

# Planning Experiments

## Assignment 3

### Research Question

Is there a greater proportion of multi-favourite families in the LGBTI community than in the heterosexual community in terms of time and length?

### Method

**Apparatus:** 100 questionnaires

**Conditions:** Participants' sexual orientation, length of time spent parenting multiple pets

**Measures:** Questionnaires are used to obtain information about the owner's sexual orientation and basic information about the pet

**Procedure:**

Record the name of the participant

Record the sexual orientation of the participant

Record the age of the participant

Record the size of the participant's household

Record the name of the participant's pet's co-parent (family/partner/roommate)

Record the name of the participant's pet

Record the number of pets the participant has

Record the duration of ownership of the participant's second pet

Record previous pet ownership experience

**Participants:**

By distributing questionnaires in several community pet shops, offline research was used to ask each respondent about their gender, age range, length of pet ownership, pet's name, gender, age, and duration of ownership.

My goal was to have the LGBTI group and the heterosexual group equal in number and gender in an identical age range. If there is not enough data for the LGBTI group, add offline research that goes to the LGBTI club or community.

### Results

\* What hypotheses will you be testing?

**Hypothesis One:**

More of the LGBTI community are in multi-favourite families than the heterosexual community

**Hypothesis Two:**

Longer duration of multiple-favourite families in LGBTI groups than in heterosexual groups

## Analysis

\* What plots and statistical tests will you use?

Participants were first excluded from joint pet ownership (e.g. the respondent's partner, family members, roommates, etc.), and all questionnaire results were grouped by age (18+, in groups of 5 years) to ensure that each group had a certain amount of data, and then ANOVA was used to compare the means of each type.

It is also important to record the ownership experience of pets ever owned, and if they qualify as multi-pet ownership, add the two parts of the duration.

## Discussion

\* Identify possible confounding variables and experimental errors

Co-parenting exclusion, there may be multiple questionnaires filled out by one same family — screened by both family information and pet information.

May not collect enough data on the LGBTI community.

\* Reflect on how you have balanced internal and external validity in your experiment design

A section of the population may be reluctant to disclose their sexual orientation.

\* Consider any ethical issues that may arise. How have you accounted for this in your experimental design?

Sexual orientation is a personal category and offline research (face-to-face) may be too rude (depending on the views of different groups). Depending on the reality of the situation, it may be possible to decide whether to change to an anonymous online questionnaire.

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