
From Streaks to Self-Tracking: Social Media Use as a Precursor to Youth Personal Informatics

Jennifer Pierre

University of California, Los Angeles
Los Angeles, CA 90025, USA
jp639@g.ucla.edu

Abstract

This position paper serves as a blend between thought piece and speculative research agenda exploring the connection between youth social media use and the development of socially-motivated personal informatics practices among this population. As informed by the authors' research assessing social media use for social support among youth in Lafayette, IN, this paper poses questions around how youth social media use may be perceived and framed as a precursor to more developed

personal informatics practices. A key finding driving forth these questions and connections is the conscious and specialized use of social media sites for various personal needs noted in youth interviews, and the self-reflection that arises from the construction of those patterns of use. This area of inquiry may contribute to further scholarship around stakeholders and motivations for personal informatics practices and the influence of broader social and inter-personal phenomena.

Author Keywords

Social media; youth; personal informatics.

ACM Classification Keywords

H.5.m. INFORMATION INTERFACES AND PRESENTATION (e.g., HCI) --- Miscellaneous.

Introduction

While research on personal informatics (PI) [3] [4] has grown significantly in recent years, especially in the area of health tracking, descriptions and analyses of youth self-tracking and personal informatics remain an area prime for further development. Though a growing body of work has examined design considerations, motivations, and key takeaways for health and educational youth tracking technologies [7] [11] [12], these findings are based on contextual uses of tracking technologies where researchers or other authority figures introduce and supervise the use

Paste the appropriate copyright/license statement here. ACM now supports three different publication options:

- ACM copyright: ACM holds the copyright on the work. This is the historical approach.
- License: The author(s) retain copyright, but ACM receives an exclusive publication license.
- Open Access: The author(s) wish to pay for the work to be open access. The additional fee must be paid to ACM.

This text field is large enough to hold the appropriate release statement assuming it is single-spaced in Verdana 7 point font. Please do not change the size of this text box.

Each submission will be assigned a unique DOI string to be included here.

Relevant Research/ Discussion Questions

1. In what ways do social media platforms motivate self-tracking?
2. How does social media- based personal informatics differ from PI on other platforms?
3. What does social media-based PI reveal about the influence of social engagement on PI?
4. How do youth engage with PI recreationally?
5. How does social media influence youth PI in particular?
6. What can youth social media use for PI reveal about its affordances for youth self-tracking motivations?
7. How can the above questions inform the design of PI systems?

Next Steps

The questions and concepts introduced in this position paper will ideally stimulate interdisciplinary discussion around the connections of social media to personal informatics more broadly, as well as specific considerations and motivations of PI for youth. A key portion of this discussion will consider the heightened significance of social motivations for youth PI, and how social media addresses those needs.

of the technology within a school system or similarly constrained environment. The exploration of purely recreational and self-initiated uses of personal informatics technologies and practices among youth remains substantially lacking.

Assessment of self-initiated youth personal informatics engagement is significant due to its likely relation to socially motivated personal informatics. While youth, especially pre-adolescent youth, are not generally engaging with self-tracking technologies as consistently or as consciously as adults, many are initiating similar practices of data collection resulting in self-reflection through their social media practices [2] [5]. Whereas social media is often used as an extension of self-tracking technologies and a space to share and reveal the social motivations of self-tracking [1], this paper presents the concept of social media as a primary personal informatics system for youth and a precursor to more traditional personal informatics practices. This assertion is supported through the knowledge that youth and adolescents are often in a stage of development that requires even greater levels of social support and collective social activity as compared to other age groups [8] [9] [10].

The notion of social media as a primary personal informatics system for youth is based on the findings of very particular and personalized uses of social media sites for personal reflection, emotion regulation and relationship maintenance reported in a series of interviews and observations conducted by the author [6]. This concept categorizes these social media organizational practices as a fundamentally socially motivated and interpersonally-embedded personal informatics system, and can ideally contribute to the need for further developed theories on recreational youth personal informatics and the larger system of socially influenced self-tracking.

Prior Research

From March to November 2017, the author conducted an ethnographic research project with youth ages 9-15 at the Lyn Treece Boys and Girls Club in Lafayette, IN, assessing their patterns and practices of social media use for social support. Using methods of participant observation and

semi-structured intensive interviews, the author observed the ways that youth at this site constructed and maintained social support systems and the role that social media plays in that process. A key revelation in youth interviews was a specialized construction of social media site use for personal and inter-personal needs, and a conscious understanding of those processes.

Though none of the youth used official self-tracking devices, they did construct systems of personal information collection and sharing that served specific self-reflective needs. For example, many youth reported using Snapchat and TikTok (formerly Musically) for casual chats with friends, and using Instagram and YouTube to follow Internet celebrities like their favorite slime makers. The former helped regulate emotional shifts throughout the day, and the latter allowed youth to bookmark certain videos to help with their personal slime making or other similar activities. The information collected revealed their own emotional paths over different points in time, who they turn to in those times of need, and which activities and recipes collected over time work best for them. Though they did not articulate the significance of that information or even note actively collecting it, they did specifically express the personalized systems they had in place for communicating with certain friends or following certain people on precise platforms and at defined times.

These systems are implicitly informed and motivated by the knowledge collected even if consumed less deliberately, and arguably constitute the beginnings of youth PI practices of collecting and reflecting on data to gain a better sense of self [3] [4]. The most explicit example of engaging in PI was Snapchat streaks, where youth used them to better understand closeness to friends and availability of friends as sources of social support. In these situations, youth seem to implicitly reflect on the data collected and use it to inform their day to day social behavior.

Acknowledgements

Thank you to Dr. Gregory Leazer and the UCLA iSchool for their generous mentorship and support.

References

1. Epstein, D. A., Jacobson, B. H., Bales, E., McDonald, D. W., & Munson, S. A. (2015, February). From nobody cares to way to go!: A Design Framework for Social Sharing in Personal Informatics. In *Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work & Social Computing* (pp. 1622-1636). ACM.
2. Forte, A., Dickard, M., Magee, R., & Agosto, D. E. (2014, February). What do teens ask their online social networks?: social search practices among high school students. In *Proceedings of the 17th ACM conference on Computer supported cooperative work & social computing* (pp. 28-37). ACM.
3. Li, I., Dey, A. K., & Forlizzi, J. (2011, September). Understanding my data, myself: supporting self-reflection with ubicomp technologies. In *Proceedings of the 13th international conference on Ubiquitous computing* (pp. 405-414). ACM.
4. Li, I., Dey, A., & Forlizzi, J. (2010, April). A stage-based model of personal informatics systems. In *Proceedings of the SIGCHI conference on human factors in computing systems* (pp. 557-566). ACM.
5. Magee, R. M., Agosto, D. E., & Forte, A. (2017, February). Four Factors that Regulate Teen Technology Use in Everyday Life. In *Proceedings of the 2017 ACM Conference on Computer Supported Cooperative Work and Social Computing* (pp. 511-522). ACM.
6. Pierre, J. (2018, April). One Big Digital Family: Examining Social Media and Social Support in the Development of Youth At-Risk. In *Extended Abstracts of the 2018 CHI Conference on Human Factors in Computing Systems* (p. SRC18). ACM.
7. Pina, L. R., Sien, S. W., Ward, T., Yip, J. C., Munson, S. A., Fogarty, J., & Kientz, J. A. (2017, February). From Personal Informatics to Family Informatics: Understanding Family Practices around Health Monitoring. In *CSCW* (pp. 2300-2315).
8. Rigby, K. (2000). Effects of peer victimization in schools and perceived social support on adolescent well-being. *Journal of Adolescence*, 23(1), 57-68. <https://doi.org/10.1006/jado.1999.0289>
9. Rigby, K., & others. (1997). What children tell us about bullying in schools. *Children Australia*, 22(2), 28.
10. Rubin, K. H., & Asendorpf, J. B. (2013). *Social Withdrawal, Inhibition, and Shyness in Childhood*. Psychology Press.
11. Schaefer, S. E., & Marta Van Loan, J. (2014). Peer Reviewed: A Feasibility Study of Wearable Activity Monitors for Pre-Adolescent School-Age Children. *Preventing chronic disease*, 11.
12. Schaefer, S. E., Ching, C. C., Breen, H., & German, J. B. (2016). Wearing, thinking, and moving: testing the feasibility of fitness tracking with urban youth. *American Journal of Health Education*, 47(1), 8-16.