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Informal Use of Information and Communication Technology: Adjunct to Traditional Face-to-Face Social Work Practice

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Abstract Information and communication technologies (ICTs) (including mobile devices) are characterized by the integration of technology into communication, and have revolutionized how individuals interact. ICTs have led to transformative changes in social work and other disciplines including education and psychology. Despite becoming increasingly popular in traditional face-to-face social work practice, research is lacking on informal ICT use by practitioners with clients, which typically occurs between sessions, but also within, as an unplanned (and often unsanctioned) adjunct to traditional face-to-face practice (*Informal Intersession ICTs*). As social work practitioners grapple with the rapid expansion of ICTs, there is a need to address the ethical, legal, systemic and professional benefits and challenges that inevitably arise. Such knowledge is necessary to inform practice and policy. Thus, the purpose of this practice update is to elucidate a framework for theoretical understanding of informal use of ICTs in social work, and draw attention to how ICTs have expanded and altered existing practice.

Keywords ICTs · Working relationship · Technological acceptance model · Clinical practice · Face-to-face therapy

Information and communication technologies (ICTs) have revolutionized the way we connect and interact (Migone 2013). ICTs include mobile devices (e.g., smartphones, tablets), computer hardware/software and other media, such as social networking sites (e.g., Facebook, Twitter) (Kimball and Kim 2013). They integrate technology into human communication, and facilitate collection, management and dissemination of information (Benedict et al. 2014). ICT use has increased exponentially, as have local and global networks seeking to capitalize on opportunities for learning, entertainment and support (Blais et al. 2008). ICTs have led to transformative changes across professions (Bradley et al. 2011). Disciplines such as education (Jackson et al. 2009), guidance counselling (Wilczenski and Coomey 2006), psychology (Van Allen and Roberts 2011; Zur 2012), and health services and informatics (Koch-Weser et al. 2010) have been impacted.

There are significant gaps in knowledge regarding ICT use in clinical social work practice. The purpose of this practice update is to elucidate a framework for theoretical understanding of ICTs in social work, drawing attention to how ICTs have altered clinical practice. Specifically, the integration of *Informal Intersession ICTs*—ICTs used informally between (and sometimes within) sessions as an adjunct to traditional face-to-face practice—will be examined.

ICT Use in Clinical Practice

ICTs have increasingly been implemented for various purposes in social work (Gillingham 2015). They facilitate information system databases, online record keeping/sharing and email communication among colleagues, staff and multidisciplinary networks, significantly changing managerial and administrative work (Burton and van den Broek 2009; Gillingham 2014). Use of social media and social networking platforms across agencies promotes community

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outreach, organizational advocacy and social justice (Hill and Ferguson 2014; Saxton et al. 2015).

ICTs have impacted clinical practice in three distinct ways:

1. *Formal Online ICTs* have been adopted into practice through standalone ICT programs/interventions (e.g., e-counseling, tele-psychology) (Boydell et al. 2014; Hadjistavropoulos et al. 2014; Mewton et al. 2014; Richards and Vigano 2013). Online communication is the single mode of therapeutic intervention, substituting for traditional face-to-face practice. With clear protocols, therapeutic interventions are conducted through designated software (e.g., asynchronous email, synchronous chat) with security protections using computers (Chester and Glass 2006; Luxton et al. 2014; Hollis et al. 2015) and/or mobile applications and messaging services (Epstein and Bequette 2013; Prentice and Dobson 2014; Whittaker et al. 2012). Formal Online ICTs may also consist of video counseling or virtual world communication.

2. *Formal Blended ICTs* have been integrated through the use of planned and structured online elements within traditional face-to-face practice (Kenter et al. 2015; Richards and Simpson 2015; van de Wal et al. 2015). Online exercises are purposefully implemented to replace or supplement some face-to-face sessions. Both online and face-to-face components are structured and monitored. Online elements include journaling (Yager 2001), e-mail reminders, text message monitoring (Aguilera and Muñoz 2011), psycho-educational activities (van der Vaart et al. 2014) and/or administration of assessment and testing instruments (Butcher et al. 2004; Gonchar and Roper Adams 2000).

3. *Informal Intersession ICTs* have entered practice through informal (at times unpredictable or unsanctioned) use by practitioners and clients as an adjunct to traditional face-to-face practice, typically between, but also within, sessions. The primary and formal modality is face-to-face (Mishna et al. 2012, Mishna et al. 2014). ICT use occurs in conjunction with face-to-face practice, as practitioners and clients may asynchronously or synchronously communicate, through email, texting and/or social networking. Informal Intersession ICTs are *not* meant to replace face-to-face practice. Interactions range from practical (e.g., scheduling) to complex (e.g., communicating intense distress or updates on critical incidents/events).

While Formal Online ICTs have been studied extensively, and Formal Blended ICTs are an emerging focus of research, there has been virtually no research exclusively on Informal Intersession ICTs. Research on ICTs in practice generally confounds ICT use for administrative

purposes, for educational tools, for online programs, and as an Informal Intersession adjunct to traditional face-to-face practice (Bullock and Colvin 2015; Jaskyte 2012). There is a small but growing body of theoretical and practice literature on informally integrating ICTs in social work practice (Barth 2015; Zilberstein 2015). Since the use of Informal Intersession ICTs has unique implications for social work practice and policy, there is a critical need for rigorous distinction of ICT uses in diverse practice contexts. As social workers grapple with the rapid expansion of ICTs, it is necessary to understand how and why practitioners informally use ICTs in their face-to-face practice, and address the ethical, legal, systemic and professional benefits, challenges and ambiguities that arise, in order to inform practice and policy.

Understanding Informal Use of ICTs in Clinical Practice

Three frameworks illustrate and underscore the significance of ICT use in social work practice: the Ecological Systems Framework (ESF), the Technological Acceptance Model (TAM), and the concept of the Working Relationship. Each contributes knowledge and promotes understanding of how ICTs have inevitably entered and impacted traditional face-to-face practice. All three frameworks are critical in applying theory to praxis, elucidating the rapid expansion of ICT use in clinical practice.

The *Ecological Systems Framework* incorporates the reciprocal contributions of nested levels of a person's environment (Bronfenbrenner 1979; Germain and Gitterman 2008). ESF is appropriate to address Informal Intersession ICTs, as it situates individuals in their social and environmental contexts and recognizes the multi-level factors influencing behaviour and wellbeing. As ICTs have influenced all aspects of interaction, including social work practice, the implications—positive and concerning—must be understood. ESF has been adapted to keep pace with ICT's expanding influence. A techno-subsystem has been proposed as a component of the individual-level microsystem (Johnson 2010; Johnson and Puplampu 2008). Others have added ICTs as an encompassing ring (Martin 2013; Martin and Alaggia 2013; Martin and Stuart 2008). Incorporating ICTs in an expanded ESF can broaden understanding of the influence of ICTs, explicating how Informal Intersession ICTs impact face-to-face social work practice.

The *Technological Acceptance Model* (David 1989) enhances understanding of attitudes towards and adoption of technology in professional contexts (Bullock and Colvin 2015; Chau 1996). Increased utilization of ICTs (especially mobile ICTs) is driven by two factors: *Perceived Usefulness* and *Perceived Ease of Use* by both practitioners and clients

(Phan 2011). Practitioners determine Perceived Usefulness by how they suppose ICTs will enhance their job performance (e.g., productivity, quality, effectiveness). Clients determine Perceived Usefulness by how they suppose ICTs will impact the effectiveness of the service they access (Cranen et al. 2011). Perceived Ease of Use is the belief by practitioners and clients regarding how easy/difficult or simple/complex ICTs are to use. TAM explicates whether the benefits of using ICTs in practice outweigh the effort by practitioners and clients to actually use the application. A third factor is how ICTs are encouraged or discouraged by *Societal and Organizational Norms* (Carrilio 2007; Wilson and Lankton 2004) and how the perspectives of social workers, clients and administrators influence ICT use. TAM has been adopted to explore ICT use among physicians (Paré et al. 2006), nurses (Kowitlawakul 2011; Pai and Huang 2011) and other medical professionals (Schaper and Pervan 2007). Extending TAM to social work is helpful in elucidating social work practitioners' attitudes about and use of Informal Intersession ICTs (Bullock and Colvin 2015; Carrilio 2007). The social work practice literature, anecdotal evidence and preliminary research all converge to underscore the rapid acceptance and utilization of informal ICT use in traditional face-to-face practice (Barth 2015; Mattison 2012; Mishna et al. 2014; Reamer 2013, 2015).

In the context of the working relationship, at the core of clinical practice, information is shared, support is offered, bonding occurs, joint perspectives or assessments are developed and interventions are planned and implemented. Evidence indicates that the working relationship is the most crucial determinant of client outcomes (Bachelor 2013; Falkenstrom et al. 2014; Wampold and Budge 2012). With the exponential increase of ICTs, it is critical to consider how the working relationship has been adapted and affected. Previous research exploring the effectiveness of a formal blended program showed that ICT use facilitates a positive working relationship, and helps to enrich face-to-face practice (Mishna et al. 2012, 2015). ICTs may function as an intermediary, through which the client's sense of connection, self-awareness and self-efficacy can be enhanced (Mishna et al. 2015; Richards and Simpson 2015). As there is exceptionally limited research, it is essential to systematically study the integration of informal ICT use in face-to face social work practice as it affects the working relationship, in order to inform social work practice and policy.

ICTs in Clinical Practice

Formal Online ICTs have increased in prevalence, with practitioners and clients engaging more and more with these programs across diverse populations and geographic regions (Barak and Grohol 2011). Programs are guided by experienced practitioners, who have acquired formal digital literacy skills to proficiently communicate. Employing screenings, assessments and informed consent, Formal Online ICTs consider the acceptability and fit of each client (employing evidence-informed strategies based on individual needs and goals), and simultaneously strive for accessibility, anonymity and/or confidentiality (Gilbert 2011; Rummell and Joyce 2010). Research has almost exclusively studied Formal Online ICTs, examining effectiveness (Dunn 2012; Gilat and Reshef 2015) and identifying clinical, ethical and legal implications (Amichai-Hamburger et al. 2014; Haberstroh et al. 2014; Hall and McGraw 2014; Johnson 2014).

Formal Blended ICTs are emerging as a conventional form of practice, with traditional face-to-face services occurring less often and typically for shorter sessions (van der Vaart et al. 2014; Löhr et al. 2007). Clients use ICTs to record thoughts, behaviours, moods or experiences as a supplement to traditional face-to-face practice. Practitioners deliver and monitor both online and face-to-face components, establishing individualized and mutually agreed upon guidelines. According to pilot findings and anecdotal evidence email, text, and online educational programs are perceived to augment therapy and the working relationship (Lopez 2015). Pilot studies have demonstrated that blended online exercises can help clients express their thoughts and describe concrete situations or problems, which provides structure for practitioner-client interactions and enables the practitioner to identify and respond to particular issues (Mansson et al. 2013; Wilhelmsen et al. 2013).

Unlike Formal Online ICTs and Formal Blended ICTs, *Informal Intersession ICTs* are not typically planned or initiated by practitioners. Due to the rapid growth of ICTs however, practitioners and administrators increasingly consider Informal Intersession ICTs an inevitable reality in contemporary practice (Mishna et al. 2012, 2014). Yet, the impact remains virtually unexplored in social work (Fantus and Mishna 2013). Anecdotal evidence indicates that email and texting are increasingly accepted informal components of face-to-face practice, while simultaneously generating ethical, legal and professional ambiguity. Potential benefits of email use include facilitating clients' ability to communicate with practitioners (Bradley and Hendricks 2009; Bradley et al. 2011), increasing client retention through ongoing contact (Cartwright et al. 2005), forecasting issues to create mutually shared goals, and informing practitioners of 'in the moment' feelings (Mattison 2012; Stifel et al. 2013). There is a critical need to systematically examine contextual use, benefits and issues related to Informal Intersession ICTs, along with ethical and professional challenges such as confidentiality, security, boundaries and accessibility (Drude and Lichstein 2005; Peterson and Beck 2003).

Recognizing and balancing benefits and risks of informal ICTs in social work can assist practitioners to employ ICTs effectively and ethically, with consideration of the working relationship. Evidence demonstrates that for formal Online ICTs, equivalent or stronger working alliances may occur than in traditional face-to-face practice (Andersson et al. 2014; Holmes and Foster 2012; Reynolds et al. 2013; Sucala et al. 2013). Emergent research on Formal Blended ICTs shows that structured and negotiated email communication in conjunction with traditional face-to-face practice may offer continuity and a "holding environment" (Peterson and Beck 2003, p. 180)—referring to a sense of security and containment for the client (Cartwright et al. 2005; Winnicott 1965). Formal Blended ICTs extend in-person sessions, enhancing client engagement and strengthening the working relationship. Knowledge is lacking, however, on how Informal Intersession ICTs affect the working relationship. According to preliminary research, ICTs can offer continuity by extending the session and enabling clients to process their thoughts and emotions. ICTs could therefore be effective in building the working relationship. Nevertheless, ICTs may also increase pressure for practitioners to respond immediately, making it difficult to manage boundaries and promoting burnout and stress. Research exploring the working relationship in the context of Informal Intersession ICTs can elucidate the benefits and risks of ICT use on the working relationship and its influence on interventions, goals and outcomes.

Conclusion

As a result of the ubiquitous nature of ICTs, it is no longer an option to disregard their use in practice (Mishna et al. 2014). Indeed social work theorists, researchers and practitioners increasingly argue that because ICTs are deeply embedded throughout society regardless of population demographics, ICT use in practice must be expected, considered and understood (Mishna et al. 2014; Reamer 2015; Zilberstein 2015). With the ubiquity of ICTs, practitioners will inevitably be faced with issues related to ICT use in practice.

As delineated in this practice update, ICTs have entered practice in several distinct ways: Formal Online ICTs, Formal Blended ICTs, and Informal Intersession ICTs, each of which has distinct functions and implications. While there is considerable research on the two formal uses of ICTs, there is a lack of systematic understanding of informal ICT use in social work practice. The three theoretical frameworks—Ecological Systems Framework, the Technological Acceptance Model, and the concept of the Working Relationship—illustrate the inevitable integration

of ICTs. These theories/concepts can support future research and be used to generate evidence-informed social work practice and policies on ICT use. With the ubiquitous growth of ICTs in clinical practice, practitioners are eager for new and systematic knowledge that provides in-depth conceptual understanding of the use, meaning and impact of Informal Intersession ICTs from the perspectives of both practitioners and clients.

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