (Med); moderators (Mo)	Main findings regarding the unstructured socializing (US)-delinquency/substance use (O) relationship ^b
Agnew (1991)	National Youth Survey (USA) N: 1725 Age: 11-17 No. of waves: 1	Category 1	O: minor delinquency, serious delinquency Mo: delinquent friends minor, delinquent friends serious	<ul style="list-style-type: none"> US → (+) O (both) Mo: US*serious dq friends → (NS) O (both) Mo: US*minor dq friends → (NS) O (both)
Agnew and Petersen (1989)	Project among high school students in suburban DeKalb County in Georgia (USA) N: 599 Age: 14-19 No. of waves: 1	Category 1 (3 measures: social activities; hanging out/loafing; leisure spend with peers regardless of nature activity)	O: delinquency total, minor delinquency, serious delinquency IV: variety of leisure activities Med: parental attachment, teacher attachment, grades, lifestyle expectations, acceptance of conventional beliefs, acceptance of deviant beliefs, association with deviant friends, parental disapproval of friends	<ul style="list-style-type: none"> US (all 3) → (+) total dq US (social act.) → (+) minor dq US (hanging, time w. peers) → (+) serious dq Med: social activities → all mediators (simultaneously added to model) → minor dq, partial mediation Med: time with peers → all mediators (simultaneously added to model) → serious dq, partial mediation Med: hanging → all mediators (simultaneously added to model) v serious dq, full mediation
Anderson (2003)	Add Health (USA) N: 17,890 Age: 13-19 No. of waves: 1	Category 1 (2 measures: one at individual level, one at school level)	O: violence, property offending, heavy alcohol use, marijuana use Mo (individual level): gender, income, private transportation, Mo (school level): rural/urban land use residential area, density residential area, dilapidation residential area	<ul style="list-style-type: none"> US (individual) → (+) O (all 4) US (school) → (+) violence, alcohol use, marijuana use Mo: US(individual)*density → (NS) O (all 4) Mo: US(school)*density → (NS) O (all 4) Mo: US(individual)*dilapidation → (NS) O (all 4) Mo: US(school)* dilapidation → (NS) O (all 4) Mo: US(school)*land use → (NS) alcohol and marijuana use Mo: US(school)*rural → (-) violence, property delinquency Mo: US(school)*urban → (+) violence, property delinquency Mo: US(individual)*land use → (NS) violence, alcohol use, marijuana use Mo: US(individual)*mixed land use → (+) property delinquency Mo: US(individual)*gender → (NS) violence, property delinquency

Continuation of Table B1

Author(s)	Research project and sample	Category of operationalization of unstructured socializing ^a	Outcome (O); independent variables if relevant (IV); mediators (Med); moderators (Mo)	Main findings regarding the unstructured socializing (US)-delinquency/substance use (O) relationship ^b
Anderson and Hughes (2009)	Add Health (USA) N: 17,890 Age: 13-19 No. of waves: 1	Category 1 (2 measures: one at individual level, one at school level)	O: violent offending, property offending, heavy alcohol consumption, marijuana use Mo: gender	<ul style="list-style-type: none"> Mo: US(individual)*male → (+) marijuana use, alcohol use Mo: US(individual)*private transportation → (NS) property delinquency, marijuana use, alcohol use Mo: US(individual)*private transportation → (+) violence (among the respondents with high rates of US, youth who drove some number of miles had higher offending rates than youths who did not drive) Mo: US(individual)*income → (NS) violence, marijuana use, alcohol use Mo: US(individual)*income → (+) property delinquency (US had a steeper slope for youth without a disposable income)
Augustyn and McGloin (2013)	Add Health (USA) N: 6574 Age: 12-19 No. of waves: 2	Category 1	O: predatory delinquency, substance use Mo: gender	<ul style="list-style-type: none"> US (individual) → (+) O (all 4) US (school) → (+) violent offending, marijuana use US (school) → (NS) property offending, heavy alcohol use US → (+) O (both) Mo: US*males → (+) predatory dq. Mo: US*gender → (NS) substance us
Barnes et al. (2007)	Study among Western New York State households (USA) N: 606 Age: 15-18 No. of waves: 1	Category 1	O: alcohol use, cigarette use, illicit drug use, delinquency Mo: gender, age, SES, race (white/black), family time	<ul style="list-style-type: none"> US → (+) O (all 4) Mo: US*gender → (NS) O (all 4) Mo: US*age → (NS) O (all 5) Mo: US*SES → (NS) O (all 5) Mo: US*white → (+) O (alcohol use, cigarette use, illicit drug use) Mo: US*race → (NS) delinquency Mo: US*family time → (NS) O (all 4)

Author(s)	Research project and sample	Category of operationalization of unstructured socializing ^a	Outcome (O); independent variables if relevant (IV); mediators (Med); moderators (Mo)	Main findings regarding the unstructured socializing (US)-delinquency/substance use (O) relationship ^b
Bernasco et al. (2013b)	SPAN (the Netherlands) N: 76 offenders Age: 12-17 No. of units: 4949 hours awake	Category 2	O: offending Med: alcohol use, cannabis use, carrying weapons	<ul style="list-style-type: none"> • US(3 separate conditions) → (+) O • US(interaction) → (+) O • Med: US → alcohol use, cannabis use, weapon carrying → O, no mediation (NS)
Bernburg and Thorlindsson (2001)	National Survey (Iceland) N: 3260 Age: 15-16 No. of waves: 1	Category 1	O: property offending, violence Mo: family commitment, school attachment, peer property offending, peer violence, definitions favorable to property offending, definitions favorable to violent behavior Med: peer property offending, peer violence, school bonding, family commitment, definitions favorable to property offending, definitions favorable to violent behavior	<ul style="list-style-type: none"> • US → (+) O (both) • Mo: US*family commitment → (-) O (both) • Mo: US*school attachment → (-) O (both) • Mo: US*peers' delinquency → (+) O (both) • Mo: US*definitions favorable to dq → (+) O (both) • Med: US → mediators (added to model in pairs) → O (both), partial mediation
Bernburg and Thorlindsson (2007)	National Survey (Iceland) N: 6458 Age: 15-16 No. of waves: 1	Category 1	O: delinquency (individual and school level) Mo (individual level): embeddedness in social ties Mo (school level): community instability (residential mobility, family disruption)	<ul style="list-style-type: none"> • US → (+) O • Mo: US*embeddedness → (-) O • Mo: US*community instability → (+) O
Boman (2013)	Rochester Youth Development Study (USA) N: 670 Age: 11-23 No. of waves: 9	Category 1	O: crime Mo: age (middle adolescence, late adolescence, emerging adulthood) Med: friend deviance	<ul style="list-style-type: none"> • US → (+) O • Med: US → friend deviance → crime, partial mediation (only during middle adolescence and emerging adulthood, not during late adolescence) • Mo: US*middle adolescence → (+) O
Chen et al. (2008)	Telephone interviews in California (USA) N: 1534 Age: 15-20 No. of waves: 1	Category 1	O: driving under influence (DUI)	<ul style="list-style-type: none"> • US → (+) O

Continuation of Table B1

Author(s)	Research project and sample	Category of operationalization of unstructured socializing ^a	Outcome (O); independent variables if relevant (IV); mediators (Med); moderators (Mo)	Main findings regarding the unstructured socializing (US)-delinquency/substance use (O) relationship ^b
DiPietro and McGloin (2012)	PHDCN (USA) N: 1799 Age: 9-19 No. of waves: 1	Category 1	O: violence Mo: immigrant generational status	<ul style="list-style-type: none"> • US → (+) O • Mo: US*immigrant generational status → (+) O (but evidence was not consistent)
Felson et al. (2012)	Second Nebraska Inmate Study (USA) N: 695 Age: adults No. of waves: 21224 person-months	Category 1	O: assault, property crime, dealing drugs	<ul style="list-style-type: none"> • US → (+) O (all)
Flannery, Williams, and Vazsonyi (1999)	Project among three middle schools from a medium-sized southwestern school district (USA) N: 1170 Age: 11-13 No. of waves: 1	Category 1	O: aggression, delinquency, substance use	<ul style="list-style-type: none"> • US → (+) O
Fleming et al. (2008)	Raising Healthy Children Project (USA) N: 776 Age: 11-15 No. of waves: 4	Category 1	O: delinquency	<ul style="list-style-type: none"> • US → (+) O
Gage et al. (2005)	Health Behavior of School-aged Children Survey (UA) N: 14,310 Age: 11-16 No. of waves: 1	Category 1	O: physical fighting, weapon carrying, alcohol use, cigarette smoking Mo: gender, parental involvement in school, parent-child communication, neighborhood safety, extracurricular activity	<ul style="list-style-type: none"> • US → (+) O (all) • Mo: US*gender → (NS) O • Mo: US* low parental involvement in school → (+) O • Mo: US* difficult parent-child communication O (only for boys) • Mo: US*neighborhood unsafety → (+) O • Mo: US*few days in extracurricular activity → (+) O (only for girls)

Author(s)	Research project and sample	Category of operationalization of unstructured socializing ^a	Outcome (O); independent variables if relevant (IV); mediators (Med); moderators (Mo)	Main findings regarding the unstructured socializing (US)-delinquency/substance use (O) relationship ^b
Galambos and Maggs (1991)	Two-Earner Family Study (Canada) N: 112 Age: 11-12 No. of waves: 2	Category 1 (2 measures: unsupervised time hanging out, peer involvement)	O: problem behavior Mo: gender, lax/firm parental control, parental acceptance, parent-adolescent conflict	<ul style="list-style-type: none"> US (both) → (+) O Mo: US (unsupervised time)*girls → (+) O Mo: US (unsupervised time)*parental control → (-) O (only for girls) Mo: US (unsupervised time)*parental acceptance → (-) O (only for girls) Mo: US (unsupervised time)*parent-adolescent conflict → (NS) O
Gardner, Roth, and Brooks-Gunn (2009)	PHDCN (USA) N: 1344 Age: 9-17 No. of waves: 3	Category 1	O: violent delinquency, nonviolent delinquency Mo: prior externalizing problem behavior	<ul style="list-style-type: none"> US → (+) O (nonviolent dq, not investigated for violent dq), only investigated for boys Mo: US*prior behavior → (NS) O (nonviolent dq)
Goldstein, Eccles, and Davis-Kean (2005)	Maryland Adolescent Development in Context Study (USA) N: 1357 Age: 12-17 No. of waves: 3	Category 1	O: problem behavior Mo: gender, racial group (African American and European American)	<ul style="list-style-type: none"> US → (+) O Mo: US*sex → (NS) O Mo: US*racial group → (NS) O
Gottfredson, Cross, and Soulé (2007)	Programs included in the Maryland After-School Opportunity Fund Program (USA) N: 497 adolescents in 35 after-school programs Age: 10-17 No. of waves: 2	Category 1 (2 measures, both at level of after-school program)	O: delinquency, substance use (individual level)	<ul style="list-style-type: none"> US (both) → (NS) O (both)
Greene and Banerjee (2009)	Project among two schools in northeastern US (USA) N: 248 Age: 11-15 No. of waves: 1	Category 2	O: cigarette smoking Med: delinquent peers, cigarette offers from peers, smoking expectations	<ul style="list-style-type: none"> US → (+) O Med: US → delinquent peers → O, no mediation (NS) Med: US → cigarette offers → O, mediation Med: US → smoking expectancies → O, no mediation (NS)

Continuation of Table B1

Author(s)	Research project and sample	Category of operationalization of unstructured socializing ^a	Outcome (O); independent variables if relevant (IV); mediators (Med); moderators (Mo)	Main findings regarding the unstructured socializing (US)-delinquency/substance use (O) relationship ^b
Hawdon (1996)	Monitoring the Future (USA) N: 3140 Age: 17-19 No. of waves: 1	Category 1	O: marijuana use IV: structured routine activity patterns Med: peer marijuana use, religiosity, commitment (students' attitudes toward school, educational aspirations), attachment (attachment to parents), belief (belief in criminal justice system)	<ul style="list-style-type: none"> Med: US → delinquent peers → cigarette offers → O, mediation Med: US → delinquent peers → smoking expectancies → O, mediation Total model: full mediation US → (+) O Med: US → peer marijuana use and religiosity (simultaneously added to model) → O, partial mediation Med: US → indicators of commitment, attachment and belief (simultaneously added to model) → O, no mediation
Hawdon (1999)	Study among first-year students of a large southern university (USA) N: 108 Age: 17-18 No. of waves: 1	Category 1	O: delinquency, multiple drug use, larceny theft	<ul style="list-style-type: none"> US → (+) O (all)
Hay and Forrest (2008)	National Longitudinal Study of Youth (USA) N: 779 Age: 12-14 No. of waves: 1	Category 1 (4 measures: child's report of unsupervised time away from home, child's report of time with peers, child's report of adult absence when returning from school, mother's report of unsupervised time away from home)	O: crime Mo: self-control	<ul style="list-style-type: none"> US (all) → (+) O Mo: US (child's and mother's report of unsupervised time) *low self-control → (+) O Mo: US (time with peers, adult absence) *low self-control → (NS) O

Author(s)	Research project and sample	Category of operationalization of unstructured socializing ^a	Outcome (O); independent variables if relevant (IV); mediators (Med); moderators (Mo)	Main findings regarding the unstructured socializing (US)-delinquency/substance use (O) relationship ^b
Haynie and Osgood (2005)	Add Health (USA) N: 8838 Age: 12-20 No. of waves: 2	Category 1	O: delinquency Mo: minor peer delinquency, serious peer delinquency	<ul style="list-style-type: none"> • US → (+) O • Mo: US*peer delinquency → (NS) O
Higgins and Jennings (2010)	National evaluation of the G.R.E.A.T. program (USA) N: 407 Age: 12-16 No. of waves: 5	Category 2	O: delinquency	<ul style="list-style-type: none"> • US → (+) O
Hirschi (1969)	Richmond Youth Project (USA) N: 1300-1539 Age: 12-18 No. of waves: 1	Category 1 (2 measures: time talking with friends, riding around in a car)	O: delinquency	<ul style="list-style-type: none"> • US → (+) O
Hughes and Short (2014)	Data from study of street gangs in Chicago 1959-1962 (USA) N: 490 Age: 12-21 No. of waves: 1	Category 1 (4 measures: hanging in the streets, riding around in cars, attending house or quarter parties in the area, summary measure)	O: general delinquency, fighting Med: signifying	<ul style="list-style-type: none"> • US (all) → (+) O (both) • Med: hanging in the streets → signifying → O (fighting), full mediation • Med: attending parties → signifying → O (fighting), partial mediation • Med: riding around in cars → signifying → O (fighting), no mediation (NS)
Hundley (1987)	Project among Ontario students (Canada) N: 2048 Age: 14.5 No. of waves: 1	Category 1	O: substance use, delinquent behavior	<ul style="list-style-type: none"> • US → (+) O (both)
Janssen et al. (2015)	SPAN (the Netherlands) N: 603 Age: 11-19 No. of waves: 2	Category 3	O: delinquency	<ul style="list-style-type: none"> • US → (+) O

Continuation of Table B1

Author(s)	Research project and sample	Category of operationalization of unstructured socializing ^a	Outcome (O); independent variables if relevant (IV); mediators (Med); moderators (Mo)	Main findings regarding the unstructured socializing (US)-delinquency/substance use (O) relationship ^b
Junger and Wiegersma (1995)	Project among high school students in Groningen (the Netherlands) N: 1328 Age: 13-15 No. of waves: 1	Category 1	O: deviance	<ul style="list-style-type: none"> US → (+) O
LaGrange and Silverman (1999)	University of Alberta Juvenile and Adolescent Behavior Study (Canada) N: 2095 Age: 11-18 No. of waves: 1	Category 1 (2 measures: together with friends, driving around)	O: general delinquency, property offenses, violence, drug offenses Mo: impulsivity, risk-taking, carelessness, temper, present oriented	<ul style="list-style-type: none"> US (both) → (+) O (general delinquency) US (both) → (NS) O (drug offenses) US (together with friends) → (+) O (violence) US (together with friends) → (NS) O (property offenses) US (driving around) → (+) O (property offenses) US (driving around) → (NS) O (violence) <p>Impulsivity</p> <ul style="list-style-type: none"> Mo: US (driving around)*impulsivity → (+) O (drug offenses) Mo: US (driving around)*impulsivity → (NS) O (general delinquency, property offenses, violence) Mo: US (together w. friends)*impulsivity → (NS) O (all) <p>Risk taking</p> <ul style="list-style-type: none"> Mo: US (driving around)*risk taking → (+) O (drug offenses) Mo: US (driving around)*risk taking → (NS) O (general delinquency, property offenses, violence) Mo: US (together w. friends)*risk taking → (+) O (violence) Mo: US (together w. friends)*risk taking → (+) O (general delinquency, property offenses, drug offenses)

Author(s)	Research project and sample	Category of operationalization of unstructured socializing ^a	Outcome (O); independent variables if relevant (IV); mediators (Med); moderators (Mo)	Main findings regarding the unstructured socializing (US)-delinquency/substance use (O) relationship ^b
Lam, McHale, and Crouter (2014)	Penn State Family Relationships Project (USA) N: 402 Age: 8-18 No. of waves: 5	Category 1	O: youth problem behaviors Mo: gender, gender composition of peer group (opposite/mixed-gender or same-gender)	Carelessness <ul style="list-style-type: none"> Mo: US (driving around)*carelessness → (+) O (drug offense) Mo: US (driving around)*carelessness → (NS) O (general delinquency, property offenses, violence) Mo: US (together w. friends)*carelessness → (NS) O (all)
Lotz and Lee (1999)	Monitoring the Future (USA) N: 2772 Age: 18-19 No. of waves: 1	Category 1	O: property delinquency, violent crime, vandalism, smoking, drinking Mo: race (African American, white), gender	Other indicators of self-control <ul style="list-style-type: none"> Mo: US (both)* temper → (NS) O (all) Mo: US (both)* present oriented → (NS) O (all) US → (+) O Mo: US*mixed-gender/peer group → (+) O Mo: US*gender → (NS) O
Maimon (2009)	PHDCN (USA) N: 824-2360 Age: 8-18 No. of waves: 3	Category 1	O: violent offending Mo (neighborhood level): collective efficacy	<ul style="list-style-type: none"> US → (+) O Mo: US* high collective efficacy → (-) O
Maimon and Browning (2010)	PHDCN (USA) N: 842 Age: 8-18 No. of waves: 3	Category 1	O: violent offending Mo (individual level): impulsivity Mo (neighborhood level): collective efficacy	<ul style="list-style-type: none"> US → (+) O Mo: US* high collective efficacy → (-) O Mo: US*impulsivity → (NS) O

Continuation of Table B1

Author(s)	Research project and sample	Category of operationalization of unstructured socializing ^a	Outcome (O); independent variables if relevant (IV); mediators (Med); moderators (Mo)	Main findings regarding the unstructured socializing (US)-delinquency/substance use (O) relationship ^b
McGloin and Shermer (2009)	Add Health (USA) N: 7415-9997 Age: 12-18 No. of waves: 2	Category 1	O: delinquency Mo: peer deviance, self-control	<ul style="list-style-type: none"> • US → (+) O • Mo: US*peer deviance → (-) O (only for girls) • Mo: US*peer deviance*self-control → (NS) O
McHale, Crouter, and Tucker (2001)	Penn State Family Relationships Project (USA) N: 198 Age: 10 to 12 No. of waves: 2	Category 1 (3 measures: hanging out, outdoor play, free time spent in unsupervised peer contexts)	O: conduct problems Med: time spent in unsupervised peer contexts	<ul style="list-style-type: none"> • US (all) → (+) O • Med: hanging out → time spent in unsupervised peer contexts → O, full mediation (but not straightforward results)
Meldrum, Barnes, and Hay (2015)	Study of Early Child Care and Youth Development (USA) N: 825 Age: 12-15 No. of waves: 2	Category 1	O: delinquency	<ul style="list-style-type: none"> • US → (+) O
Meldrum and Clark (2015)	Project among two schools in a southeastern state (USA) N: 357-426 Age: 11-21 No. of waves: 1	Category 1	O: petty theft, major theft, vandalism, violence, trespassing, alcohol use, marijuana use	<ul style="list-style-type: none"> • US → (+) O (all)
Meldrum, Young, and Weerman (2009)	School Project (the Netherlands) N: 1364-1949 Age: 11-18 No. of waves: 2	Category 1	O: delinquency	<ul style="list-style-type: none"> • US → (+) O

Author(s)	Research project and sample	Category of operationalization of unstructured socializing ^a	Outcome (O); independent variables if relevant (IV); mediators (Med); moderators (Mo)	Main findings regarding the unstructured socializing (US)-delinquency/substance use (O) relationship ^b
Miller (2013)	Edinburgh Study of Youth Transitions and Crime (Scotland) N: 3064-3454 Age: 15 No. of waves: 1	Category 1 (3 measures: hanging around with friends locally, hanging around in Edinburgh city center/hang around away from home, nightlife)	O: assault, fare evasion, shoplifting, vandalism, drug use	<ul style="list-style-type: none"> • US (all) → (+) O (assault) • US (hanging around locally) → (+) O (shoplifting, vandalism) • US (nightlife, hanging around away from home) → (NS) O (shoplifting, vandalism) • US (nightlife, hanging around away from home) → (+) O (drug use) • US (hanging around locally) → (NS) O (drug use) • US (hanging around away from home) → (+) O (fare evasion) • US (nightlife, hanging around locally) → (NS) O (fare evasion)
Moore and Ohtsuka (2000)	Five secondary schools in Melbourne (Australia) N: 769 Age: 15-18 No. of waves: 1	Category 1 (2 measures: unstructured leisure time, socializing)	O: gambling, problem gambling Mo: gender	<ul style="list-style-type: none"> • US (both) → (+) O (gambling) • US (both) → (NS) O (problem gambling) • Mo: US*gender → (NS) O
Müller, Eisner, and Ribeaud (2013)	Zurich Project on the Social Development of Children and Youths (Switzerland) N: 1032 Age: 11-14 No. of waves: 2	Category 2	O: variety of delinquency, shoplifting, vandalism, assault	<ul style="list-style-type: none"> • US → (+) O (variety of delinquency, shoplifting, vandalism) • US → (NS) O (assault)
Mustaine and Tewksbury (2000)	Project among college students in 8 different states (USA) N: 1513 Age: 17->20 (about 30% is 21+) No. of waves: 1	Category 1	O: assault	<ul style="list-style-type: none"> • US → (NS) O

Continuation of Table B1

Author(s)	Research project and sample	Category of operationalization of unstructured socializing ^a	Outcome (O); independent variables if relevant (IV); mediators (Med); moderators (Mo)	Main findings regarding the unstructured socializing (US)-delinquency/substance use (O) relationship ^b
Novak and Crawford (2010)	National Education Longitudinal Study (USA) N: 1485 Age: 15-18 No. of waves: 2	Category 1	O: delinquency Mo: gender	<ul style="list-style-type: none"> • US → (+) O • Mo: US*males → (+) O
Op de Beek and Pauwels (2010)	Youth in Flanders. Measured and Counted (Belgium) N: 4829 Age: 11-21 No. of waves: 1	Category 1	O: general offending, petty crime, serious delinquency Mo: family strain, school strain, loss strain	<ul style="list-style-type: none"> • US → (+) O • Mo: US*family strain → (-) O (general offending) • Mo: US*school strain → (-) O (general offending) • Mo: US*family/school strain → (NS) O (petty crime, serious delinquency)
Osgood and Anderson (2004)	National evaluation of the G.R.E.A.T. program (USA) N: 4358 within 36 schools Age: 13-15 No. of waves: 1	Category 2 (both at individual and school level)	O: delinquency (both at individual and school level)	<ul style="list-style-type: none"> • US (individual) → (+) O • US (school) → (+) O
Osgood et al. (1996)	Monitoring the Future (USA) N: 1782-1840 Age: 18-26 No. of waves: 5	Category 1 (4 measures: ride around in a car or motorcycle just for fun; get together with friends informally; go to parties or other social affairs; during a typical week, on how many evenings do you go out for fun and recreation)	O: criminal behavior, heavy alcohol use, marijuana use, use of other illicit drugs, dangerous driving	<ul style="list-style-type: none"> • US (all) → (+) O (alcohol and marijuana use) • US (driving around, go to parties, evenings out for fun) → (+) O (criminal behavior) • US (get together with friends) → (NS) O (criminal behavior) • US (get together with friends, go to parties, evenings out for fun) → (+) O (other drug use) • US (driving around) → (NS) O (other drug use) • US (driving around, evenings out for fun) → (+) O (dangerous driving) • US (get together with friends, go to parties) → (NS) O (dangerous driving)

Author(s)	Research project and sample	Category of operationalization of unstructured socializing ^a	Outcome (O); independent variables if relevant (IV); mediators (Med); moderators (Mo)	Main findings regarding the unstructured socializing (US)-delinquency/substance use (O) relationship ^b
Pettit et al. (1999)	Child Development Project (USA) N: 438 Age: 12-13 No. of waves: 2	Category 1	O: externalizing problems Mo: parental monitoring, neighborhood safety	<ul style="list-style-type: none"> US → (+) O Mo: US* parental monitoring → (-) O Mo: US* neighborhood safety → (-) O Mo: US* parental monitoring*neighborhood safety → (-) O: lowest level of externalizing problems for high monitored adolescents from safe neighborhoods who report low amounts of US
Posner and Vandell (1999)	Project in Milwaukee elementary schools (USA) N: 194 Age: 8-11 No. of waves: 3	Category 3 (2 measures: unstructured outdoor activities, socializing)	O: behavior problems Mo: race	<ul style="list-style-type: none"> US (outdoor activities) → (+) O US (socializing) → (NS) O Mo: US (outdoor activities)*white → (+) O
Regnerus (2002)	Add Health (USA) N: 1648 Age: 13-19 No. of waves: 2	Category 1	O: theft, minor delinquency Mo: age group (two groups), No. of delinquent friends, proportion of delinquent friends, mean delinquency among friendship group (delinquency of friends matched to DVs)	<ul style="list-style-type: none"> US → (+) O (both) Mo: US* younger → (+) O (theft) Med: US → friends' delinquency (3 measures) → O (both), no mediation (NS)
Riley (1987)	National survey (England and Wales) N: 751 Age: 14-15 No. of waves: 1	Category 3	O: offending Med: peer-group commitment	<ul style="list-style-type: none"> US → (+) O Med: US → peer-group commitment → O, partial mediation
Sentse et al. (2010)	TRAILS (the Netherlands) N: 1023 Age: 10-14 No. of waves: 2	Category 1	O: antisocial behavior Mo: gender, antisocial friends	<ul style="list-style-type: none"> US → (+) O Mo: US* boys → (+) O Mo: US* antisocial friends → (+) O

Continuation of Table B1

Author(s)	Research project and sample	Category of operationalization of unstructured socializing ^a	Outcome (O); independent variables if relevant (IV); mediators (Med); moderators (Mo)	Main findings regarding the unstructured socializing (US)-delinquency/substance use (O) relationship ^b
Smith and Ecob (2013)	Edinburgh Study of Youth Transitions and Crime (Scotland) N: 4300 Age: 13-17 No. of waves: 6	Category 1 (2 measures: hanging about, spare-time activities)	O: serious offending, general offending	US (both) → (+) O (both) • US (both) → (+) O (both)
Staff et al. (2010)	Monitoring the Future (USA) N: 1000-3500 Age: 13-19 No. of waves: 2-3	Category 1	O: delinquency, marijuana use, heavy drinking	US → (+) O (all) • US → (+) O (all)
Steketee (2012)	International Self Report Study of Delinquency-2 (31 countries in Europe, USA and Latin America) N: about 67,000 Age: 12-16 No. of waves: 1	Category 1 (5 measures: hanging out with friends, going out at night, time with 1-3 friends/larger group, time with friends in public places, lifestyle of frequently hanging out with large group in public places)	O: serious offending, delinquency versatility Mo: gender	US (first 4 measures) → (+) serious offending • US (lifestyle) → (+) delinquency versatility • Mo: US* gender → (NS) O
Sun and Longazel (2008)	Project among college classes in one mid-Atlantic public university (USA) N: 558 Age: 18-26 No. of waves: 1	Category 1 (2 measures: going to parties, getting together with friends informally)	O: binge drinking, drinking-driving, negative alcohol related behaviors (e.g., police contact, getting into fights)	US (going to parties) → (+) O (all) • US (getting together with friends) → (NS) O (all)

Author(s)	Research project and sample	Category of operationalization of unstructured socializing ^a	Outcome (O); independent variables if relevant (IV); mediators (Med); moderators (Mo)	Main findings regarding the unstructured socializing (US)-delinquency/substance use (O) relationship ^b
Svensson and Oberwittler (2010)	Halmstad School Survey, MPI Youth Survey (resp. Sweden and Germany) N: 880 (Sweden), 879 (Germany) Age: 15-16 (Sweden), 13-16 (Germany) No. of waves: 1	Category 1	O: offending Mo: delinquent friends	<ul style="list-style-type: none"> • US → (+) O (in both samples) • Mo: US*delinquent friends → (+) O (in both samples)
Thomas and McGloin (2013)	Add Health, National evaluation of the G.R.E.A.T. program, Monitoring the Future data (all USA) N: 8989 (Add Health), 1172 (G.R.E.A.T.), 2809 (Monitoring the Future) Age: 10-22 (Add Health), 13-19 (G.R.E.A.T.), 18-26 (Monitoring the Future) No. of waves: 2-4	Category 2	O: delinquency Mo: impulsivity	<ul style="list-style-type: none"> • US → (+) O (in all samples) • Mo: US*impulsivity → (NS) O (inconsistent findings across samples and research designs, no strong support for interaction)
Thorlindsson and Bernburg (2006)	National survey (Iceland) N: 3431 Age: 15-16 No. of waves: 1	Category 1	O: alcohol use, hashish use Mo: peer alcohol use, positive peer attitude towards alcohol use, peer hashish use, positive peer attitude toward hashish use	<ul style="list-style-type: none"> • US → (+) O (both) • Mo: US*peer alcohol use → (+) O (alcohol use) • Mo: US*peer attitudes tow. alcohol use → (+) O (alcohol use) • Mo: US*peer hashish use → (+) O (hashish use) • Mo: US*peer attitudes tow. hashish use → (+) O (hashish use)
Vásquez and Zimmerman (2014)	National Youth Survey (USA) N: 1543 Age: 13-20 No. of waves: 2	Category 1	O: drug delinquency, property delinquency, violent delinquency	<ul style="list-style-type: none"> • O (all) → (+) US

Continuation of Table B1

Author(s)	Research project and sample	Category of operationalization of unstructured socializing ^a	Outcome (O); independent variables if relevant (IV); mediators (Med); moderators (Mo)	Main findings regarding the unstructured socializing (US)-delinquency/substance use (O) relationship ^b
Vazsonyi et al. (2002)	International Study of Adolescent Development (Hungary, the Netherlands, Switzerland, USA) N: 6914 Age: 15-19 No. of waves: 1	Category 1	O: vandalism, alcohol, drug use, school misconduct, general deviancy, theft, assault	<ul style="list-style-type: none"> US → (+) O (all)
Wallace and Bachman (1991)	Monitoring the Future (USA) N: 77500 Age: 17-19 No. of waves: 1	Category 1	O: tobacco use, alcohol use, marijuana use, cocaine use	<ul style="list-style-type: none"> US → (+) O (all)
Weerman (2011)	School Study (the Netherlands) N: 1156 Age: 11-18 No. of waves: 2	Category 1 (2 measures: time with peers, being part of an informal street-oriented youth group)	O: delinquency	<ul style="list-style-type: none"> US (part of informal street-oriented group) → (+) O US (time spent with peers) → (NS) O
Weerman et al. (2013)	SPAN (the Netherlands) N: 843 Age: 12-17 No. of waves: 1	Category 3 (2 measures: time with peers unsupervised, time with peers mainly socializing)	<p>O: delinquency</p> <p>Mo: physical time with peers, virtual or online time with peers, time with peers in public places, time with peers not in public, time with peers supervised, time with peers not socializing, time with peers exposed to alcohol/drugs, time with peers not exposed to alcohol/drugs, time with two or more peers, time with one peer</p>	<ul style="list-style-type: none"> US (both) → (+) O Mo: US*public location → (+) O (time spent with peers is related to delinquency only when it combines at least two of the conditions just socializing, being in public, being unsupervised)
Weerman and Hoeve (2012)	School Study (the Netherlands) N: 1110 Age: 11-18 No. of waves: 2	Category 1	O: delinquency Mo: gender	<ul style="list-style-type: none"> US → (+) O Mo: US*boys → (+) O

Author(s)	Research project and sample	Category of operationalization of unstructured socializing ^a	Outcome (O); independent variables if relevant (IV); mediators (Med); moderators (Mo)	Main findings regarding the unstructured socializing (US)-delinquency/substance use (O) relationship ^b
Weerman et al. (2015)	SPAN (the Netherlands) N: 616-843 Age: 11-20 No. of waves: 2	Category 1	O: delinquency Mo: gender	<ul style="list-style-type: none"> • US → (+) O • Mo: US*gender → (NS) O
West and Farrington (1977)	Cambridge Study in Delinquent Development (England) N: 389 Age: 18-19 No. of waves: 1	Category 1 (2 measures: hanging about on the streets, driving motor vehicle)	O: delinquents/nondelinquents	<ul style="list-style-type: none"> • O → (+) US (both)
Wikström and Butterworth (2006)	Peterborough Youth Study (England) N: 1957, 339 subsample Age: 14-15 No. of waves: 1	Category 3 (2 measures: peer-centeredness, time spent in high-risk public environments)	O: offending, offending prevalence, offending frequency Mo: gender, risk score (balanced score, protective score)	<ul style="list-style-type: none"> • US → (+) O • Mo: US (time spent in high-risk public environments)*girls → (+) O (offending prevalence) • Mo: US (time spent in high-risk public environments)*girls → (NS) O (offending frequency) • Mo: US (peer-centeredness)*balanced risk score → (+) O (offending)
Wikström et al. (2010)	Peterborough Adolescent and Young Adult Development Study (England) N: 716 Age: 13-17 No. of waves: 5	Category 3 (2 measures: unsupervised with peers in areas of low collective efficacy, unsupervised with peers in areas with public entertainment)	O: crime Mo: crime propensity (composite of morality and low self-control)	<ul style="list-style-type: none"> • US (both) → (+) O • Mo: US (both)*crime propensity → (+) O

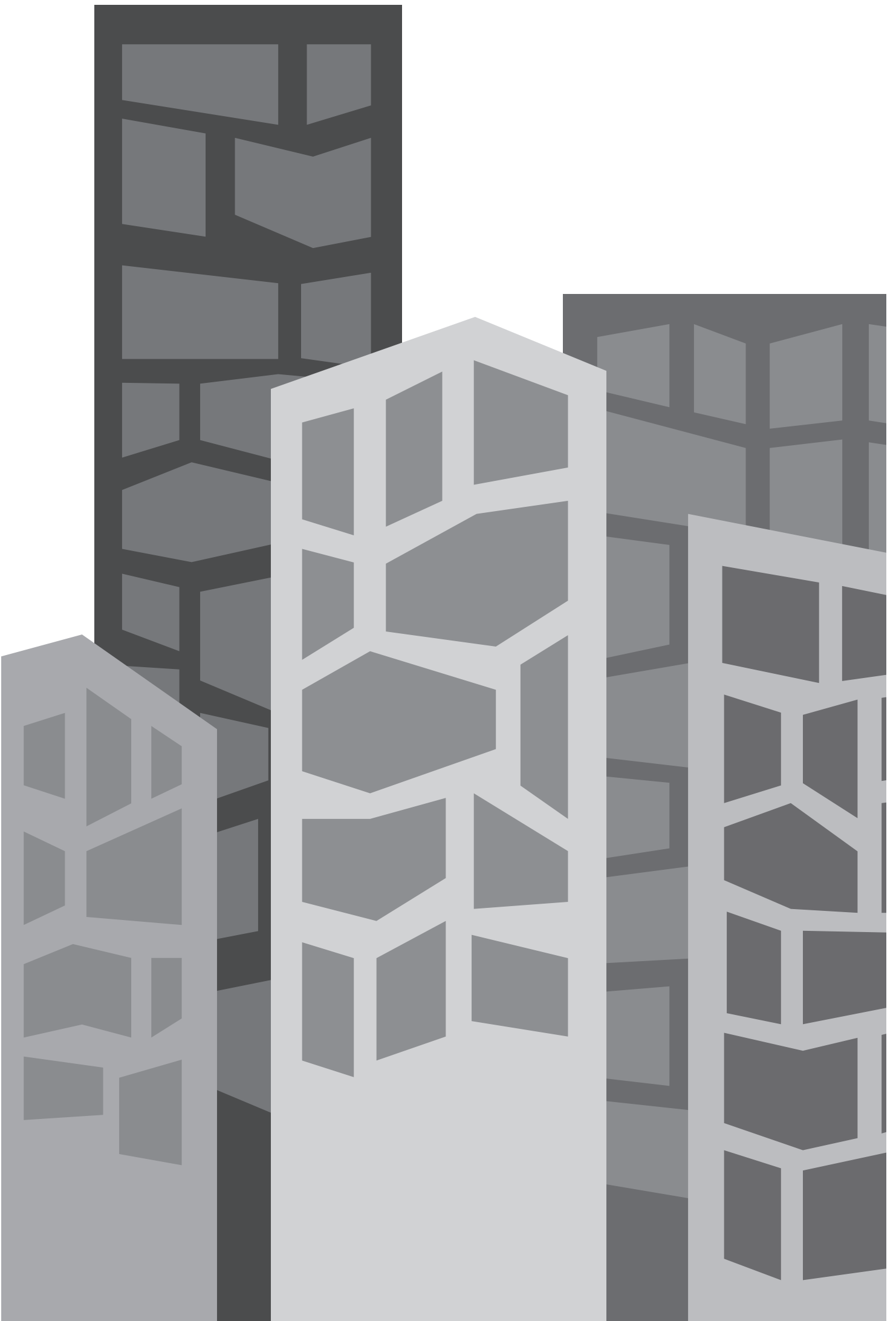
Continuation of Table B1

Author(s)	Research project and sample	Category of operationalization of unstructured socializing ^a	Outcome (O); independent variables if relevant (IV); mediators (Med); moderators (Mo)	Main findings regarding the unstructured socializing (US)-delinquency/substance use (O) relationship ^b
Wikström et al. (2012a)	Peterborough Adolescent and Young Adult Development Study (England) N: 657-716 Age: 13-17 No. of waves: 5	Category 3 (3 measures: time spent in unstructured peer-oriented activities in areas of low collective efficacy, in areas with public entertainment, combined measure)	O: crime, crime rates across hours Mo: crime propensity (composite of morality and self-control), peer crime involvement, collective efficacy in the area, functional location (local centers-city centers; on the streets and in parks-moving around), time of day (evenings-during the day)	<ul style="list-style-type: none"> US (all) → (+) O (crime) Mo: US (combined measure)*peer crime involvement → (+) O (crime) Mo: US (combined measure)*crime propensity → (+) O (crime) Mo: US *medium collective efficacy → (+) O (crime rates across hours) Mo: US *local centers and on the streets → (+) O (crime rates across hours) Mo: US *evening → (+) O (crime rates across hours)
Wong (2005)	Survey in Western Canadian city (Canada) N: 578 Age: 9-19 No. of waves: 1	Category 1	O: total delinquency, violence, property offenses, trivial offenses IV: other leisure activities Med: differential involvement index, attachment to parents, attachment to school, attachment to peers, respect for law, delinquent association, social bond index	<ul style="list-style-type: none"> US → (+) O (all) Med: US → attachment to parents, school and peers, respect for law, delinquent association (simultaneously added to model) → O (all), full mediation (delinquent association is the most important mediating factor)
Yin, Katims, and Zapata (1999)	Study in school district in south central Texas (USA) N: 2651 Age: 13-16 No. of waves: 1	Category 1	O: delinquency Mo: gender	<ul style="list-style-type: none"> US → (+) O Mo: US*gender → (NS) O

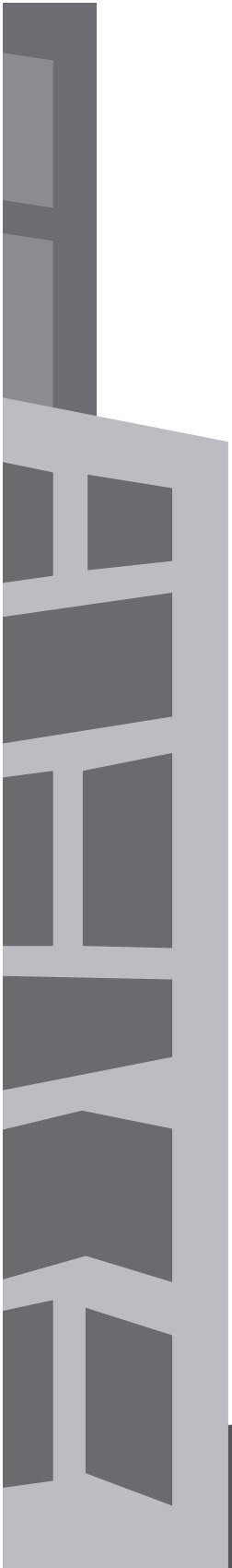
NOTES: Only the results of the studies are displayed that concerned the direct unstructured socializing-delinquency relationship, or moderation or mediation thereof. ABBREVIATIONS: US = unstructured socializing; O = outcome/measure for delinquency or substance use; Mo = moderator/moderation; Med = mediator/mediation; IV = independent variables, only displayed if relevant; NS = non-significant; + = positive relationship found; - = negative relationship found.

^aOperationalization of unstructured socializing: Category 1: One condition measured, at least one other condition implied; Category 2: All conditions measured in stylized questionnaire-format; Category 3: All conditions measured in time diary format.

^bFull mediation refers to the direct effect being reduced to non-significance; partial mediation refers to a substantially reduced direct effect that remains significant.



Acknowledgements



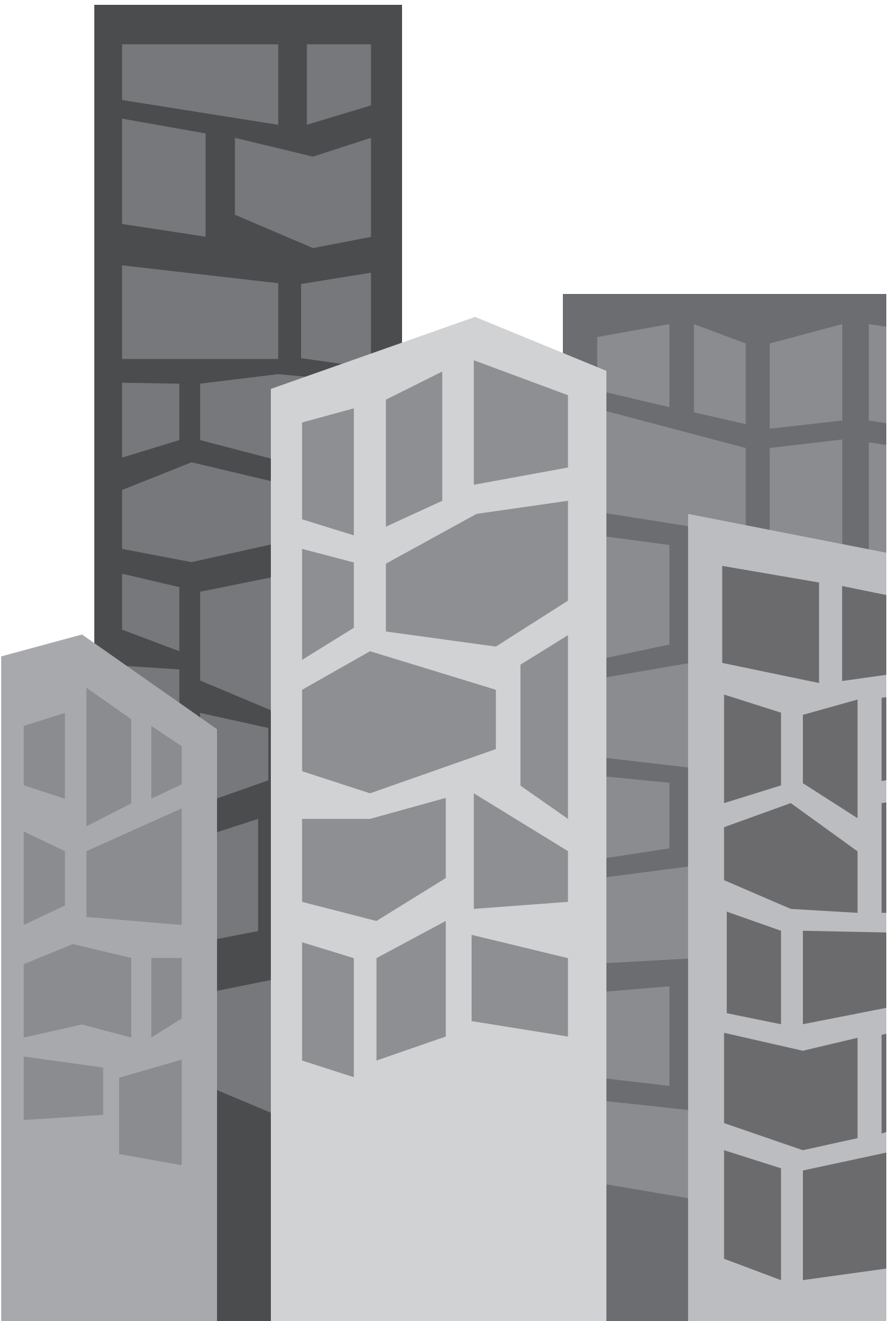
Acknowledgements

The NSCR has offered me a stimulating environment that has immensely helped shape this dissertation. Whilst, as I theorize in my dissertation, the setting may influence behavior irrespective of individuals in the setting, I would nevertheless like to thank some of those individuals in person. Frank Weerman, thank you for your continually constructive and detailed feedback, for channeling my ideas, for teaching me how to structure arguments, and for always making time for me and my over-enthusiastic plans. Wim Bernasco, thank you for your optimism, your trust in my capabilities, and your incredible involvement in my project: It felt like I had a fourth promotor. Lieven Pauwels and Gerben Bruinsma, thank you for your ideas and counsel, and for giving me the opportunity to conduct my PhD study within the SPAN project. Thanks to my colleagues at the NSCR for the pub quizzes, ‘foute kroegentochten’, and the epic Hollyween party. Dr. Heleentje Janssen, thanks for being an amazing roommate all these years: Staying sassy, Tony Chocolonely, “I am going to type every word I know: Monday...” etc. And of course, I loved our conversations about negative binomial interaction effects and multilevel SEM.

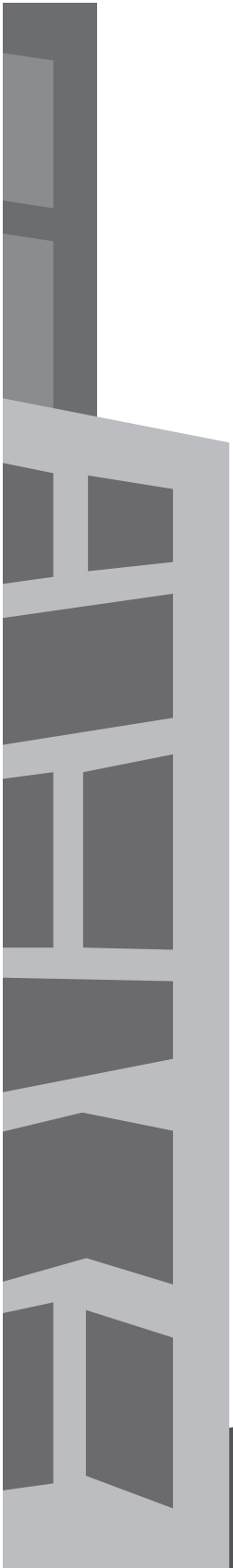
Wayne Osgood, thank you for your hospitality, feedback, the numerous introductions you arranged, and for our inspiring conversations about Short and Strodtbeck and siblings in the backseat of a car (“Don’t hit your sister”). Linda Caldwell, Nicole Langeveld, and Nathalie Feitsma, thank you for helping me consider the practical implications of my research findings. Furthermore, I would like to thank the interviewers of the SPAN and SSO projects for their effort and commitment, the directors of the ten secondary schools in The Hague for allowing the SPAN data collection, and—most importantly—all adolescents who were willing to entrust us with information about their activities and personal lives.

Writing this dissertation has certainly kept me from unstructured socializing, or from spending time otherwise engaged in social activities with family and friends. I would therefore like to conclude with some special thanks

for their patience and support. Specifically, mam en pap, thank you for your assistance, encouragement, and advice. Jessica, Wim, and Hadewich, thank you for reminding me to do more of the things that make me happy. And finally, dear Joris, thank you for putting up with me through the tough final months. Your support came in many forms: Through practical assistance (the graphs and posters would not have been so impressive without your help), through your enduring belief in my abilities, by putting things in perspective, and in providing your opinion whether or not I wanted to hear it. Please keep brightening up my life with your enthusiasm and smarty-pants comments.



About the Author



About the Author

Evelien Hoeben (1987) is a researcher in sociology and criminology. She obtained her master in Sociology at the University of Groningen (2010, cum laude) on a study about the social networks of forensic psychiatric patients. After one year as full-time data coordinator at the NSCR, for the Study of Peers, Activities, and Neighborhoods (SPAN), she started her PhD research on that same project. The studies described in this book were part of her PhD research, which was conducted between August 2011 and September 2015. Her research interests include adolescent delinquency and substance use, peer processes, time use, and situational explanations for deviance. Evelien currently works as a postdoctoral researcher at the Sociology department of the University of Amsterdam. More information is available on: www.evelienhoeben.com.


Publications and submitted works

- Hoeben, Evelien M. 2016. Beyond the borders of the residential neighborhood: Unstructured socializing, neighborhood disadvantage, and adolescent delinquency. *Submitted to Journal of Research in Crime and Delinquency*.
- Hoeben, Evelien M., Wim Bernasco, Frank M. Weerman, Lieven J.R. Pauwels, and Sjoerd van Halem. 2014. The space-time budget method in criminological research. *Crime Science* 3(12): 1-15.
- Hoeben, Evelien M., D. Wayne Osgood, Sonja E. Siennick, and Frank M. Weerman. 2016. Hanging out with the wrong crowd? Unstructured socializing, delinquency, and characteristics of the present peers. *Submitted to Social Forces*.
- Hoeben, Evelien M., Marinus Spreen, Marlies van den Berg, and Stefan Bogaerts. 2011. Informeel toezicht tijdens de resocialisatie in een tbs-behandeling. Toepassing van FSNA als sociale interventie in de forensische psychiatrie. *PROCES* 90(1): 26-41.

- Hoeben, Evelien M., Wouter Steenbeek, and Lieven J.R. Pauwels. 2016. Measuring disorder: Observer bias in systematic social observations at streets and neighborhoods. *Conditionally accepted for publication in Journal of Quantitative Criminology*.
- Hoeben, Evelien M., and Frank M. Weerman. 2014. Situational conditions and adolescent offending: Does the impact of unstructured socializing depend on its location? *European Journal of Criminology* 11(4): 481-499.
- Hoeben, Evelien M., and Frank M. Weerman. 2016. Why is involvement in unstructured socializing related to adolescent delinquency? *Accepted for publication in Criminology*.
- McNeeley, Susan M., and Evelien M. Hoeben. 2016. Public unstructured socializing and the code of the street: Predicting violence and victimization. *Conditionally accepted for publication in Deviant Behavior*.
- Meldrum, Ryan C., Jacob T. N. Young, Evelien M. Hoeben, and D'Andre Walker. 2016. Peers and delinquency: A state-of-the-art review. *Invited for submittance at Journal of Criminal Justice*.
- Van Halem, Sjoerd, Evelien M. Hoeben, Wim Bernasco, and Tom F. M. Ter Bogt. 2016. Measuring short and rare activities: Time-diaries in criminology. *Revised and resubmitted to electronic International Journal of Time Use Research*.

Popular academic

- Bernasco, Wim, and Evelien M. Hoeben. 2014. Misdaaddagboeken. *Kennislink*: <http://www.kennislink.nl/publicaties/misdaaddagboeken>.
- Hoeben, Evelien M. 2013. Rondhangen en jeugdcriminaliteit: Veel rondhangen op straat stimuleert crimineel gedrag onder jongeren. *Kennislink*: <http://www.kennislink.nl/publicaties/rondhangen-en-jeugdcriminaliteit>.
- Hoeben, Evelien M., and W. Nathalie Feitsma. 2015. Een goeie hangplek luistert nauw. *Secondant*: <http://www.ccv-secondant.nl/platform/article/een-goeie-hangplek-luistert-nauw/>.



Adolescent delinquency is related to involvement in unstructured socializing, also referred to as 'hanging out'. Although the relationship is quite established, many questions remain unanswered. Why does hanging out lead to more delinquency? Are youths from disadvantaged neighborhoods more often engaged in unstructured socializing than their peers? Would hanging out in the city center be more crime conducive than hanging out at a friends' home? Does 'hanging out with the wrong crowd' indeed facilitate delinquency and substance use? This book addresses these and other questions to provide a deeper insight into the association between adolescent delinquency and the familiar phenomenon of youths 'hanging out and messing about'.

Evelien Hoeben is a researcher in sociology and criminology. She conducted the studies in this book at the NSCR. www.evelienhoeben.com

