What are male coalitions good for? Sociosexual attitudes predict formation of male (but not female) groups in a real-world sample

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Sociosexual attitudes predict formation of male (but not female) groups in a real-world sample

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INTRODUCTION

The function of coalitions is a central topic in primatology and crucial for understanding the social dynamics of primates including humans (van Schaik 1996, Harcourt & de Waal 1992). Due to differences in parental investment, male and female coalitions are expected to meet different social needs. Generally, male coalitions are predicted to relate more to aggression, defence, cooperation and mate acquisition, while female coalitions are predicted to relate more to the acquisition of resources (Miller 1998). Actual coalitionary behaviour, however, varies both between and within primate species. Male and female coalition formation has been intensively investigated in non-human primates in the last decades (e.g. Mitani 2009; Kulik et al. 2012), but remain surprisingly little studied in humans, partly due to a lack of data of suitable data on adult behaviour.

QUESTIONS

Here, we explore gender differences in coalitionary behaviour by investigating student friendship groups (see * below for details on data). During their 1st study year, students form single-sex groups of around 15 persons, which often provide the basis for a lifelong association. Our questions are:

1) Do groups cluster in relation to attitudes regarding sociosexuality?

2) Are male and female groups different with regards to sociosexuality attitudes and other mating- related variables?

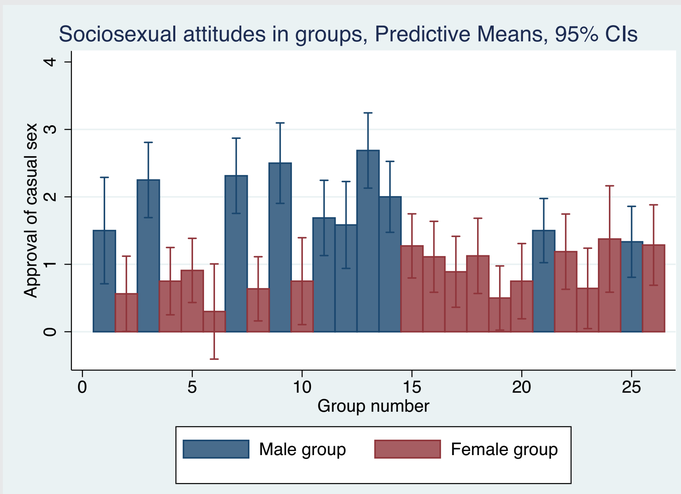
MEASURES

We conducted a baseline survey before formation of the groups, which included several questions about socio-economic background, lifestyle and health, social life, life goals, affectual state and personality. Follow-ups surveys were conducted after group formation, asking about social relations and group performance. Individual sociosexual attitudes were measured by two statements, rated on a 5-point Likert scale ("I have to be closely attached to somebody before I am comfortable having sex with them" / "I would rather have one than several sexual relationships at a time."). These questions correspond to items 7 and 6 in the full sociosexuality-questionnaires (as developed by Simpson & Gangestad 1991 and Penke & Asendorpf 2008) and were reversed for analysis, so that higher scores indicate less restricted sociosexual attitudes. The mean of these two items were combined to into one sociosexual attitudes-variable. Survey items also included dating status (dating versus single) and self attributes, where participants rated their own skills and features vis-à-vis others.

DATA & ANALYSIS

During the study year, students formed 10 male and 15 female friendship groups, with an average group size of 14 members. Over a follow-up including three consecutive surveys during one year, we examined individual-level factors associated with this group formation (N=147–196).

RESULTS



Attitudes to casual sex varied by gender on the individual and group level. As expected, women were overall more sociosexually restricted in their attitudes towards casual sex than men were; men also had more variations in their answers (mean for females 0.88, sd 0.77, min 0= strongly agree, max 3=disagree and mean for males 1.92, sd 0.94, min 0 = strongly agree, max 4 = strongly disagree with statements in support of monogamy and emotionally close sex). Gender differences are also obvious on a group level as illustrated in the Figure. Female groups with the least restricted sociosexual attitudes were similar to the male groups with most restricted attitudes.

Regarding our questions 1 and 2: multilevel regression analysis show that sociosexual attitudes did predict group formation, but only for male groups.

Table: variances between and within friendship groups of variables related to sexual and mating behaviour.

Variable	MALES β	MALES Variance between groups	MALES Variance within groups	MALES ICC	FEMALES β	FEMALES Variance between groups	FEMALES Variance within groups	FEMALES ICC
Sociosexuality attitudes	1.94	0.35	0.89	13%	0.87	1.17	0.74	5%
Dating status (relationship=1)	0.25	0.18	0.38	18%	0.36	0	0.49	0%
Self-perceived social skills (0-10)	6.99	0.97	1.24	38%	7.12	0.29	1.04	7%
Self-perceived physical attractiveness (0-10)	6.43	0.87	1.31	31%	6.44	0.34	1.16	8%

Note: Values are not mutually adjusted. ICC=intraclass correlation, or the % of total variance due to variation between groups (variance between groups divided by the sum of the variance between groups and the variance within groups). N(respondents)=201, 130 females, N(groups)=26, 16 female.

Also, dating status and perceiving oneself to be socially skilled and physically attractive, predicted how males, but not females, teamed up with each other.

CONCLUSION

Gender differences in human coalitions are often associated with the evolutionary history of men as hunters and warriors, who collaborate to hunt big game and defend or attack other male groups. Additionally, however, male coalitions also relate to sexual selection on a social level (van Schaik et al. 2006; Miller 1998).

With data from the FFS study, we found that among all the individual-level variables investigated, factors related to sexual and mating behaviour were strongly associated with group formation among males but not among females. This is to our knowledge the first longitudinal study to detect influences of sociosexual orientation on group behaviour. Among the limitations of our study is that we did not first use the full sociosexuality questionnaire (SOI-R, Penke & Asendorpf 2008). However, that questionnaire has now been applied to the same study in a later survey wave.

So: in our sample of young Westerners, male but not female group formation and success was strongly predicted by factors related to mating status and sexual strategies. We suggest that mate attraction can be an important feature of male coalitions in humans.

*

DATA COLLECTION WITHIN THE FRATERNITY FRIENDSHIP STUDY

Data is part of the **Fraternity Friendship Study,** a longitudinal study of group formation conducted in an old and large student organisation at a major European university (www.theffs.nl) (Pearce et al. 2016; Rotkirch et al. submitted). The special structure of this Fraternity provides an opportunity to study friendship groups and over time.

The friendship-group formation process is guided by older Fraternity members and clearly structured. Around 300–400 students enter the Fraternity each year. In August, prospective members spend time together engaging in various bonding activities. After that they are encouraged to divide for friendship groups with others in their intake year. After 8–9 weeks, groups can register themselves as a named entity and seek approval from the Fraternity board. In order to be approved, groups have to demonstrate commitment to the group and familiarity with each other. Friendship group membership is exclusive and, once formed, fixed.

Once established, friendship groups are expected to meet at least one evening every week as a group and also to attend Fraternity activities. On Fraternity nights, groups meet each other and enter competitive singing and ritualized fights, which affects their status as a group as well as individual members' position in the local 'mating market' (Pearce et al., 2016). Most Fraternity members come to feel very close to their group within the first year (Rotkirch et al. submitted).

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