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Collegiate Natural Drinking Groups: Structure, Dynamics and Impact on Drinking Outcomes

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How did such a long title come about and what am I really going to talk about?

- A bit of history in my research interest in natural drinking groups.
- A bit of history on my interest in identity theory.
- Current research:
 - Natural drinking groups
 - Transition to college and identity formation
 - Intersecting paths
- Direction and locations research may be going



What I won't be talking about

- SDSU AOD prevention efforts (even though there are a lot of exciting innovations there)
- Other drug issues, like legalizing marijuana, prescription drug abuse, or salvia divinorum (though I may mention a YouTube study we did)
- Alcohol labeling research that we are doing (even though its been called a waste of stimulus dollars)



Acknowledgements

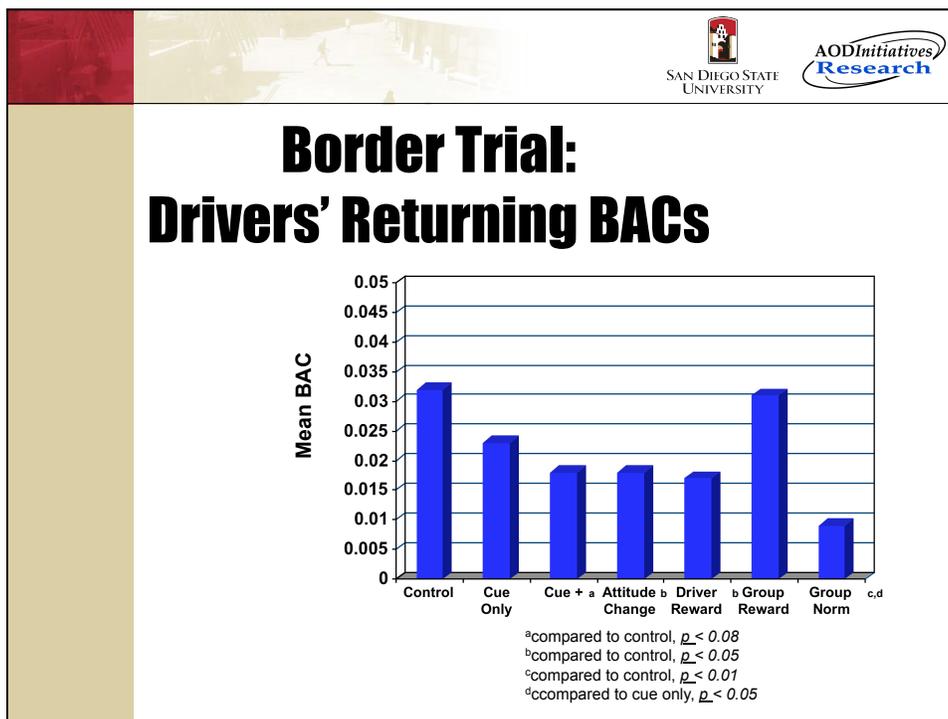
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Border and Designated Driver Research: from necessity to phenomenon

- Need to sample border crossers
- Interest in the misapplication of designated driver concept

Questionable Use

- Designated drivers have *higher* BACs than nondesignated drivers (Fell, Voas, and Lange, 1997).
- Flaws in the public's definition.
 - Driver permitted to drink
 - Apler (1989); Shore et al. (1991); Knight, Glascoff, and Rikard (1993); Lange, Voas, and O'Rourke (1998).
 - Post-consumption designation
 - Tolerance-based designation
 - Every driver believes they are a "designated driver"



Scaling Up Implications: RADD California Coalition

RADD Designated Driver's License™

- Pledge
- Rewards
- Brief intervention

CALIFORNIA
RADD DESIGNATED DRIVER'S LICENSE™

RADD
The Entertainment Industry's Voice for Road Safety

DESIGNATED DRIVER
Bearer must be 21 or older to participate

Valid December 1, 2006 through February 4, 2007

Get and use your card at www.radd.org

— Title Sponsors Here —

DESIGNATED DRIVER PLEDGE

As a designated driver, I pledge:

- ✓ That I am 21 years of age or older.
- ✓ That I will be or use a designated driver.
- ✓ When I am the designated driver, I will not drink alcohol beverages and will provide responsible transportation for all members of my group.

Signature _____ Date _____



Engagement, Identity and Normative Influence

- Interest in why social norms marketing may not work (Clapp et al, 2003)
- Evaluation of University of Michigan Residential Learning Centers.
- Most “Engagement” measures focus on activity level.



Social Identity Measures

- Four different question stems corresponding to each group:
 - How much do you feel you identify with the following groups?
 - How similar do you feel your attitudes and beliefs are to individuals in the following groups?
 - To what extent do you feel strong bonds to the following groups?
 - How important are the following groups to your sense of who you are—your self-identity?



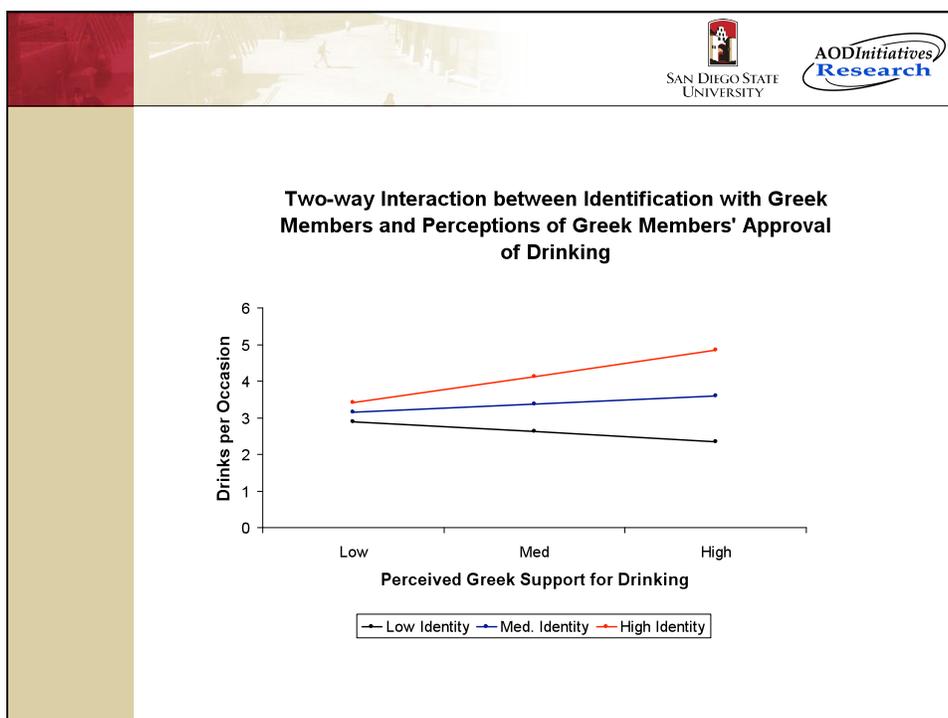
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Hierarchical Regression Analyses (identification with Greek-letter members and Greek-letter members' approval of excessive drinking among non-Greek members)

	B	β		R^2 Change		R^2 Total	
Gender	1.40	0.22	**	0.05	**	0.05	**
Identity w/Grk Membrs.	0.42	0.14	*				
Perception of Grk. Membrs.' approval of excessive drinking	0.18	0.08		0.18		0.24	**
Identity X Norm	0.36	0.23	**	0.01	*	0.25	**

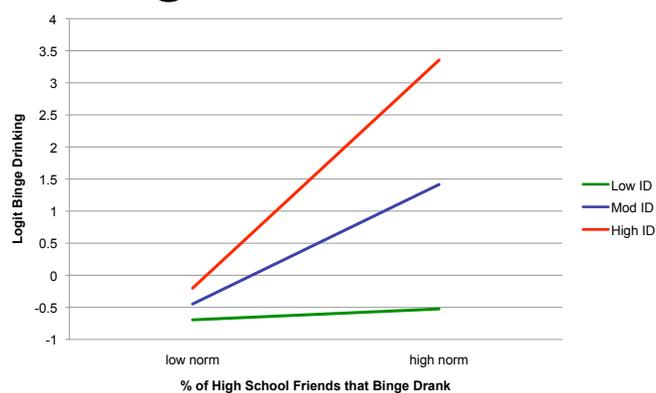
*p<0.05; **p<0.01

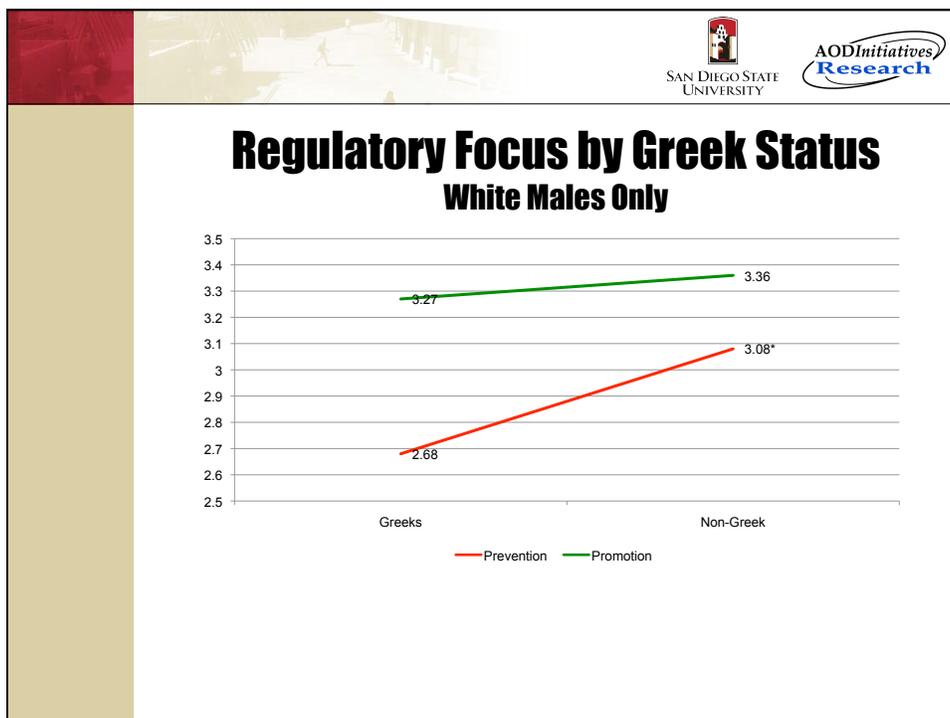
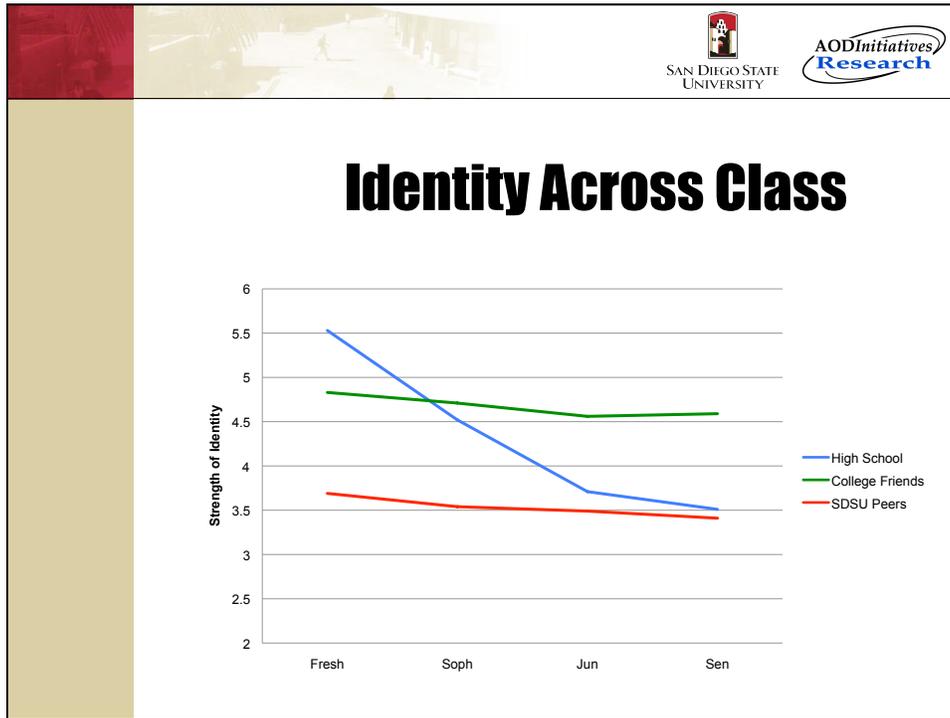


Sample Characteristics

- Web survey of undergraduates at SDSU.
- Spring 2009
- N=1091
- 66.7% female
- 59.4% White
- 11.7% Greek membership

High School Friends





Consequences of Regulatory Focus

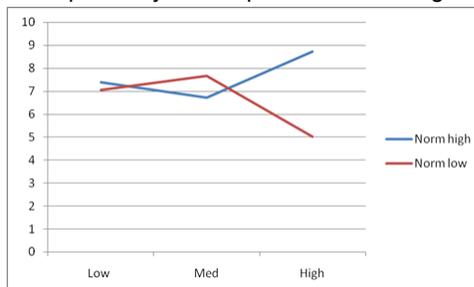
Prevention	Promotion
Cautious	Risky behavior
Avoid Losses	Maximize Gains
Vigilance	Eagerness
Regret Mistakes	Avoid Missed Opportunities
Concern for Rejection	Concern for being Ignored

Molden, Lucas, Gardner, Dean and Knowles (2009)
 Higgins (1997)

Drinking Group Norms and Identity

- Survey of 414 undergraduates who shared alcohol with others in past 30 days

Group identity X Group norm on drinking





But there are more to groups than identity

What about

- Relationships
- Roles
- Dynamics



Background

- Little is known about the small group environment in which college drinking occurs
- Most of the research focuses on individual level factors such as:
 - Motivations, expectations & personality
- Most college drinking events include small groups even when within larger parties

Source: Clapp et al 2008; Lange et al, 2006



Natural Drinking Groups (NDG)

- Drinking groups have typically been studied using observational techniques or in artificially created groups
- Typically conducted in bars, excluding students that are underage
- Thus, little is known about natural drinking groups:
 - How they form
 - Their structure
 - Their dynamics
 - How they deconstruct

Source: Clark 1981; Single 1993; Clapp et al 2006



NDG Defined

- A collection of two or more people organized to share a social activity centered on drinking who are bonded by friendship or other interpersonal relationships
- NDG are distinct from parties, which are typically larger than an NDG
 - Parties can be attended by multiple NDG and a single NDG could attend multiple parties
- NDGs can be described using these elements
 - Roles, relationships & norms

Source: Lange et al 2006

Ways we've studied NDGs

- Web surveys
- Interviews
- Online diaries
- Breath test surveys

- Future may include:
 - YouTube surveillance

Effect of Dating Relationships

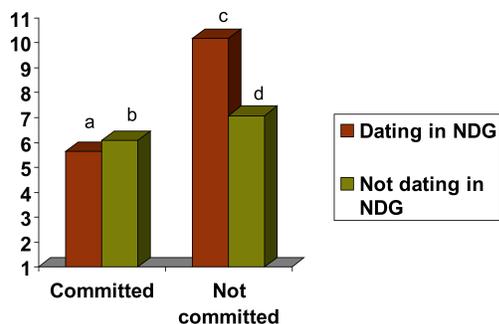
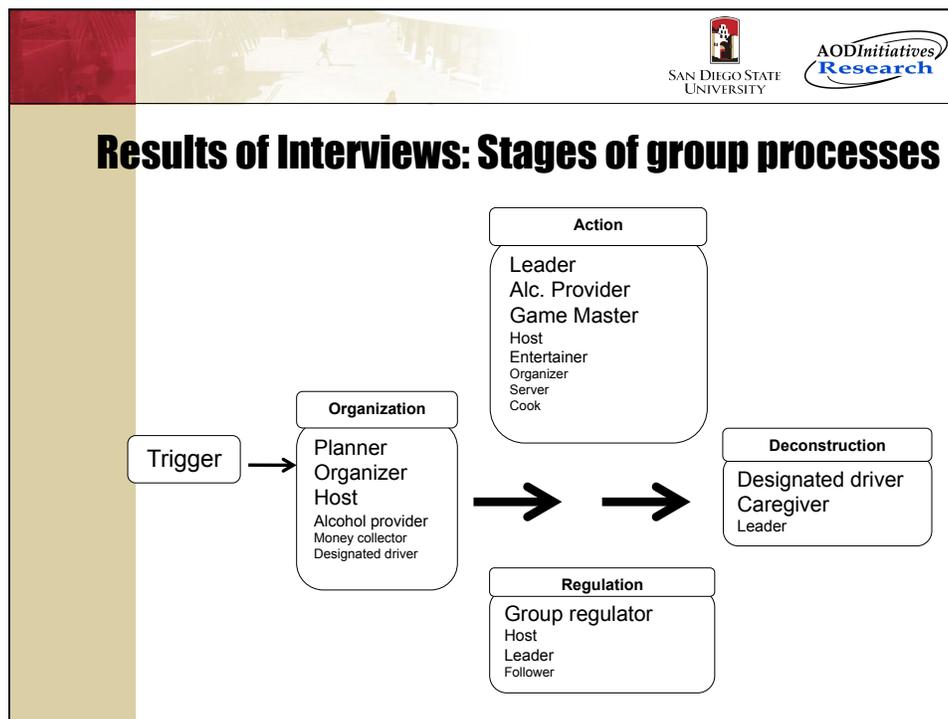


Figure 1. Number of Drinks Consumed in the NDG.






Diary Recruitment

- Recruitment location
 - Large university campus
 - Booths set up in high traffic areas
- Inclusion criteria
 - 18-24 years old
 - Enrolled at the university
 - Drank in the past year
 - Participated in a NDG in the past 30 days



Procedure

- Required to attend 1 training session (\$15)
- Complete Dairy (PLOG) entry once a week for 4 weeks
- Each week completed earned \$15, plus a \$15 bonus for completing all 4 (\$90 total)



Survey (PLOG)

Ex. Quantitative

- No. in group
- Group member demographics
 - Gender, student status
- Member drinking
 - Intoxication level
 - Drinking or not
- Participants drinking history

Ex. Qualitative

- Member names
- Participant event drinking
- Closeness to members
- What happened
- Event location
- Hook-ups
- Resources
- Roles



Question examples

- **What my group did:** Describe all the activities that you did as a group and also more individual activities (specifying group members' names) that each of you did during that time. Specify whether each activity was planned or not. Finally, write about how you felt about each of the activities and the process of deciding what happened next, and how involved you were in the decision making process and how you feel about your involvement.
- **This part is about the “social structure” of the group: What were the “roles”** (what we act like or the function we have) that each person potentially had during the gathering and the “social status” of each member of the group? Did some people have more influence on the group than others? Include details about the “how” and “why”, and your thoughts about it.



Participants

- 71 students recruited
- 68 completed at least 1 week
- 44% female, 44% White, 32% Seniors, 28% Freshmen
- Mean age was 20 (sd = 1.65)
- Reported mean maximum number of drink in past 30 days = 9.6 (sd = 6.3) drinks
- 77% reported at least one past month heavy drinking episode (5/4 drinks)

PLOGs

- 244 total entries
- 200 were alcohol-related events
- 61 of the 71 participants completed all 4 entries including non-drinking events
 - 30 reported 4 drinking events
 - 20 reported 3 drinking events
 - 9 reported 2 drinking events
 - 2 reported 1 drinking event

Coding

- Atlas.ti.5
- Diaries were converted to Microsoft Word Documents and imported into Atlas
- Coded by 2 graduate research assistants, using the schemes developed from a previous related study

Coding (continued)

- Coding was completed in 3 waves
 - 1st wave = detailed comprehensive coding of individual-level factors
 - 2nd wave = coding of between week and participant factors (ex. specific group members that repeat from week to week)
 - 3rd wave = checking first 2 waves for consistency and recoding
- Repeat coding occurring now

Data Coding

- By counting occurrences, qualitative variables were converted into quantitative data
 - Roles (leader, alcohol provider, follower, caregiver)
 - Couples present in the group
 - Mixed student groups
 - Gender composition of groups
 - Group size calculated by counting names and adding 1 (participant)



Themes

- **Micro Themes**
 - Effects of Alcohol
 - Benefits and consequences
 - Event area
 - Group members' relationships
 - School organizations, from the dorms, fraternity
- **Macro Themes**
 - Group closeness
 - Member carry over
 - Same role in multiple weeks



Quotes

M3: She dropped her phone in the toilet and peed in her pants

M0: I got arrested.

W2A18: I was bummed because I wouldn't have anything to write about for this survey. Other than being bummed I was bored because when alcohol is involved things tend to be more fun.

W2A12: Jerry and Bill both decided to go to this party and I tagged along with Bill because he is my boyfriend.



Results

- Groups ranged from 2-11 or more, $M=4.5$ ($sd = 1.97$)
- The mean percentage of drinkers was 87% (13%-100%) excluding participant
- Average drinks per drinking group member ranged from 3.9 ($sd = 1.5$) in week 1 to 4.4 ($sd = 1.45$) in week 4.
- Most of the events were private events (house parties, hanging out in dorms etc) 75% ($n = 161$)



Individual & Group Effects on Participant's Drinking

	B(S.E.)	Sig
Male vs. Female	-1.758 (.633)	.006
Age	-.426 (.208)	.041
Number of locations visited	.772 (.501)	.125
Party Type (1=hanging out, 2 = group level party, 3= larger party)	1.802 (.345)	.002
Public vs. Private	-.761 (.820)	.355
Percent of other drinkers in the group	4.154 (1.68)	.012



Individual & Group Effects on Participant Intoxication

	B (S.E.)	Sig
Male vs. Female	.100 (.265)	.706
Age	-.130 (.096)	.180
Number of locations visited	.263 (.212)	.216
Party Type (1=hanging out, 2 = group level party, 3= larger party)	.398 (.146)	.007
Public vs. Private	.062 (.344)	.856
Percent of other drinkers in the group	2.403 (.690)	.001
Mean age of the Group	-.136 (.051)	.009



Roles

- Combination of Quantitative and Qualitative survey items (1st two weeks)
- Leaders (49%)
 - Makes decision and guide the group
 - Leaders are likely to repeat across 2 weeks
 $\chi^2 = 10.2, p < .01$
 - More likely in parties (dorm or house) vs. bars or restaurants $\chi^2 = 8.46, p < .01$
- Followers (47%)
 - Elect to have little to no impact on group decisions
 - Tends to be the same people $\chi^2 = 3.77, p = .052$

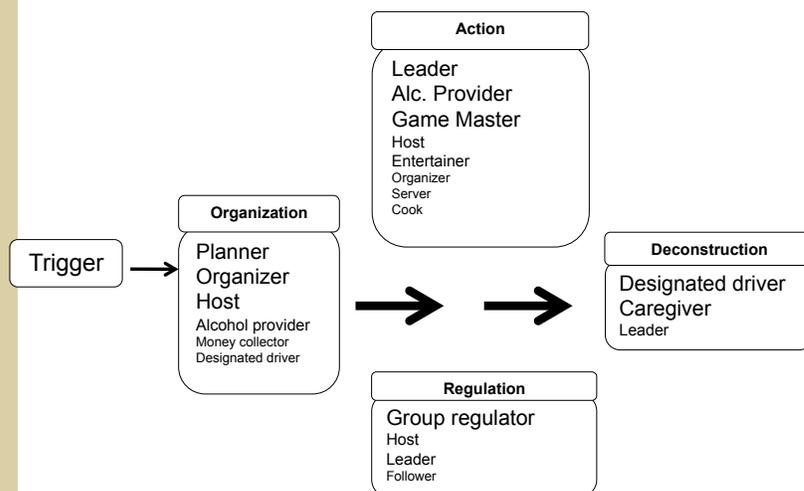
Roles (continued)

- **Caregivers (15%)**
 - Take care or “babysit” other group members
 - No caregivers were present when the group was all male
 - Male viewed care giving as protecting females, females were more nurturing or mutual responsibility
- **Alcohol Providers (25%)**
 - Most likely for parties $\chi^2 = 6.60, p < .01$
 - Most important for younger groups
- **Couples (38%)**
 - Although not a role, influenced many aspects of the group dynamics
 - Caring for a girlfriend cues more nurturing behavior by a male
 - Couples tend to be fracture point for groups deconstruction

Conclusions

- Effective 2nd step exploring relationships between NDG and drinking
- Significant contribution roles within the group
- Contexts are also likely to interact with NDG characteristics (party size, location, party type etc)

Results of Interviews: Stages of group processes



Ongoing research

- NDG Breath Test Survey
 - Proximal testing
 - Outcome follow-up
 - Planning follow-up
- Other surveillance
 - YouTube monitoring

