Social media technologies for collaboration and communication: Perceptions of childcare professionals and families

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THE PRIMARY AIM OF the study was to develop an understanding of how social media technologies, such as Web 2.0, can be used to facilitate collaboration and communication between childcare professionals and families of young children. Participants involved in this project were selected from three childcare centres and included two centre directors, seven childcare workers, and eight parents of children attending one of the three centres. Semi-structured individual interviews ($n = 17$) were conducted by the two researchers. Results confirmed differing perspectives about the value of using social media for collaboration and communication between families and early childhood professionals. This paper discusses participants’ perceptions of influential factors in adopting social media.

Introduction

The rise in popularity and use of social media tools, such as Facebook, Wikipedia and Twitter have led to an increase in the regularity and frequency of interactions between individuals, groups and communities (Cheung, Yip, Townsend & Scotch, 2008). Evolving from Web 1.0, Web 2.0 technologies, which encompass social media tools, are revolutionising the way in which information is communicated, stored and disseminated (Cheung et al., 2008; KamelBoulos & Wheelert, 2007). Social media allow users to easily generate and ‘curate other content to share among their networks’ (Beattie, 2011, para. 4). The collaborative capacity of social media tools make them an attractive and useful tool for users who desire ‘synchronous (real-time, or near real-time)’ or asynchronous interactions (Cheung et al., 2008, p. 694).

Effective communication and collaboration is based on mutual respect, trust, confidence, commitment and individual beliefs. Swick (2003, p. 276) states that early childhood educators who have established successful parent–teacher partnerships are more likely to have ‘highly positive’ involvements with parents and children. Parent–educator and family–school partnerships are dependent on communication (Swick, 2003). Exchange of information and important insights about children’s development, parenting styles and preferences helps to strengthen family perspectives and educators’ pedagogical approaches. Collaboration and shared understandings, however, empower families, educators and children. In the United States of America (USA), the Department of Homeland Security (US DHS, 2013) recognises the importance of protecting online users’ ‘privacy, civil rights and civil liberties’ (US DHS, 2013, para. 5). A greater awareness for the need to protect individual confidentiality in cyberspace has led to a rise in cybersecurity and firmer user guidelines (Parette, Quensenberry & Blum 2010). When used appropriately, social media tools ‘can be powerful socialisation models for children to develop relationships with others’ (Parette et al., 2010, p. 337). Parette and colleagues (2010) reported that in early childhood education ‘now more than ever we are finding a way for this “third space” to exist where children are able to develop and maintain relationships through face-to-face and/or cyber interactions’ (p. 337). There is limited literature reporting childcare staff and families’ perceptions of using social media for collaboration and communication. Hence, the literature review provided in this paper draws upon other educational sectors and the health profession.

1 Child care refers to educational settings which cater for preschool-aged children.
2 Early childhood education refers to schooling which caters for children aged five–eight years.
Facilitating factors for adopting social media technologies

Globally, ‘texting’ through mobile phones has increased the rate, speed and frequency of social interactions (KamelBoulos & Wheelert, 2007). The different types of social media tools have become increasingly popular. Dinh (2011) estimates that there are over half a million visitors to Facebook and over 90 million hits to Twitter every month. Social networking applications have advanced communication exchanges and accelerated interactions, often surpassing regulatory bodies’ capacities to develop guidelines for privacy, and the security of information exchanges (Bertot, Jaeger & Hansen, 2012; Elefant, 2011).

In medical and health care education, a review of the use of Web 2.0 technologies by KamelBoulos and Wheelert (2007) identified in recent years greater levels of participation, ‘agency and interactivity’ between users (pp. 3–4). Likewise, a medical practice in Brooklyn, New York, created a secure portal, thereby reducing the need for patient consultation with general practitioners (Holt, 2011). Rather than organising face-to-face appointments with patients about minor ailments, medical practitioners received and sent emails and instant messages, and engaged in video conferences (Holt, 2011). The ease of use, convenience, cost and benefits for adopting Web 2.0 technologies have brought about changes in the ways in which information is communicated and exchanged by professionals and families (Blue-Banning, et al., 2004; Holt, 2011).

In education, students and young children are becoming increasingly technologically literate, and hence readily seek and embrace newer, faster and more efficient ways of communicating and collaborating in an online environment. When it comes to technology use in educational settings, however, students reported that ‘they felt like they are stepping back in time’ (DEECD, 2010, p. 7). It is likely the rapid and constant evolution of social media platforms makes it increasingly difficult to obtain and maintain current and secure Web 2.0 technologies. Bertot et al. (2012) remind users of the need to comply with regulatory bodies, a challenge often thwarted by the ‘free-flowing world of social media’ (Elefant, 2011, p. 1).

Barriers against adopting social media technologies

Parallel to ever-increasing volumes and frequencies of online communications and interactions are the risks associated with the adoption of social media technologies. The impersonal and somewhat public status of online communication has contributed to an alarming rise in the incidence of identity theft (Lai, Li & Hsieh, 2012). Critics (e.g. Dinh, 2011; Holt, 2011; KamelBoulos & Wheelert, 2007; Parette et al., 2010; Reh, 2010) have questioned the ethical use, and security of personal information, photos and video clips within social media networks. Undeniably, ‘online contents can be viewed, copied, shared and manipulated by a worldwide audience’ (DEECD, 2010, p. 31). In an attempt to reduce these concerns, numerous security measures, campaigns, support programs, resources and policies have been developed and implemented (DEECD, 2010). KamelBoulos and Wheelert (2007) advocate that ‘social networking relies on reciprocal trust, the social glue binding participation in online application and services’ (p. 13). Providing a secure online environment, whilst encouraging parents of young children and educators to share and exchange information is, however, likely to be challenging.

In addition to the complexities of adopting social media technologies, personal preferences, past experiences, cultural (Ribieré, Haddad & VandeWiele, 2010) and generational differences are also potential deterrents to online interactions (Parette et al., 2010). Swick (2003) states that ‘our beliefs (parents and early childhood professionals) about the communication process itself is a powerful influence in the how we then plan and carry out this process with each other’ (p. 276). Ostensibly, those with a personal preference for face-to-face interactions tend to place much greater emphasis on non-verbal cues, facial gestures and overt behaviours than words, images or text on a page.

Moyle (2010, cited in DEECD, 2010) suggests that rather than being concerned about the types of platforms being used, greater attention should be given to the application of social media technologies. There are many and varied reasons reported in the literature that explain an individual’s choice to use, or avoid, particular social media technologies, and how to adopt measures which inform policy and best practice (Elefant, 2011). There is, however, limited literature reporting early childhood educators’ and families’ perceptions for adopting social media. Hence, in the study reported in this paper, a constructivist grounded theory approach was used to develop an understanding of how social media technologies can be used to facilitate collaboration and communication between childcare professionals and families of young children. During interviews, constructivist inquiry facilitates conversation between researchers and participants, and generates in turn new understandings (Mills, Bonner & Francis, 2006).

Method, data collection and analysis

The participants, as shown in Table 1, included childcare centre employees, notably directors (n = 2), room leaders and other childcare workers (n = 7), and parents (n = 8) of children attending one of three childcare centres situated in northern Tasmania, Australia. Centres were purposively selected on the basis of socioeconomic status, geographical location, and willingness to be...
involved in the research. In the centres, families were representative of the wider community, and included participants from differing economic communities, and social and cultural backgrounds. At the time of data collection, three staff reported between three to seven years of employment within their current childcare centre. As shown in Table 1, childcare centres included directors \((n = 2)\), room leaders \((n = 6)\), and an administrator.

Two interview schedules were developed: first a schedule for childcare educators, and second one for parents. Individual interviews began with an introductory question seeking information about the participants’ backgrounds. The researchers adapted the open-ended interview questions as required, and in this way were able to probe more deeply the topics being examined. Rich data can only be generated if interviewees engage fully in the discussion (Krueger & Casey, 2000).

Telephone \((n = 2)\) and face-to-face interviews \((n = 15)\) lasting approximately 30 minutes were conducted by the researchers using a small-sized audio voice recorder or MP3 player. The audio voice files were then uploaded onto a password-protected computer, and transcribed by a research assistant. Transcriptions were distributed to interested participants \((n = 3)\) for member checking. Upon return of transcriptions, both researchers removed colloquialisms and grammatical errors, in preparation for data entry and analysis.

A three-step coding process saw data analysed using NVivo 10 data analysis program. The first step involved repeated readings of the transcripts and the emergence of key themes. Next, constant comparisons resulted in the identification of a number of categories and subcategories, and finally some themes were combined to reduce the number of categories and subcategories (Creswell, 2012). This paper presents the participants’ perceptions of the influential factors in adopting social media tools.

Table 1. Demographic data

<table>
<thead>
<tr>
<th>Childcare centres ((n = 3))</th>
<th>Participants’ roles ((n = 17))</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Childcare director ((n = 2))</td>
</tr>
<tr>
<td>Centre 1 ((n = 5))</td>
<td>1</td>
</tr>
<tr>
<td>Centre 2 ((n = 4))</td>
<td>1</td>
</tr>
<tr>
<td>Centre 3 ((n = 8))</td>
<td>1</td>
</tr>
<tr>
<td>Total responses ((n = 17))</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 2. Participants’ perceptions of influential factors in adopting social media

<table>
<thead>
<tr>
<th>Reasons for adopting social media ((n = 124))</th>
<th>Reasons against adopting social media ((n = 115))</th>
</tr>
</thead>
<tbody>
<tr>
<td>◆ Communication ((n = 43))</td>
<td>◆ Personal/individual preferences ((n = 30))</td>
</tr>
<tr>
<td>◆ Engagement with others</td>
<td>◆ Time ((n = 18))*</td>
</tr>
<tr>
<td>◆ Maintaining connections</td>
<td>◆ Confidentiality ((n = 17))*</td>
</tr>
<tr>
<td>◆ Keeping up-to-date</td>
<td>◆ A lack of current IT skills ((n = 13))</td>
</tr>
<tr>
<td>◆ Convenience ((n = 21))</td>
<td>◆ Design and structure ((n = 9))*</td>
</tr>
<tr>
<td>◆ Confidentiality ((n = 11))*</td>
<td>◆ Access to networks ((n = 7))</td>
</tr>
<tr>
<td>◆ Time ((n = 8))*</td>
<td>◆ Age ((n = 6))</td>
</tr>
<tr>
<td>◆ Flexibility ((n = 8))</td>
<td>◆ Socioeconomic status ((n = 5))</td>
</tr>
<tr>
<td>◆ Design and structure ((n = 7))*</td>
<td>◆ Difficulties associated with maintenance ((n = 5))</td>
</tr>
<tr>
<td>◆ Access to computers ((n = 6))</td>
<td>◆ Language barriers and cultural differences ((n = 5))</td>
</tr>
<tr>
<td>◆ Access to networks ((n = 3))</td>
<td></td>
</tr>
<tr>
<td>◆ Receiving useful information ((n = 3))</td>
<td></td>
</tr>
<tr>
<td>◆ Age ((n = 2))</td>
<td></td>
</tr>
<tr>
<td>◆ Cultural factors ((n = 2))</td>
<td></td>
</tr>
<tr>
<td>◆ Preference for written formats ((n = 2))</td>
<td></td>
</tr>
<tr>
<td>◆ Being able to access sites at work ((n = 2))</td>
<td></td>
</tr>
</tbody>
</table>

*Indicates a theme occurring in both categories, reasons for and against adopting social media.
Results and findings

Two research questions were provided to explore participants’ perceptions, as shown in Table 2. The category with the higher frequency of responses (n = 124) was related to the question: What are the facilitating factors that may motivate you to use Web 2.0 tools for communication and collaboration? The second question: What are the barriers that may discourage you from adopting Web 2.0 tools for communication and collaboration? had slightly fewer responses related to participants’ reasons against adopting social media (see Table 2).

Participants’ reasons for adopting social media

Within the category ‘reasons for adopting social media’, communication attracted the highest rate of responses (n = 43). The interviewees reported that the rising popularity of smartphones, email and short message services (SMS) had streamlined centre staff’s and families’ communication. The relative speed of technological communication was perceived by interviewees to be an influencing factor, providing them with an efficient way to engage with others, maintain connections and keep up to date with information and events. This is indicated by a director: ‘To be able to contact them [parents] immediately rather than put something in the file box which they may not pick up until next week, is much quicker’ (Director 1, Centre 2, References 2 & 3).

Parents (n = 2) curious about their child’s experiences whilst in child care considered social media would avail them with access to additional insights, and finer details about their child’s everyday routines, which parents felt were of significant or personal interest.

I think for a parent who is not picking up their child from the childcare centre, [access to social media] would be great. My husband and I, tend to alternate pickups. So for the person that’s not picking up—even though we discuss her day if I was curious and forgot to ask something and [there was a] place where I could see whether or not she ate all her lunch, or know what she learnt …—I might click in to a webpage and have a look. (Parent, Centre 1, Reference 1)

Adopting media technologies was perceived by a few participants (n = 2) to provide additional details about their child, information exchanges which otherwise would not be forthcoming. For these parents, social media was a window through which they might observe their child whilst in care. Not all participants, however, as the following sections show, regarded social media positively.

Participants’ reasons against adopting social media

Interview responses to the question: What are the barriers that may discourage you from adopting Web 2.0 tools for communication and collaboration? are shown in Table 2. The interviewees’ preferences were personal, based on their prior experiences and their capacity to navigate particular social media sites. As one parent explained: ‘I’m not a Twitter fan. I think Facebook is much more attractive. I have used Skype occasionally to communicate with people living in different time zones’ (Parent 2, Centre 3, Reference 1).

Likewise, educators reported that families who had recently arrived from overseas were more inclined to converse directly with educators, or use available time in their day to read information, pamphlets and complete forms. Educators agreed, notwithstanding language barriers, some families preferred face-to-face communications.

Participants mixed responses to social media

Confidentiality emerged as reasons both against (n = 17) and for (n = 11) adopting social media tools. Given the research context involved young children and families, it was anticipated that confidentiality would be ‘a major concern for families’ (Administrator, Centre 3, Reference 1) and childcare educators. One room leader said ‘confidentiality is very important—[particularly] if [the digital habitat] included photos, names and personal information, we would have to be really strict’ (Educator 3, Centre 3, Reference 1). Generally participants agreed that security and privacy were important considerations, as reported by parents:

I wouldn’t mind some photos being uploaded, as long as it’s private and only parents could view [the images], because I wouldn’t want [my child’s] photos available for everyone to see (Parent 4, Centre 1, Reference 3).

I’d like it, if I could log onto a secure webpage (Parent 3, Centre 3, Reference 1).

And, as the following statement typical of comments received shows, centre directors were also mindful of the need for a secure password-protected space:

If there’s a password-protected space that is unique for each child and their family (Director 1, Centre 1, Reference 1).

Staff working in childcare centres are vigilant when storing, or disclosing personal information about families; hence, if a site is perceived to be secure then staff and parents are more likely to adopt a digital habitat, and vice versa.
Discussion and findings

Adopting social media for the purposes of communication and collaboration

Participants’ preferences for adopting social media were related to the efficiency, convenience, and flexibility of communication. This finding is consistent with some other research (Dinh, 2011; Holt, 2011; KamelBoulos & Wheelet, 2007; Parette et al., 2009). Technology has revolutionised communication and the dissemination of information (Holt, 2011). At the ‘click of a button’ people are instantly connected and easily able to communicate and collaborate with others.

Mostly, interviewees noted the immediacy of exchanging information in an online environment was preferred over more ‘traditional’ ways of information sharing, which included paper-based resources distributed to family mail boxes located in the childcare centre foyer.

Parents are interested in their child’s experiences whilst in childcare, and perceived social media would yield additional information. Partnerships between childcare professionals and families are vital to young children’s development, as they play a critical role in laying the foundations for later success in learning and life (Swick, 2003). As an instrument which might facilitate communication, interviewees regarded social media as an effective and efficient means for streamlining communications.

Personal/individual preferences are barriers to adopting social media

Not all participant responses (n = 115) were in favour of adopting social media, with oppositional responses (n = 30) showing a preference for a particular Information Technology (IT) platform or mode of communication. In this study, like reported elsewhere (Ribiere, et al., 2010), site familiarity, layout, user friendliness, cultural barriers (such as written and spoken English as a second language), or having a preference for face-to-face communication were deterrents for adopting social media.

Web 2.0 technologies emphasise online collaboration and communication, yet a few families preferred communicating face to face with early childhood professionals. Within the subcategory ‘personal/individual preferences’ (see Table 2) a small group of parents expressed a preference to hear, rather than to read about accidents, falls, or a child’s unanticipated sickness (n = 9). This finding is in contrast to previous research (Holt, 2011) reporting patients’ tendency to use virtual communication to consult with general practitioners about minor ailments. In contrast to societies’ rising use of technology (Dinh, 2011), staff and parents involved in this study were critical consumers, and as such were unwilling to adopt social media technologies simply because they were readily available and perceived to be efficient.

These constraints could be alleviated somewhat through the provision of various supports, including professional learning, the provision of regular and ongoing technical support, and the development of a site which meets users’ needs. Secondly, to facilitate the use of social media, interested participants will require time to develop their competence, confidence, and technological skills which are necessary in this era of rapid technological change and growth.

Confidentiality—mixed responses

Arguably, participants’ perceptions are influenced by their context. In this study, the context involved young children and their families, and as recognised previously in the literature (Cheung et al., 2008; Dinh, 2011; Holt, 2011; KamelBoulos & Wheelet, 2007; Lai et al., 2011; Parette, et al., 2009; Reh, 2010), participants involved in this study were also concerned about information confidentiality and security.

Childcare centres require their teaching staff to manage personal and sensitive information; thus it was hardly surprising that confidentiality emerged as both a reason for, and against adopting social media technologies. Interviewees’ use of social media technologies was conditional, determined in accordance with the levels of security and privacy they might be afforded.

On one hand, Lai et al. (2011) recommend that security protection is three-fold, that is, individual users, technical designers and businesses all have a shared responsibility to improve the quality of their security and service. On the other hand, Elefant (2011) and US DHS (2013) urge developers to comply with regulations, best practice, and guidelines that minimise the risks of adopting social media platforms. As it was found in this study, as well as in Swick’s (2003) research, the provision of a secure site with limited access increased participants’ willingness to adopt social media technologies.

Online security issues may be alleviated when user guidelines are ratified, and regulations sanctioned about who was responsible for information release, and the types of information to be disclosed (see Elefant, 2011 for a summary of legal and regulatory issues arising in the USA). The provision and regular maintenance of effective security software updates is an imperative (Bertot et al., 2012; Elefant, 2011). Further, given the small scale of this study, research examining parents’ and childcare professional staffs’ preferences relative to various communication modes is an aspect worthy of further investigation. In this study, the participants were willing to adopt social media for the purpose of collaborating and communicating in childcare centres, yet implementation and usage will be dependent upon users’ personal/individual preferences and the provision of a safe and secure environment.
Conclusion

In sum, the small scale of this project means that generalisability to other regions and communities is unlikely; however, findings reported here provide an ideal starting point for other discussions about the value of childcare educators and parents adopting social media technologies for the purpose of collaboration and communication. Overall, the participants had divided opinions, but were slightly in favour (n = 11) of adopting social media technologies for these purposes. As mentioned above, negative perceptions may be minimised as participants use social media technologies to support, rather than to replace, face-to-face interactions, and moreover when users are guaranteed a safe and secure online environment.

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References


