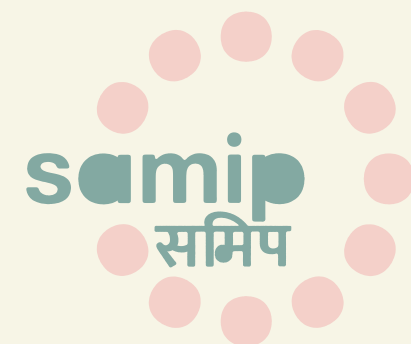


# Exploring Key Influencers of Menstrual Seclusion in Nepal using Social Network Analysis



Strengthening Actions  
in Menstrual Health and  
Hygiene Interventions  
for Promotion of  
Women's Health in Nepal



In Partnership with & Supported By:



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# Background

- Menstrual seclusion is a **religiously and socially rooted** practice.
- Practices range from **restrictions of everyday activities** (e.g., avoiding touching food, religious activities, and indoor activities) to **residing in separate spaces** (i.e., *chhau goths*) for the durations of their menstrual cycle.
- Despite **significant health risks posed by menstrual seclusion**, there is **little known about how to influence behaviors** promoting health and safety during menstruation.



A girl shows where she sleeps outside the home.



A women shows where she sleeps during menstruation, separate and downstairs, but still inside the home.

# Defining *Chhaupadi*

- All participants in our study **identified as practicing *chhaupadi*** – we adopt this term in our presentation to respect community usage, while recognizing that definitions may differ across regions.
- Participants defined *chhaupadi* as behavioral restrictions during menstruation, but they varied by participant as follows:
  - **No involvement in religious activities (100%)**
  - **No entering the kitchen (100%)**
  - Prohibited from using the household latrine (87%)
  - Use separate water tap for bathing or washing (97.8%)
  - No preparing food (95.7%)
  - Prohibited from using the household latrine (87%)
  - No eating dairy products (69.6%)
  - No touching men (69.6%)
  - No touching plants or animals (63%)
  - **Sleep outside the home (65.2%)**
  - **Sleep separately inside the home (37%)**
  - No attending school (0%)



# Objectives

- Given the social pressure in communities associated with following menstrual restrictions, we aim to reveal:
  - **Key Influencers** of menstrual restrictions, and
  - Associated **relationship characteristics that influence menstrual seclusion practices.**
- This information can be harnessed to effectively design menstrual health interventions focused on shifting social norms to improve health.

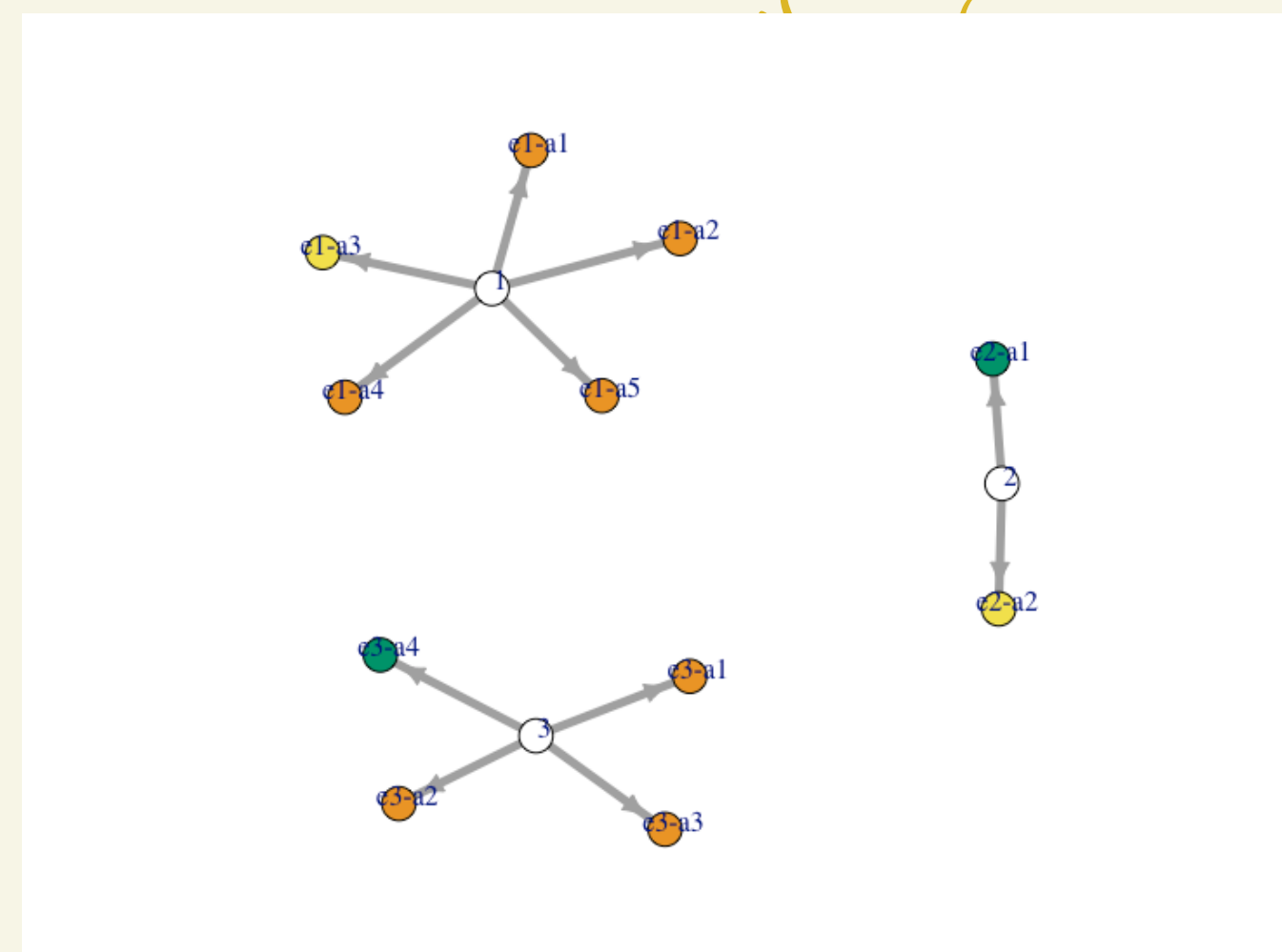
# Methods – Social Network Analysis

**Social Network Analysis (SNA):** Set of methods for the analysis of social structures, particularly the relationships within a structure.

- Grew out of the fields of sociology, psychology, and organizational studies
- Central idea is that **relationships matter** in decision making and in the **adoption of behaviors**
- **Primarily quantitative, with few open ended qualitative questions added**

## Key Terms:

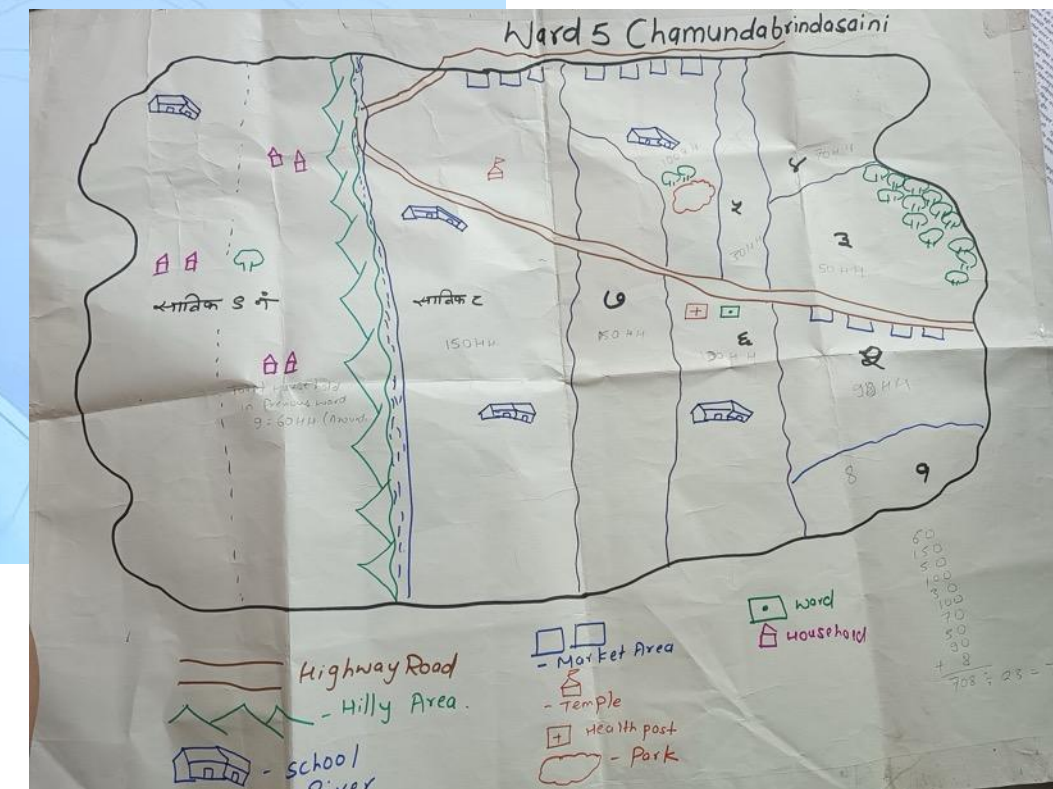
- **Ego:** Individual being interviewed
- **Alter:** Person an ego is reporting a relationship with
- **Ego-centric dataset:** Dataset developed with several egos at the center of their own “universe”, we then collect information (or attributes) about the egos, their alters, and the types of relationships they have.



Example of an ego-centric dataset – each white dot is an ego, and the dots they are connected to are the alters.

# Methods – Site, Sample

- **Dailekh, Nepal** (high prevalence of *chhaupadi* practice) <sup>1</sup>
- **Sampling:** Research assistant developed maps of two villages with local community members, identified location and approximate number of residences, skip pattern based on number of number of participants needed per village.
- **46 women** surveyed (currently practice *chhaupadi*, interviewed first *chhaupadi* practicing female who answered door) (exploratory dataset size)
- **Ego-centric dataset:** Nomination of up to 5 alters per ego (Who influences your decision to practice *chhaupadi*?)



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# Methods – Survey & Analysis

- **Survey:**
  - Verbally administered by research assistant
  - 59 questions max (if nominating 5 alters) and approximately 40 minutes to complete
  - Demographic information (egos and alters)
  - Relationship characteristics between egos and alters (e.g., nature, length, frequency of contact)
  - Influence over *chhaupadi* practice (Could this person convince you to stop practicing *chhaupadi*?)
- **Analysis:**
  - Means and frequencies to report demographic data
  - T-tests and chi-squared tests as appropriate for comparisons



# Results – Egos (N=46)

## Demographic Characteristics

- **Mean age:** 27 years
- **Caste/ethnicity:** 41% Dalit, 28% Brahmin, 13% Chhetri
- **Female:** 100%
- **Hindu:** 100%
- **Employed:** 67%
- **Married:** 70%
- **Education:** 37% completed class 6-10, 26% illiterate
- **Religion:** All expressed is very important (N=41), or important (N=5)

Characteristic	Egos (N=46)
<b>Caste/ethnicity</b>	N (%)
Brahmin-Hill	13 (28.3)
Chhetri	6 (13)
Thakuri	2 (4.3)
Damai/Dholi	3 (6.5)
Sanyasi/Dasnami	3 (6.5)
Dalit	19 (41.3)
<b>Employment</b>	N (%)
Employed	31 (67.4)
Student	11 (23.9)
Housewife	3 (6.5)
Unemployed	1 (2.2)
<b>Marital status</b>	N (%)
Married	32 (69.6)
Single	12 (26.1)
Widowed	2 (4.3)
<b>Highest level of education</b>	N (%)
Illiterate	12 (26.1)
Literate or up to class 5	8 (17.4)
Class 6-10	17 (37)
Class 11-12	6 (13)
Bachelor's degree or above	3 (6.5)
<b>Household size (people) mean</b>	7.1
<b>Head of Household sex (female)</b>	4 (8.7)
<b>Ego is head of household</b>	1 (2.2)

# Results – Alters (N=218)

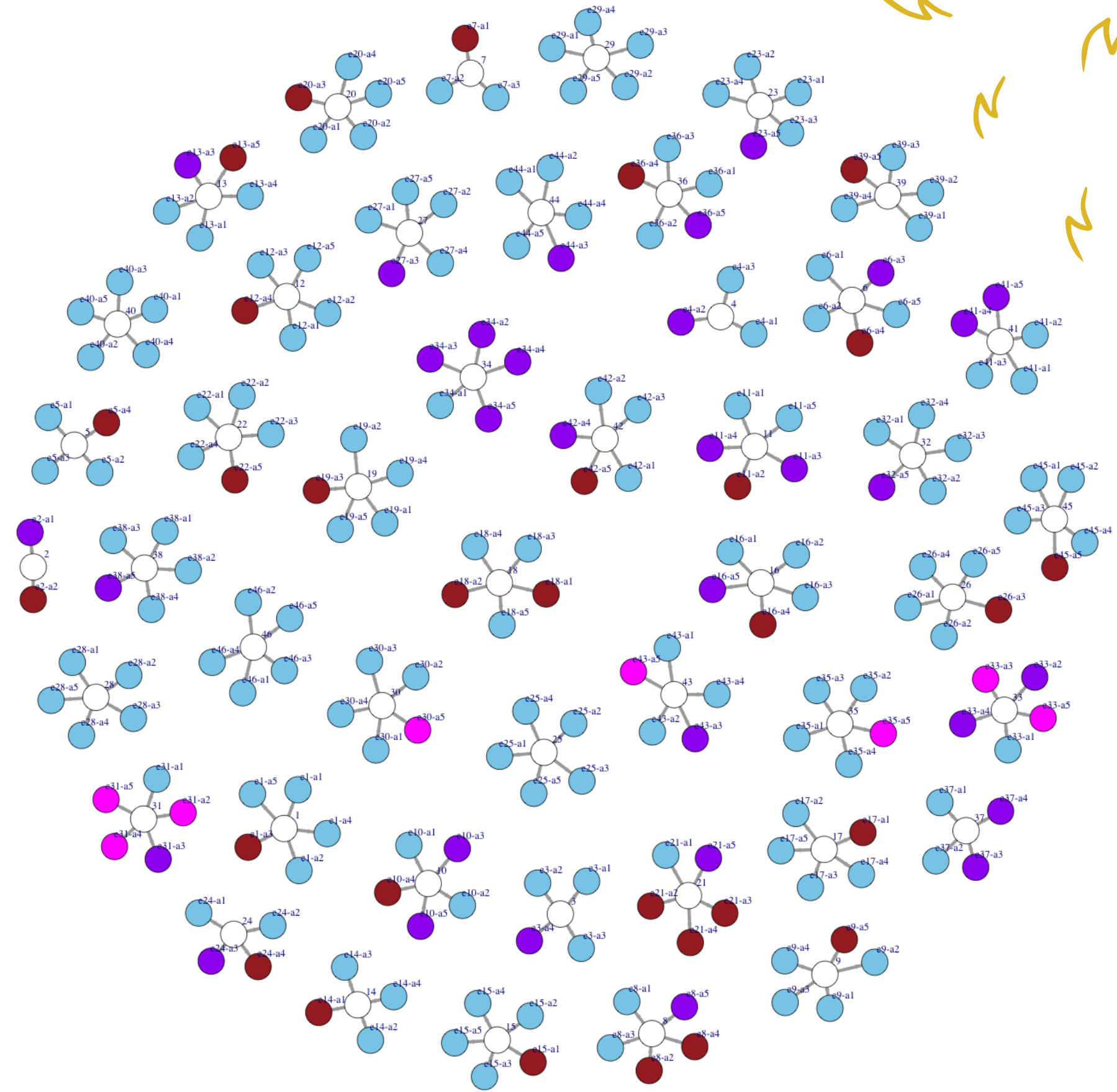
- On average, egos nominated **4.7 alters each** (range 2-5) (Who influences your decision to practice *chhaupadi*?)

## Influencers of menstrual seclusion practices are:

- Mean Age: 52 years**
  - Significantly older than egos (t-test p-value>0.001)
- 48% Female**
- 68% are Family members**
- Caste/ethnicity** groups were represented at similar rates (chi-squared p-value=0.8542)
- Employment types** were statistically significantly different between egos and alters (chi-squared p-value>0.0001)

Characteristic	Alters (N=218)
<b>Relationship to Ego</b>	
	<b>N (%)</b>
Family	148 (67.9)
Neighbor	32 (14.7)
Faith Healer	30 (14.7)
Friend	8 (3.7)
<b>Caste/ethnicity</b>	
	<b>N (%)</b>
Brahmin-Hill	64 (29.4)
Chhetri	32 (14.7)
Thakuri	23 (1.4)
Damai/Dholi	16 (7.3)
Sanyasi/Dasnami	12 (5.5)
Dalit	91 (41.7)
<b>Employment</b>	
	<b>N (%)</b>
Employed	142 (65.1)
Unemployed	64 (29.4)
Housewife	8 (3.7)
Student	4 (1.8)

# Results – Relationships



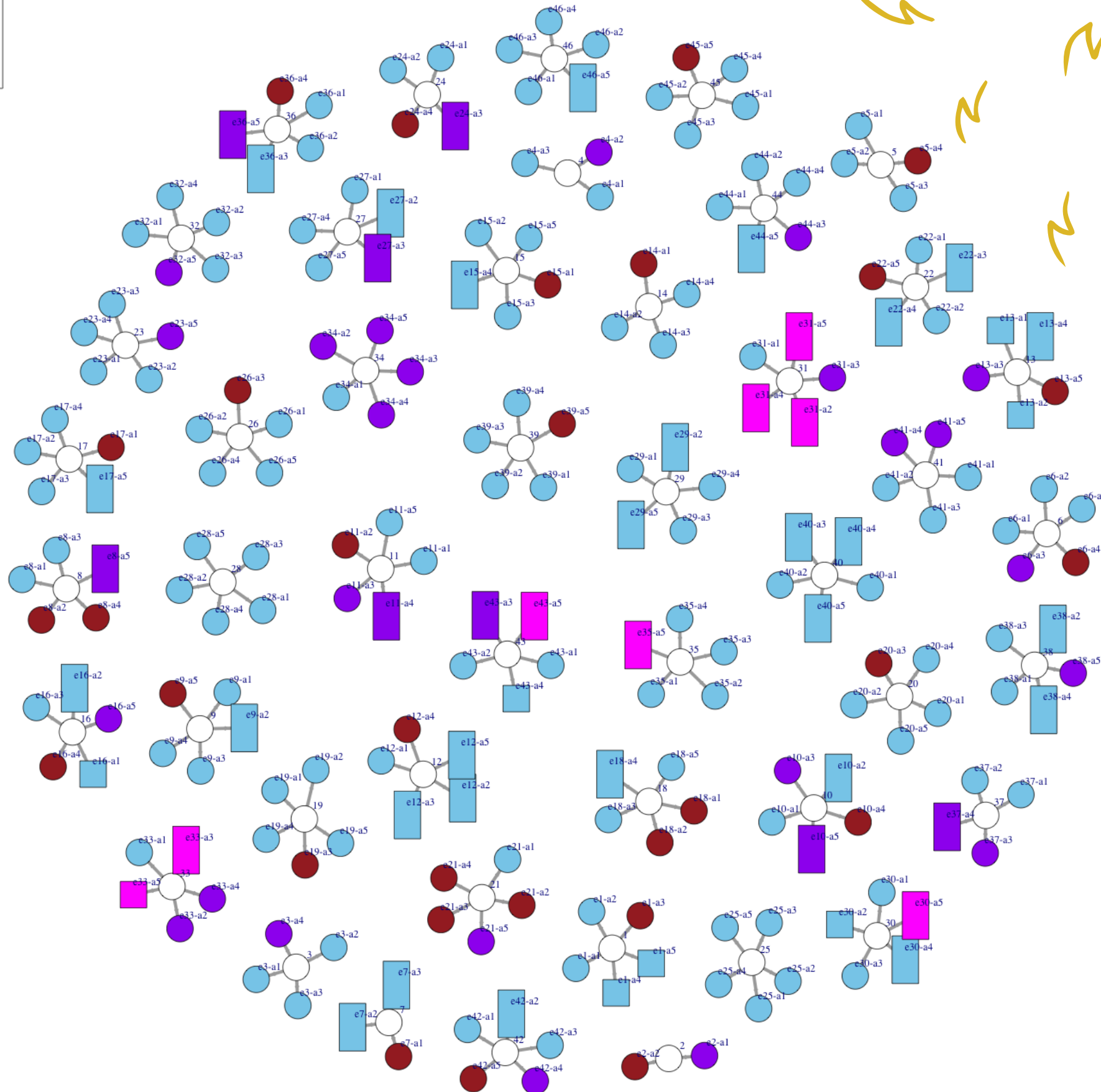
Who influences your decision to practice *chhaupadi*?



# Results – Relationships & Influence to Stop



No = circle  
 Yes = square  
 Maybe = rectangle



Ego  
 Family Member  
 Friend  
 Neighbor  
 Faith Healer  
 Teacher  
 Other

Could this person convince you to stop practicing *chhaupadi*?



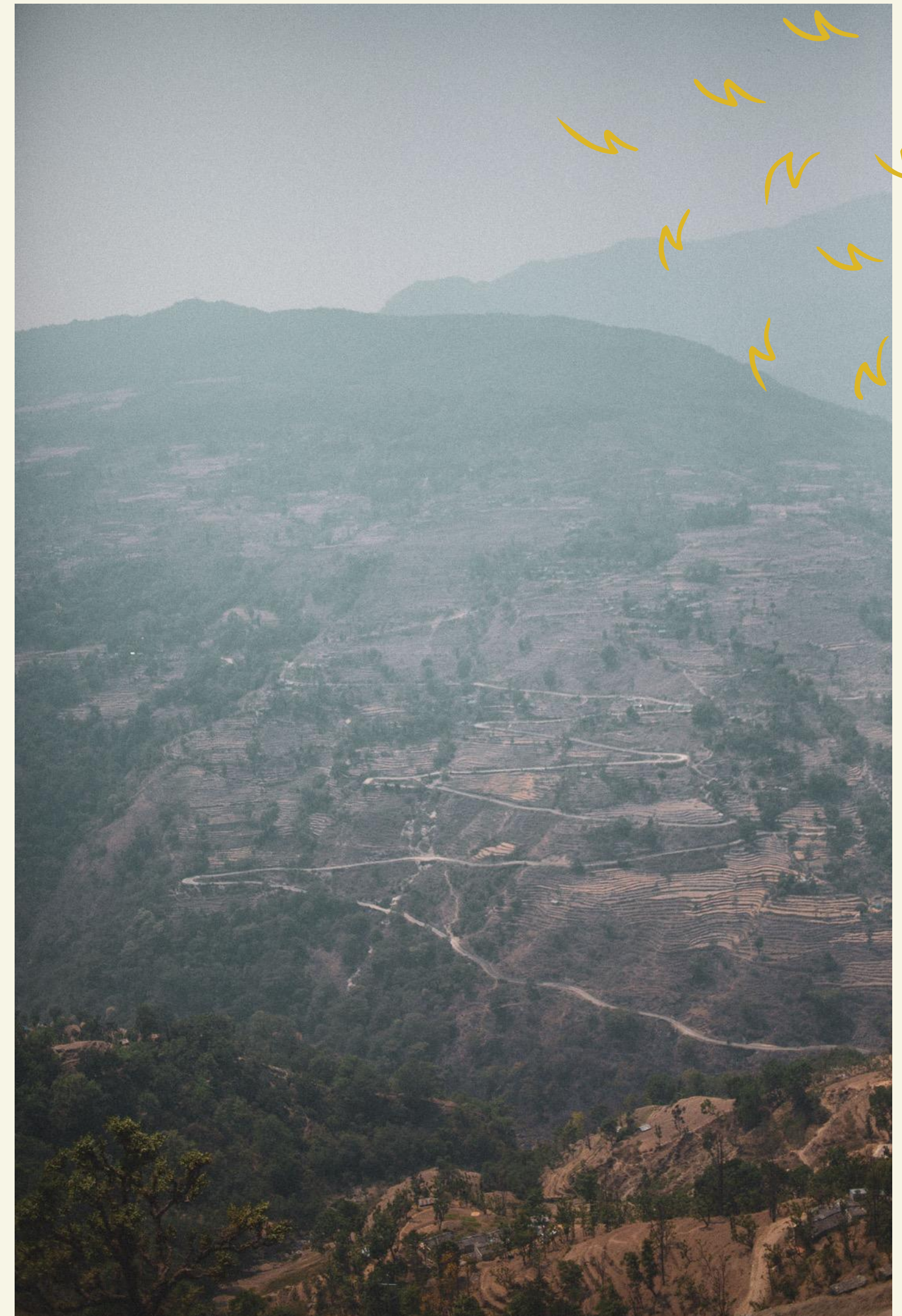
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# Results – Alters (N=218)

- Across all relationship types:
  - **Mean relationship length = 10+ years**
  - **Mean contact in the relationship = once per week**



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# Conclusions



- **Family members** are the most common influencers of menstrual seclusion practices, but not necessarily the most poised to change menstrual seclusion practices. Only a few mentioned that family members could convince them to change.
- **Religious figures** like faith healers are influential figures in the practice of *chhaupadi* but are currently not identified as individuals who could (or would) change practice.
- Loose tie relationships, like **friends or neighbors**, who still contribute to the social norms surrounding *chhaupadi* may be uniquely positioned to leverage for change.
- Influencers of current *chhaupadi* practices were strongest among individuals with **frequent (weekly) contact and long-term relationships (10+ years)**, regardless of relationship type.

# Implications

Those closest (family) reinforce *chhaupadi*—but **those less closely tied** (friends and neighbors) may be best positioned to change it.



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