



ISSN: 0737-0024 (Print) 1532-7051 (Online) Journal homepage: <http://www.tandfonline.com/loi/hhci20>

Introduction to This Special Issue on the Lived Experience of Personal Informatics

Dan Cosley, Elizabeth Churchill, Jodi Forlizzi & Sean A. Munson

To cite this article: Dan Cosley, Elizabeth Churchill, Jodi Forlizzi & Sean A. Munson (2017) Introduction to This Special Issue on the Lived Experience of Personal Informatics, Human-Computer Interaction, 32:5-6, 197-207, DOI: [10.1080/07370024.2017.1324787](https://doi.org/10.1080/07370024.2017.1324787)

To link to this article: <https://doi.org/10.1080/07370024.2017.1324787>



Published online: 20 Sep 2017.



[Submit your article to this journal](#)



Article views: 131



[View related articles](#)



[View Crossmark data](#)



Introduction to This Special Issue on the Lived Experience of Personal Informatics

Dan Cosley,¹ Elizabeth Churchill,² Jodi Forlizzi,³ and Sean A. Munson⁴

¹ *Cornell University*

² *Google*

³ *Carnegie Mellon University*

⁴ *University of Washington*

Over the last decade, the idea of a “quantified self” has become increasingly well-known (Swan, 2013). The main premise is to collect and reflect on data about oneself in order to gain new insights or meet other goals. Quantified self activities usually involve active and passive data collection combined with using tools for automated and/or user driven data curation. Much of the research conversation around the quantified self, as well as related concepts such as personal informatics systems and persuasive technologies, focuses on technological innovation, rational decision making, and self-improvement outcomes (Li, Dey, & Forlizzi, 2010; Purpura, Schwanda, Williams, Stubler, & Sengers, 2011).

Often lost in this framing of rational self-improvement through technology is the actual practice and experience of the self being quantified as people engage with their data and the systems they use to track and reflect on that data (Choe, Lee, Lee, Pratt, & Kientz, 2014; Epstein, Ping, Fogarty, & Munson, 2015). This is also referred to as “lived informatics” (Rooksby, Rost, Morrison, & Chalmers, 2014). The rational

Dan Cosley (danco@cs.cornell.edu, <http://www.cs.cornell.edu/~danco/>) is an information and computer scientist whose connection to this special issue is his interest in leveraging personal social media data for reminiscence and reflection; he is an Associate Professor in the Information Science Department of Cornell University. **Elizabeth Churchill** (churchill@acm.org, <http://elizabethchurchill.com/>) has been working in the area of human-computer interaction (HCI) for more than 2 decades, bridging academic and industry research in HCI, Computer Supported Cooperative Work, social media, ubiquitous computing, and most recently design frameworks; she is a Director of User Experience at Google in the United States. **Jodi Forlizzi** (forlizzi@cs.cmu.edu, <http://www.jodiforlizzi.com/>) is an interaction designer and design researcher who explores the form, behavior, and impact of systems that collect personal data; she is a Professor in the Human-Computer Interaction Institute in the School of Computer Science at Carnegie Mellon University. **Sean A. Munson** (smunson@uw.edu, <http://www.smunson.com/>) studies, designs, and evaluates techniques for helping people collect and make sense of data about themselves or the world around them, with a particular focus on supporting health and wellness; he is an Assistant Professor in Human Centered Design & Engineering and member of the DUB Group at the University of Washington.

self-improvement framing may also omit other important issues. Technological work sometimes leaves out entire classes of people (e.g., the lack of support for women's health in early versions of Apple's HealthKit). Rather than enabling insight, collecting too much data—or the wrong data—can paralyze or lead to frustrating guilt (Bentley et al., 2013; Choe et al., 2014; Epstein, Caraway, Johnston, Fogarty, & Munson, 2016). Individuals with the same goals might have quite different needs around tracking, and even individuals with shared initial goals may have needs that evolve differently over time.

Thus, in this special issue of *Human–Computer Interaction* we engage with the idea of the lived experience of a quantified life. Although we value innovation and self-improvement, our main focus is not there, but rather on how new practices have evolved around collecting, inspecting, and reflecting on personal data. Further, rather than focusing on collection of personal data for specific goals or externally defined programs of tracking and improvement, we attend to people's subjective perspectives on personal informatics.

This focus on the *human experience* of personal informatics provoked the following questions: What are new uses and needs around personal informatics beyond self-improvement? What is the direct experience of tracking and how do people engage either directly or indirectly with data? What issues are associated with serving particular individuals in specific contexts? More generally, we look to foreground perspectives that live outside the personal informatics mainstream to foster new debates around the envisioning, design, and development of future personal informatics technologies.

THEMES AND ARTICLES IN THE SPECIAL ISSUE

Our final set of 11 articles reflects a breadth of range in human–computer interaction (HCI), from field work to critical design to enabling technologies to an engagement with the epistemological views that underlie discussion of quantified living. Together, these articles suggest four main challenges to the dominant narrative of personal informatics systems:

1. Stepping back from self-improvement to reflect on the notion of “self,” including processes of identity definition and self-presentation.
2. Enabling direct presentations of self-relevant data that leverage our perceptual and physical abilities to make sense of data to complement analytical approaches.
3. Seeing tracking as a meaningful experience that affects the people who track, even with support for unobtrusive collection and computational analysis of data.
4. Respecting agency and supporting individual needs, through awareness of the risks of automation and identifying alternative goals and processes for tracking.

Considering the Self and Its Needs Beyond Self-Improvement

In their article “Beyond Total Capture: A Constructive Critique of Lifelogging,” Sellen and Whittaker (2010) talked about the need for systems to go beyond capture and to consider specific applications, providing a range of potential value propositions for personal informatics systems. Many of these values, however, are relatively rarely explored, and the value offered by systems is often misaligned with user goals (Gulotta, Forlizzi, Yang, & Newman, 2016). Kersten-van Dijk, Westerink, Beute, and IJsselsteijn (2017) observed that the default stance/goal of personal informatics systems is self-improvement, whether through self-monitoring and feedback or through the development of insights following from reflection on data (Rapp & Tirassa).

This default stance can marginalize other uses and ways of thinking about personal informatics. A number of articles in the issue identify uses of personal informatics that downplay behavior change and self-improvement. Instead, they address caring for and supporting the self (Rapp & Tirassa), self-maintenance around chronic conditions both mental (Matthews, Murnane, & Snyder) and physical (Kaziunas, Lindtner, Ackerman, & Lee), self-repair in physical rehabilitation (Bagalkot & Sokoler), self-analysis around emotional well-being (Hollis et al., 2017), and sensemaking systems to support resumption of work contexts (Rule, Tabard, & Hollan).

This prevailing stance in personal informatics also implies a control theory view of “self” that is about monitoring, feedback, and improvement. As a corrective, Rapp and Tirassa call for deeper reflection on this “self” that is being improved, maintained, cared for, and reflected upon, positioning the self as embedded in both time and in social relations. Thinking about past and social selves calls out identity construction and expression as a key need (Bagalkot & Sokoler), data curation as a key consideration (Hollis et al.; Jones & Kelly; Wiese), and perspective taking as a key potential mechanism (Kaziunas et al.). Considering the present self also highlights aspects of meaning making and direct experience, whereas the lens of a future self moves beyond straightforward self-improvement goals to also consider alternate strategies and futures. This may involve explicit exploration of future emotional states in light of suggestions for how to change them (Hollis et al.).

These more complex views of the self also support more nuanced thinking about how and why personal informatics systems help people. It’s important, as Halttu and Oinas-Kukkonen point out, to identify the psychological mechanisms that allow people to move from data to reflection to insight, and how system designs support those mechanisms. For instance, a number of tools analyze people’s data looking for statistical correlations. But not all correlations are created equal, and a key problem for such tools is avoiding overload. In a three-month longitudinal study, Jones and Kelly found that people favor correlations that are not just useful but also multifaceted, unexpected, and unique. These properties of correlations might be overlooked when thinking of a purely rational self, but they make sense in a more holistic view of selves who are curious and learning.

Enabling Direct Experiences of Personal Data

Many personal informatics approaches emphasize computational support for analysis and aggregation, ranging from time series views of behavior to approaches that scaffold statistical analysis (Bentley et al., 2013; Jones & Kelly) or self-experimentation (Daskalova et al., 2016; Karkar et al., 2015; Lee et al., 2017). However, a number of studies have suggested that direct experiences of specific personal data can be effective for personal informatics goals around recollection (Hodges et al., 2006), reminiscing (Cosley, Sosik, Schultz, Peesapati, & Lee, 2012), and reflection (Isaacs et al., 2013). By direct experiences of data, we do not just mean the presentation of raw rather than processed data, although showing specific moments and accomplishments might contribute toward the identity goals just described. We also see great potential in careful analysis of the kinds, sources, level of detail, and needs around those data, as argued by Wiese.

One kind of direct experience of data might involve visual data that can leverage our perceptual abilities without requiring abstraction and analysis. In this special issue, Bagalkot and Sokoler explore the use of personal video to support rehabilitation exercises, whereas Rule et al. leverage perception and visual memory to recover context and resume suspended activities via screenshots and videos of work environments that provide entry points into people's mental representations of their work context. Such visual data are commonly used in lifelogging systems (Hodges et al., 2006; Lee & Dey, 2008) but much less often in personal informatics systems, perhaps because it is less amenable to computational analysis. This may be a mistake. For instance, Cordeiro, Bales, Cherry, and Fogarty's (2015) deployment of a photo-based food diary demonstrates the ease with which such visual data can be recorded. The ability of these data to prompt recall or provoke emotional reactions can offer advantages over data that more readily lend themselves to computational aggregation and analysis.

Another sense of direct experience of data is the invitation or need to experience data in the moment, as called out by the "present self" framing in Rapp and Tirassa: the feeling of being able, or unable, to perform an exercise (Bagalkot & Sokoler); the literal visceral experience of measuring glucose or receiving insulin from a DIY pancreas (Kaziunas et al.); or the use of tracking as a way to, sometimes moment by moment, strive for normalcy in bipolar disorder (Matthews et al.).

Tracking Itself as a Meaningful Experience That Affects Trackers

Besides data, tracking itself can be directly experienced. Default stances around personal informatics systems tend to focus on (though as pointed out by Kersten-van Dijk et al., not always evaluate) *outcomes* of self-tracking, rather than the processes by which self-tracking affects those outcomes (Halttu & Oinas-Kukkonen). This outcome focus has consequences for both the science and usefulness of self-tracking systems. Left in the margins is the experience of tracking, an idea captured in part by the lived informatics framings of Rooksby et al. (2014) and Epstein, Ping, et al.

(2015). A number of special issue articles grapple with this theme, in which tracking is seen as an integrated component of everyday life that itself affects people through their practices.

We highlight experience because inevitably the practice of tracking makes the tracked activity, results, and goals around it more salient, despite the common aim (and evident value; Halttu & Oinas-Kukkonen) of developing unobtrusive personal informatics systems that support continuous, automatic, effortless tracking. This aim of unobtrusiveness is smartly inverted by the design work by Gross, Bardzell, Bardzell, and Stallings around visible, salient, engaging artifacts that look to provoke reflection on the process of tracking. Tracking can also invite immediate attention to how one feels physically (insulin levels in Kaziunas et al.; motor abilities in Bagalkot & Sokoler) or mentally (emotions in Hollis et al.; mental health in Matthews et al.). This attention can create contradictory feelings that one is both managing a condition and suffering from it (Bagalkot & Sokoler; Kaziunas et al.; Matthews et al.). These default narratives around technologies of tracking can create expectations of self-monitoring improvement that are difficult to shake even in contexts that are clearly not about such improvement, leading to a kind of “persuasive anxiety” around personal informatics systems (Gross et al.).

Respecting and Supporting Agency and Individual Needs

The common perspective on personal informatics as monitoring, feedback, and improvement—a “utilitarian view of the self” (Rapp & Tirassa)—may combine with the focus on computation’s role in gathering and analyzing data to marginalize people’s agency (Purpura et al., 2011). Gross et al.’s pitting of systems designed to support experience against the framing of self-improvement, and finding that experience often loses, is one example of this reduced agency. However, when done well, personal informatics systems can enhance agency, as with bipolar disorder patients’ tracking of condition indicators (Matthews et al.). They can also increase people’s perceived control over their emotions (Hollis et al.). We think this balance between computational support and individual empowerment, or as Matthews et al. put it, automaticity versus agency, is both under-addressed in the literature and a fundamental consideration for successful personal informatics work.

Further, both research goals around general solutions/theories and commercial goals for large markets tend to focus attention on common information domains and goals such as physical activity (more), food consumption (less), sleep (more regular), and mood (happier). This leaves limited room for individual customization of what is tracked, how it is tracked, and why it is tracked. Yet even people who share a goal of tracking to eat healthier often have radically different ideas about how they want to eat healthier and thus what to track (Cordeiro et al., 2015). Bipolar sufferers might need quite different tracking domains and granularities that are particular to individual experiences of the condition (Matthews et al.), whereas the specifics of a particular patient’s rehabilitation needs might demand not just individual programs but

individual systems (Bagalkot & Sokoler, 2017). This naturally leads to visions of tools for flexible aggregation such as this issue's Phenom system, which takes a holistic, ecosystems approach to develop personal informatics infrastructure that supports access, aggregation, and analysis of personal data across a variety of platforms shaped by the needs of individual users, goals, and contexts (Wiese).

CONCLUSION

Beyond these themes of “looking beyond self-improvement,” “enabling direct experience of data,” “tracking as meaningful experience,” and “respecting agency and individuals,” shepherding this special issue has led us toward three directions that we might expect to see in future personal informatics work.

Explicit Consideration of Collaborative and Social Aspects of Personal Informatics

One promising direction is a shift toward designing personal informatics systems with social context and collaboration in mind. In practice, there is already a lot of social activity around tracking data: sharing data about progress to receive informational or emotional support (Epstein, Jacobson, Bales, McDonald, & Munson, 2015); forming activity groups that collaborate or compete around goals (Gui, Chen, Caldeira, Xiao, & Chen, 2017; Munson, Krupka, Richardson, & Resnick, 2015); discussing specific goals and how individually tracked data might shed light on them (Choe et al., 2014); attempting to use tracked data when interacting with the medical system (Chung et al., 2016); and aggregating individuals' data with the hope of discovering patterns, causes, and cures for conditions (as in PatientsLikeMe). A number of special issue articles also highlight social elements and contexts of personal informatics systems (Rapp & Tirassa). Personal informatics technologies, even ones typically owned by individuals (in the United States) such as cell phones and activity trackers, are often experienced socially because they are part of a shared place (Grimes, Landry, & Grinter, 2010; Gross et al.) or used and made sense of with other people such as caregivers and doctors (Bagalkot & Sokoler; Matthews et al.) or friends and family (Gross et al.; Matthews et al.; Pina et al., 2017).

Tracking tools themselves, however, are generally designed for individuals collaborating with, if anything, an agent that suggests activities (Hollis et al.; Rabbi, Aung, Zhang, & Choudhury, 2015) or analyses (Bentley et al., 2013). Social *motivators* are often addressed in personal informatics systems research, but the social aspects of these systems are usually treated as *features* (leaderboards, comparisons, likes and comments, public commitments) rather than *contexts*. When considered as context, social elements are often seen more as risks than opportunities, as with the concerns about public visibility and control over data in the design principles articulated by Consolvo, McDonald, and Landay (2009).

There have been some attempts in both research and commercial systems to support shared interpretation and collaborative tracking. To date, these systems have worked for some people while excluding others. For example, although some menstrual-tracking tools allow partners to share tracked data, they typically assume that trackers are in heterosexual relationships and that any tracking responsibility falls on the woman (Epstein et al., 2017). Developing models of tracking in which different people may share in the activities associated with tracking, reflecting, and acting on data will guide the development of systems that better support collaborative tracking among families, peers, and experts.

Personal Informatics as a Form of Identity Work

We also suggest a much deeper consideration of personal informatics as identity work, related to the argument in Rapp and Tirassa about the need to have a clear conception of the “self” that is being tracked. In this view, tracking is seen as identity claiming and expression, in the same way that wearing a cycling kit is a tool, a way of expressing an identity (e.g., “I am a cyclist”) and demonstrating a longer term commitment to a broader identity of a fit person that can be narrated to others. These identity claims can be around specific facets of life (e.g., “I am a runner”), general attributes that have personal and social value (e.g., “I am a healthy person”), and psychological self-reflections at a personal metalevel (e.g., “I am empowered”; Matthews et al.).

Looking at tracking in this way also highlights the need to support not just analysis but presentation of self to others (see also Elsdén, Kirk, & Durrant, 2016; Parker, 2014). People who share data such as their statistics from a run can also confuse their audience if they are not clear about whether they are making an identity claim or seeking advice (Epstein, Jacobson, et al., 2015). As with considering the collaborative and social roles of personal informatics, understanding and supporting identity formation and communication using personal data will require explicit consideration of social context.

Meaningful Evaluation of Both Outcomes and Experiences

Finally, we see a need to broaden and deepen the methods used to evaluate personal informatics systems. Echoing arguments from the related space of behavior change technologies, we argue that personal informatics system evaluations must address how personal data are meaningful to individuals from their perspective, not just from an objective evaluation of outcomes approach. In particular, evaluations need to consider the socio-technical mechanisms that make them more or less successful, as well as people’s experiences of the technology (Klasnja, Consolvo, & Pratt, 2011).

Going forward, more user, usability, and usage studies are needed, as are design, technical, and critical explorations. We see particular potential in longitudinal studies, as it is well known that personal informatics efforts are often quickly abandoned, and

even when people persist, their motivations, willingness, and experience are likely to change over time. This focus on time raises a number of HCI questions: How do people's relationships and experience with their data and the technology change over time? Are there particular long-term patterns of use that we should design to support or avoid? How do people's goals evolve with longer term use, and where do they align or misalign with designers' or interventionists' goals?

We hope this special issue helps to foreground these questions and issues and that you enjoy reading it as much as we enjoyed putting it together. Thanks to all the authors who expressed interest and to the journal's editorial staff for helping make this possible.

NOTES

Funding. This material is based upon work while Dan Cosley was serving at the National Science Foundation. Any opinions, findings, conclusions, or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the National Science Foundation.

REFERENCES

- Bentley, F., Tollmar, K., Stephenson, P., Levy, L., Jones, B., Robertson, S., ... Wilson, J. (2013). Health Mashups: Presenting statistical patterns between wellbeing data and context in natural language to promote behavior change. *ACM Transactions on Computer-Human Interaction*, 20(5), 30. doi:10.1145/2503823
- Choe, E. K., Lee, N. B., Lee, B., Pratt, W., & Kientz, J. A. (2014). Understanding quantified-selfers' practices in collecting and exploring personal data. *Proceedings of the CHI 2014 Conference on Human Factors in Computer Systems*. New York, NY:ACM.
- Chung, C. F., Dew, K., Cole, A., Zia, J., Fogarty, J., Kientz, J. A., & Munson, S. A. (2016). Boundary negotiating artifacts in personal informatics: Patient-provider collaboration with patient-generated data. *Proceedings of the CSCW 2016 Conference on Computer Supported Cooperative Work & Social Computing*. New York, NY: ACM.
- Consolvo, S., McDonald, D. W., & Landay, J. A. (2009). Theory-driven design strategies for technologies that support behavior change in everyday life. *Proceedings of the CHI 2009 Conference on Human Factors in Computer Systems*. New York, NY:ACM.
- Cordeiro, F., Bales, E., Cherry, E., & Fogarty, J. (2015). Rethinking the mobile food journal: Exploring opportunities for lightweight photo-based capture. *Proceedings of the CHI 2015 Conference on Human Factors in Computer Systems*. New York, NY: ACM.
- Cosley, D., Sosik, V. S., Schultz, J., Peesapati, S. T., & Lee, S. (2012). Experiences with designing tools for everyday reminiscing. *Human-Computer Interaction*, 27, 175–198.
- Daskalova, N., Metaxa-Kakavouli, D., Tran, A., Nugent, N., Boergers, J., McGeary, J., & Huang, J. (2016). SleepCoacher: A personalized automated self-experimentation system

- for sleep recommendations. *Proceedings of the UIST 2016 Symposium on User Interface Software and Technology*. New York, NY: ACM.
- Elsden, C., Kirk, D. S., & Durrant, A. C. (2016). A quantified past: Toward design for remembering with personal informatics. *Human-Computer Interaction*, *31*, 518–557. doi:10.1080/07370024.2015.1093422
- Epstein, D. A., Caraway, M., Johnston, C., Fogarty, J., & Munson, S. A. (2016). Beyond abandonment to next steps: Understanding and designing for life after personal informatics tool use. *Proceedings of the CHI 2016 Conference on Human Factors in Computer Systems*. New York, NY: ACM.
- Epstein, D. A., Jacobson, B. H., Bales, E., McDonald, D. W., & Munson, S. A. (2015). From nobody cares to way to go!: A design framework for social sharing in personal informatics. *Proceedings of the CSCW 2015 Conference on Computer Supported Cooperative Work & Social Computing*. New York, NY: ACM.
- Epstein, D. A., Lee, N. B., Kang, J. H., Agapie, E., Schroeder, J., Pina, L. R., ... Munson, S. A. (2017). Examining menstrual tracking to inform the design of personal informatics tools. *Proceedings of the CHI 2017 Conference on Human Factors in Computer Systems*. New York, NY: ACM.
- Epstein, D. A., Ping, A., Fogarty, J., & Munson, S. A. (2015). A lived informatics model of personal informatics. *Proceedings of the UbiComp 2015 Conference on Pervasive and Ubiquitous Computing*. New York, NY: ACM.
- Grimes, A., Landry, B. M., & Grinter, R. E. (2010). Characteristics of shared health reflections in a local community. *Proceedings of the CSCW 2010 Conference on Computer Supported Cooperative Work*. New York, NY: ACM.
- Gui, X., Chen, Y., Caldeira, C., Xiao, D., & Chen, Y. (2017). When fitness meets social networks: Investigating social and fitness practices on WeRun. *Proceedings of the CHI 2017 Conference on Human Factors in Computer Systems*. New York, NY: ACM.
- Gulotta, R., Forlizzi, J., Yang, R., & Newman, M. W. (2016). Fostering engagement with personal informatics systems. *Proceedings of the DIS 2016 Conference on Designing Interactive Systems*. New York, NY: ACM.
- Hodges, S., Williams, L., Berry, E., Izadi, S., Srinivasan, J., Butler, A., ... Wood, K. (2006). SenseCam: A retrospective memory aid. *Proceedings of the UbiComp 2006 Conference on Ubiquitous Computing*. New York, NY: ACM.
- Isaacs, E., Konrad, A., Walendowski, A., Lennig, T., Hollis, V., & Whittaker, S. (2013). Echoes from the past: How technology mediated reflection improves well-being. *Proceedings of the CHI 2013 Conference on Human Factors in Computer Systems*. New York, NY: ACM.
- Karkar, R., Zia, J., Vilardaga, R., Mishra, S. R., Fogarty, J., Munson, S. A., & Kientz, J. A. (2015). A framework for self-experimentation in personalized health. *Journal of the American Medical Informatics Association*, *23*, 440–448. doi:10.1093/jamia/ocv150
- Klasnja, P., Consolvo, S., & Pratt, W. (2011). How to evaluate technologies for health behavior change in HCI research. *Proceedings of the CHI 2011 Conference on Human Factors in Computing Systems*. New York, NY: ACM.
- Lee, J., Walker, E., Burselson, W., Kay, M., Buman, M. P., & Hekler, E. B. (2017). Self-experimentation for behavior change: Design and formative evaluation of two approaches. *Proceedings of the CHI 2017 Conference on Human Factors in Computing Systems*. New York, NY: ACM.
- Lee, M. L., & Dey, A. K. (2008). Lifelogging memory appliance for people with episodic memory impairment. *Proceedings of the UbiComp 2008 Conference on Ubiquitous Computing*. New York, NY: ACM.

- Li, I., Dey, A., & Forlizzi, J. (2010). A stage-based model of personal informatics systems. *Proceedings of the CHI 2010 Conference on Human Factors in Computer Systems*. New York, NY: ACM.
- Munson, S. A., Krupka, E., Richardson, C., & Resnick, P. (2015). Effects of public commitments and accountability in a technology-supported physical activity intervention. *Proceedings of the CHI 2015 Conference on Human Factors in Computer Systems*. New York, NY: ACM.
- Parker, A. G. (2014). Reflection-through-performance: Personal implications of documenting health behaviors for the collective. *Personal and Ubiquitous Computing*, 18(7), 1737–1752. doi:10.1007/s00779-014-0780-5
- Pina, L. R., Sien, S. W., Ward, T., Yip, J. C., Munson, S. A., Fogarty, J., & Kientz, J. A. (2017). From personal informatics to family informatics: Understanding family practices around health monitoring. *Proceedings of the CSCW 2017 Conference on Computer Supported Cooperative Work & Social Computing*. New York, NY: ACM.
- Purpura, S., Schwanda, V., Williams, K., Stubler, W., & Sengers, P. (2011). Fit4Life: The design of a persuasive technology promoting healthy behavior and ideal weight. *Proceedings of the CHI 2011 Conference on Human Factors in Computer Systems*. New York, NY: ACM.
- Rabbi, M., Aung, M. H., Zhang, M., & Choudhury, T. (2015). MyBehavior: Automatic personalized health feedback from user behaviors and preferences using smartphones. *Proceedings of the UbiComp 2015 Conference on Pervasive and Ubiquitous Computing*. New York, NY: ACM.
- Rooksby, J., Rost, M., Morrison, A., & Chalmers, M. C. (2014). Personal tracking as lived informatics. *Proceedings of the CHI 2014 Conference on Human Factors in Computer Systems*. New York, NY: ACM.
- Sellen, A. J., & Whittaker, S. (2010). Beyond total capture: A constructive critique of lifelogging. *Communications of the ACM*, 53(5), 70–77. doi:10.1145/1735223
- Swan, M. (2013). The quantified self: Fundamental disruption in big data science and biological discovery. *Big Data*, 1, 85–99. doi:10.1089/big.2012.0002

ARTICLES IN THIS SPECIAL ISSUE

- Bagalkot, N. L., & Sokoler, T. (2017). Designing for lived informatics in out-of-clinic physical rehabilitation. *Human-Computer Interaction*, XX,XX–XX. doi:10.1080/07370024.2017.1312405
- Gross, S., Bardzell, J., Bardzell, S., & Stallings, M. (2017). Persuasive anxiety: Designing and deploying material and formal explorations of personal tracking devices. *Human-Computer Interaction*, XX, XX–XX. doi:10.1080/07370024.2017.1287570
- Halttu, K., & Oinas-Kukkonen, H. (2017). Persuading to reflect: Role of reflection and insight in persuasive systems design for physical health. *Human-Computer Interaction*, XX, XX–XX. doi:10.1080/07370024.2017.1283227
- Hollis, V., Konrad, A., Springer, A., Antoun, C., Antoun, M., Martin, R., & Whittaker, S. (2017). What does all this data mean for my future mood? Actionable analytics and targeted reflection for emotional well-being. *Human-Computer Interaction*, XX,XX–XX.
- Jones, S. L., & Kelly, R. (2017). Dealing with information overload in multifaceted personal informatics systems. *Human-Computer Interaction* XX, XX–XX.
- Kaziunas, E., Lindtner, S., Ackerman, M. S., & Lee, J. M. (2017). Lived data: Tinkering with bodies, code and care work. *Human-Computer Interaction*, XX,XX–XX. doi:10.1080/07370024.2017.1307749
- Kersten-van Dijk, E. T., Westerink, J. H., Beute, F., & IJsselsteijn, W. A. (2017). Personal informatics, self-insight, and behavior change: A critical review of current literature. *Human-Computer Interaction*, XX, XX–XX. doi:10.1080/07370024.2016.1276456

- Matthews, M., Murnane, E., & Snyder, J. (2017). Quantifying the changeable self: The role of self-tracking in coming to terms with and managing bipolar disorder. *Human-Computer Interaction*, XX,XX-XX. doi:[10.1080/07370024.2017.1294983](https://doi.org/10.1080/07370024.2017.1294983)
- Rapp, A., & Tirassa, M. (2017). Know thyself: A theory of the self for personal informatics. *Human-Computer Interaction*, XX, XX-XX. doi:[10.1080/07370024.2017.1285704](https://doi.org/10.1080/07370024.2017.1285704)
- Rule, A., Tabard, A., & Hollan, J. (2017). Using visual histories to reconstruct the mental context of suspended activities. *Human-Computer Interaction*, XX, XX-XX. doi:[10.1080/07370024.2017.1300063](https://doi.org/10.1080/07370024.2017.1300063)
- Wiese, J. (2017). Evolving the ecosystem of personal behavioral data. *Human-Computer Interaction*, XX, XX-XX. doi:[10.1080/07370024.2017.1295857](https://doi.org/10.1080/07370024.2017.1295857)