

Overview

We propose that a family systems paradigm can be leveraged within Social-Computational Systems (SoCS) as a means of advancing our understanding of systems that include both people and technology.

Definitions

- **Family systems theory** arises from developmental psychology and recognizes that we cannot model family systems as unidirectional and bivariate influence of parents on children. Instead, a family system is more accurately portrayed as a dynamic process where parents and children are iteratively and bidirectionally influencing one another over time (Cummings et al. 2012).
- **Family systems research** is comprised of an emerging set of methods for studying families as a system; three main tenets of family systems theory include:
 - 1) A focus on transactional and bidirectional processes
 - 2) Longitudinal effects
 - 3) Multi-level analysis

Core Tenets



Process-Oriented



Longitudinal



Multi-Level Analysis

Family Systems Theory



Strengths

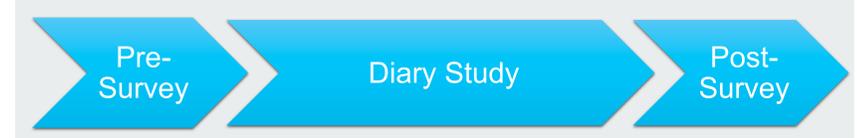
- Facilitates a better understanding of complex processes that exhibit bidirectional and iterative influences between actors within the system.
- Allows researchers to uncover long-term, causal relationships, not just simple correlations.
- Moves beyond the individual as the main unit of analysis to include dyadic, triadic, and group-level analyses.
- Leverages a proven methodology within psychology to the domain of social computing.

Our Current Study

Adolescent Online Safety

Longitudinal, Dyadic Diary Study

- Mother and Adolescent (13-17 year-olds) Dyads
- Separate Diaries (Private)
- 2 Months, Weekly Reports



Resilience Framework

(Stevenson and Zimmerman 2005)



Conclusion

- Family systems approaches can and should be extended beyond the family unit to understand other complex, social systems, including those within social computing.

Works Cited

- Cummings, E. M., Bergman, K. N., and Kuznicki, K. A. (2012) Emerging Methods for Studying Families as Systems, *PSU 20th Annual Symposium on Family Issues*, State College, PA, 2012.
- Laurenceau, J.-P., and Bolger, N. (2005) Using Diary Methods to Study Marital and Family Processes, *Journal of Family Psychology* (19:1), pp 86-97.
- Stevenson, F. and Zimmerman, M. A. Adolescent Resilience: A Framework for Understanding Healthy Development in the Face of Risk. *Annual Review of Public Health*, 26 (2005), 399-419.