

# APPLYING SOCIAL NETWORK ANALYSIS TO THE SPREAD OF MOODS AND EMOTIONS

AMONG GRADUATE NURSING STUDENTS

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#### Background

Affect contagion, the transfer of moods and emotions in groups, occurs with interaction.

It's existence is well established in corporate and industry settings to influence workplace outcomes.

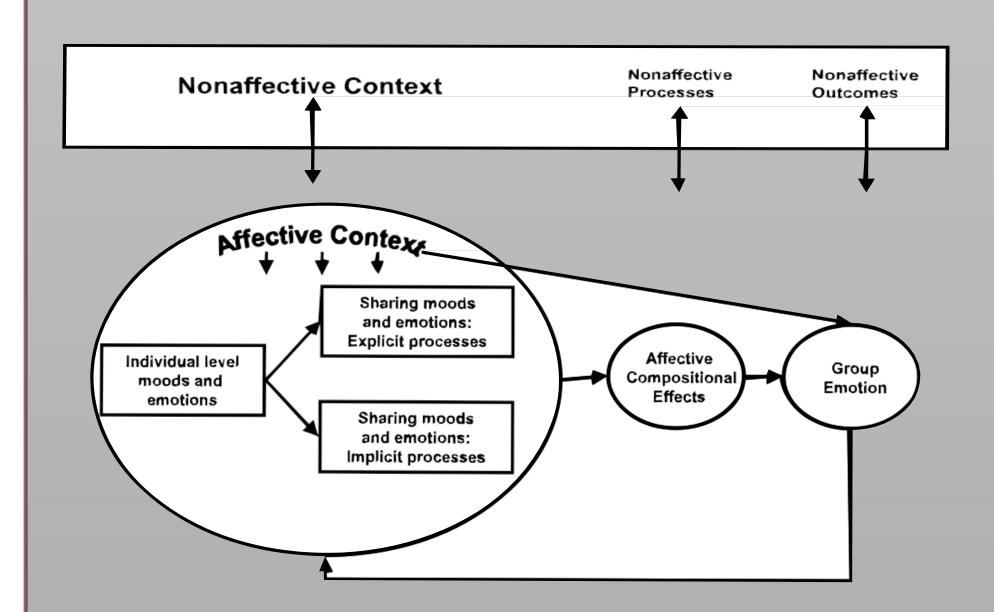
Limited information exists regarding the primary and secondary effect of affect influencing stimuli in a natural setting.

#### Purpose

Observe the evolution of affect contagion among advanced practice nursing (APN) students using social network analysis and linear statistical methods.

#### Methods

The theoretical model "Moods and emotions in small groups and work teams" (Kelly & Barsade, 2001) was used to develop this study.



Students were surveyed twice daily, measuring changes in affect.

Participants were assigned to small groups for stimuli exposure based upon network location.

The stimuli exposure to small groups occurred on 12 separate days.

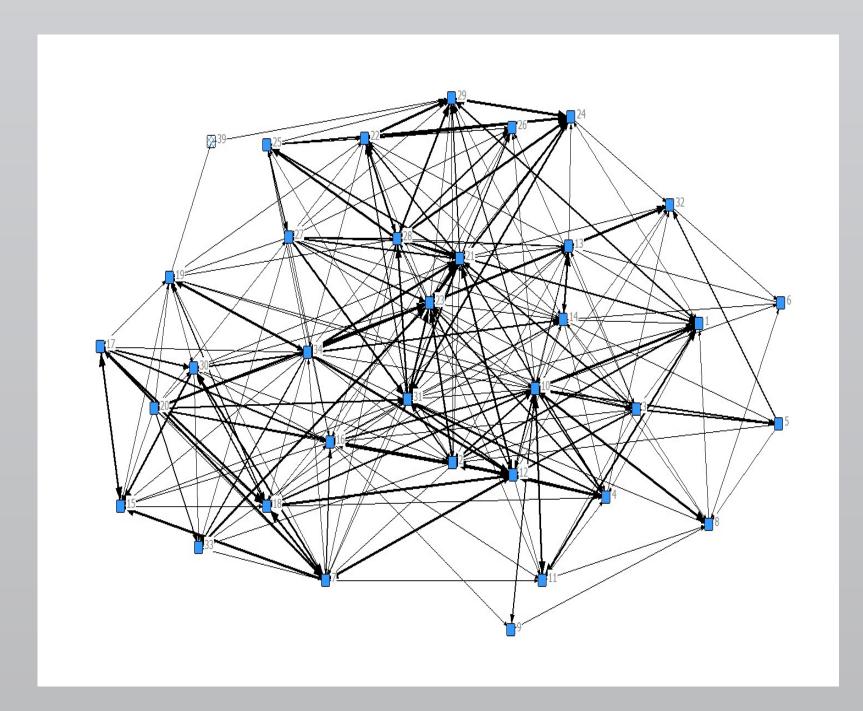
#### Results

#### Demographics

	Whole Network (N=60)	Participating Network (n=35)	
<u>Gender</u>			
Male	25 (42%)	14 (40%)	
Female	35 (58%)	21 (60%)	
Academic Program			
WHNPP	2	2 (100%)	
CNS	2	0 (0%)	
FNP	29	13 (45%)	
RNA	19	10 (53%)	
PMHNP	13	10 (77%)	
Branch of Service			
Army	27	17 (63%)	
Navy	21	10 (48%)	
Air Force	15	8 (53%)	

Roster network (n = 35)

Social network surveys were used to establish relationships among the participants.



Affect was correlated using assortative mixing.

Afternoon positive affect (APA) and negative affect (ANA) were measured at each time point.

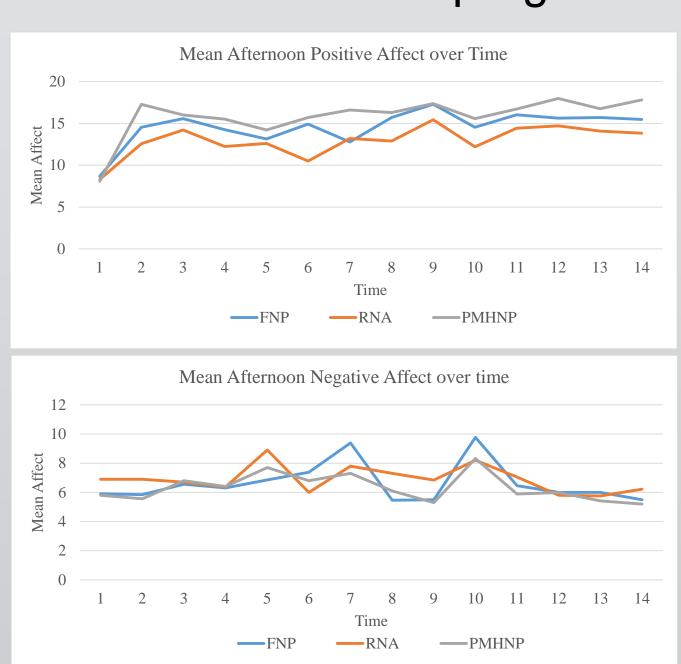
Correlations among participants occurred during time points 1, 6, 8, and 10.

Time	Affect Type	Assortativity	Jackknife lower CI	Jackknife upper Cl
T1*	ANA	0.561*	0.321	0.872
T6*	ANA	0.292*	0.116	0.470
T8*	ANA	0.390*	0.060	0.757
T10*	APA	-0.258*	-0.494	-0.030

References upon request

Family Nurse Practitioner (FNP) and Nurse Anesthesia (RNA) students' affect was more labile than Pysch / Mental Health Nurse Practitioner (PMHNP) students.

PMHNP students had positive affect consistently higher than the other two programs and negative affect consistently lower than the other two programs.



## Network affect evolved and changed across time.



### Conclusion

A shared affect occurred among the participants

It may be possible to modify group emotion through a shared affective experience

Academic programs demonstrated differences in affect

Affect evolved overtime

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