

Social media, rituals, and long-distance family relationship maintenance: A mixed-methods systematic review

Susan Abel, Tanya Machin, and Charlotte Brownlow

School of Psychology and Counselling, Faculty of Health, Science, and Engineering,
University of Southern Queensland

Author Note

Susan Abel <https://orcid.org/0000-0002-4703-8415>

Tanya Machin <https://orcid.org/0000-0002-4358-2149>

Charlotte Brownlow <https://orcid.org/0000-0001-8497-5021>

We have no known conflicts of interest to disclose

Correspondence concerning this article should be addressed to Susan Abel, School of Psychology and Counselling, Faculty of Health, Science, and Engineering, University of Southern Queensland, Toowoomba, Queensland 4350, Australia. Email: susan.abel@usq.edu.au

Abstract

For families with limited opportunities for face-to-face interaction, social media can be a vital communication medium to help shape the family identity, maintain bonds, and accomplish shared tasks. This mixed-methods systematic review of quantitative, qualitative, and mixed-method empirical studies published between 1997 and 2019, uses a convergent data-based framework to explore how long-distance families engage in family practices using various modes of social media. Fifty-one papers were synthesised into four domains: (1) doing family in a social media environment, (2) performing family through stories and rituals, (3) the nature of online communication practices, and (4) privacy, conflict, and the quality of family relationships. Given the value of patterned routines to families, research into the role of family kinkeepers is suggested. Finally, families use chat (messages) extensively for both assuring behaviour and conflict resolution so further investigation of the impact of this asynchronous mode is recommended.

Keywords: social media; ambient copresence; mediated absence; mixed-methods meta-synthesis; family rituals, family practices

Social media, rituals, and long-distance family relationship maintenance: A mixed-methods systematic review

Mutually supportive families play a vital role in the psychological and physical health of members and can lead to heightened well-being and life satisfaction (Denny et al., 2014; Houlberg et al., 2011). Participating in family rituals has been shown to strengthen bonds between members (Crespo et al., 2011). However, families who are geographically or temporally separated have limited opportunities for face-to-face interaction. This review considers how distanced families use social media to engage in family practices which shape their family identity, show their affection, and fulfil their roles (Morgan, 2011).

Families whose members live even short geographical distances from each other may face limited possibilities for in-person contact. The experience of temporal distance varies widely. For example, some parents may work away from home for two weeks each month, while Filipino migrant mothers are often separated from their children for years at a time (Madianou and Miller, 2011). Due to the COVID-19 pandemic, many families have experienced temporal distance due to government-imposed control measures such as stay-at-home and social distancing restrictions (World Health Organization, 2020). Given the subjectiveness of distance, for this research a *long-distance* family is defined as one in which the members expect to sustain their kinship ties despite limited face-to-face interaction (Stafford, 2004).

Koerner and Fitzpatrick (2004) posit three perspectives to define different types of family features. The *structural* view considers who is in the family. The *functional* (accomplish shared tasks), and *transactional* (generate a family identity and facilitate bonding) views are practice-oriented perspectives which consider what families do, and how they do it. Globally, most people report that connecting with family is a key motivation for using social media (Whiting and Williams, 2013).

Social media encompasses the websites and applications through which users create content, share information, and interact (Machin, 2018). Scholars have begun to explore how previously identified maintenance behaviours in relationships might be adapted and enacted on social media. For example, Vitak (2014) investigated the relationship between geographic proximity, maintenance strategies enacted online, and the perceived role of Facebook. Vitak found people who were geographically distant from a friend considered Facebook a vital relationship maintenance tool.

Modes of communication using social media could be conceptualized as audio (synchronous auditory), chat (asynchronous text-based), audiovisual (synchronous audiovisual), and *collapsed context* (Jansson, 2016; Tufekci, 2008; Vitak, 2012). Context collapse refers to the idea that an individual's social media posts are accessible to multiple unintended audiences (Tufekci, 2008; Vitak, 2012). People modify their tone and self-presentation when communicating with people from different groups in their lives, such as a close friend or employer. Facebook's default "friends" audience makes user posts visible to all friends, thus collapsing these disparate groups into a single group (Facebook, 2020; Vitak, 2012).

To continue their family practices, long-distance families have used a variety of tools such as letters, telephone calls, emails, with varying degrees of satisfaction (Wilding, 2006). While social media may be considered an extension of these media technologies, the smartphone's affordance of *portability* has transformed long-distance family practices (Madianou, 2014; Schrock, 2015). Licoppe (2004) suggests the ubiquity of smartphones has led to a form of "connected presence" in which individuals make shorter, more frequent, and less formal communicative gestures. These gestures fulfil a phatic function, in that the act of communicating is more important than what is said (Licoppe and Smoreda, 2005). Connected presence does not mean that individuals are always available. An illustration of negotiating

accessibility is turning off “active” status in Facebook Messenger but leaving the smartphone connected to the internet (Licoppe, 2004; Schrock, 2015).

Research on the effect of mediated communication on family functioning and practices demonstrate mixed results, which is perhaps unsurprising given the breadth of the family structures and contexts examined (Carvalho et al., 2015; Hertlein, 2012). Considering the global uptake of social media, this study aims to provide a narrative synthesis of published peer-reviewed research on family practices over social media. The context is not restricted to any particular family structure (e.g., parent-child) nor stage-of-life, but considers how individuals engage in family practices from a distance. This review poses the following research questions:

1. *What are the patterns of social media use by long-distance families?*
2. *What family practices are engaged in over social media?*

Method

Design

This review followed the Joanna Briggs Institute (JBI) methodology for mixed-methods systematic reviews (Lizarondo et al., 2017). Additionally, the lead researcher found no current reviews on the topic when consulting the following databases: PROSPERO, MEDLINE, Cochrane Database of Systematic Reviews, and JBI Database of Systematic Reviews and Implementation Reports. A qualitative PICo (Lockwood et al., 2015) defined inclusion criteria where P represents population (long-distance families), I is the phenomenon under study (social media), and Co is the context (relationship maintenance).

Data Collection

An initial search of the Psychology and Behavioral Sciences Collection and CINAHL identified keywords from titles and abstracts of relevant articles and index terms used to describe elements of the PICo. These keywords were refined after consultation with a

specialist research librarian. The search strategy incorporated four concepts to maximize the capture of relevant articles: (1) families, (2) social media, (3) reasons for distance, and (4) relational maintenance communication. To take into account differences in thesaurus terminology and indexing, search terms were modified by database.

In May 2019, identical results were obtained by three independent reviewers who simultaneously searched the following academic databases using the keywords and subject headings presented in Table 1: Psychology and Behavioral Sciences Collection, CINAHL, Scopus, Taylor & Francis Online, Wiley Online Library, PsychINFO, PsychARTICLES, SAGE journals, Social Sciences and humanities, Web of Science, Wiley Online Library. Google Scholar was searched with the same terms to increase the comprehensiveness of the search, and the first 200 articles screened (Haddaway et al., 2015).

Table 1

Keywords and subject headings

Population	Phenomena of interest	Context
"family", "parent", "long-distance", "transnational", "social media", "ICT", "communication", "relational "divorce", "military", "deploy*", "separat*", "incarcerated", "elderly", "migrant", "FIFO", "international", "cross-residential"	"communication", "technology", "social technology", "Facebook", "Facetime", "Skype", "smartphones", "tablets"	"relational maintenance", "relational maintenance", "commitment", "connect"

Following the search, 1408 citations were loaded into Mendeley referencing software and duplicates removed. Two independent reviewers assessed the titles and abstracts of 1088 records against the review inclusion criteria: (a) published between 1997 and 2019, (b) available in English, (c) a population of long-distance families, and (d) explored the use of social media for family relationship maintenance. The timeframe was chosen based on the emergence of the first social media website, SixDegrees.com in 1997 (boyd and Ellison, 2007). Two independent researchers assessed the full text of the remaining 272 articles against the inclusion and exclusion criteria. A further 221 studies were excluded as they did

not match the inclusion criteria. Any disagreements between the reviewers at each stage of the selection process were resolved by discussion.

Data Assessment

Prior to inclusion in the review, two independent reviewers assessed the studies for methodological validity using the standardized critical appraisal instruments (Lockwood et al., 2015; Munn et al., 2015) from the JBI SUMARI system (Munn et al., 2019), as presented in Table 2. All 51 articles were retained regardless of the quality appraisal, as they were deemed significant to the aim of the review (Pope et al., 2007). The quality appraisal procedure revealed minor differences in the quality scoring of the articles. Any disagreements between reviewers were resolved through discussion with a third reviewer. Two mixed-method studies did not provide sufficient information regarding data collection or analysis and could not have the article quality assessed.

Table 2

Assessment of qualitative and quantitative components of studies

Questions	Yes	No	U Responses (n)
Critical Appraisal Checklist for Quantitative Research (Munn et al., 2015)			
1 Was the sample frame appropriate to address the target population?	8		
2 Were study participants sampled in an appropriate way?	8		
3 Was the sample size adequate?	6	2	
4 Were the study subjects and the setting described in detail?	8		
5 Was the data analysis conducted with sufficient coverage of the identified sample?	6	2	
6 Were valid methods used for the identification of the condition?	7	1	
7 Was the condition measured in a standard, reliable way for all participants?	7	1	
8 Was there appropriate statistical analysis?	6	2	
9 Was the response rate adequate, and if not, was the low response rate managed appropriately?	8		
Critical Appraisal Checklist for Qualitative Research (Lockwood et al., 2015)			
1 Is there congruity between the stated philosophical perspective and the research methodology?	49		
2 Is there congruity between the research methodology and the research question or objectives?	48	1	
3 Is there congruity between the research methodology and the methods used to collect data?	48		1
4 Is there congruity between the research methodology and the representation and analysis of data?	48	1	
5 Is there congruity between the research methodology and the interpretation of results?	48	1	
6 Is there a statement locating the researcher culturally or theoretically?	17	34	
7 Is the influence of the researcher on the research, and vice- versa, addressed?	7	41	1
8 Are participants, and their voices, adequately represented?	46	3	
9 Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?	12	37	
10 Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?	49		

Note. U = Unclear

Methodological congruence for the qualitative studies indicated high dependability, although credibility of some studies was weakened by the lack of any statement of ethics, statement on the cultural or theoretical location of the researchers, or their possible influence on the results of the study. Thus, the confidence in the output of the meta-synthesis, graded according to the ConQual score (Munn et al., 2014) lies between moderate and strong. Figure 1 describes the inclusion process according to the Preferred Reporting Items for Systematic Reviews (PRISMA; Moher et al., 2009).

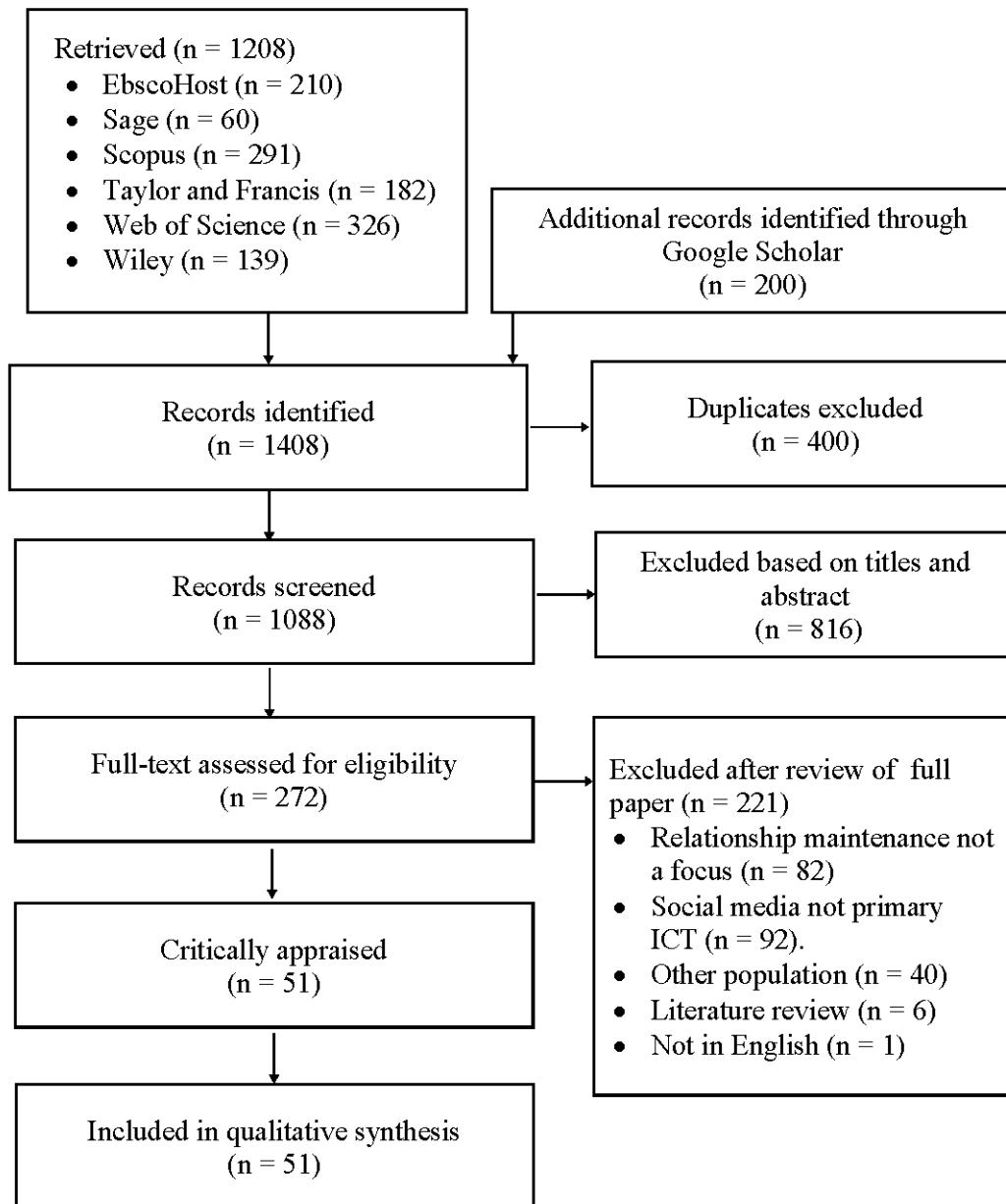


Figure 1. PRISMA flow chart for article inclusion based on initial search (May, 2019)

Results

Data extraction

As both quantitative and qualitative research can address the research question, the researchers used a convergent data-based integrated approach. After repeated examination of included studies, results from quantitative reports were *qualitized* (narrative syntheses of quantitative data results; Lizarondo et al., 2017) and findings were extracted by a single reviewer using the standardized data extraction tools in JBI SUMARI. Only findings matched

with an unequivocal (directly observed) or credible (plausible interpretations logically inferred from the data) verbatim were extracted.

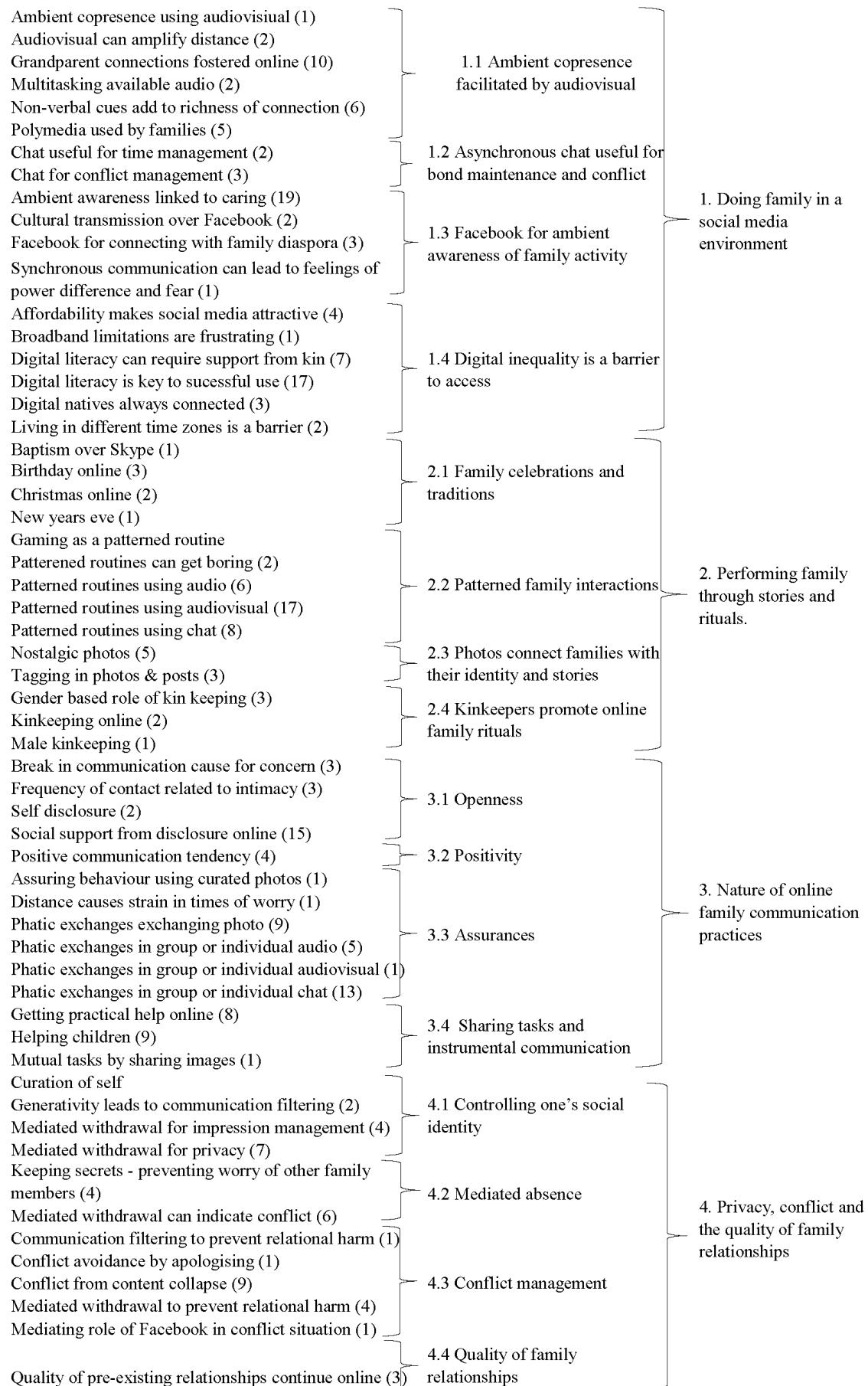
Table 3 presents an overview of the 51 studies. The studies were conducted between 2010-2019, and analyzed data from approximately 4292 global participants (the exact number of participants cannot be stated as one article did not declare the number of participants so a figure of 7 was interpreted; Nishitani, 2014). Most studies employed cross-sectional designs (30) and the rest were longitudinal (21). Qualitative methodologies were preferred (49) over quantitative studies (2), with some mixed methods designs (6). Researchers predominately chose to collect data using interviews (47); sometimes in combination with other methods such as media diaries (17). Quantitative data was collected using questionnaires (8). Transnational families were the most common context (38) followed by in-country long-distance families (10), separation due to work (2), and homelessness (1).

Table 3.
Summary of Articles Included in the Review

Author(s) Year	Participants	Participants' cultural background	Context	Method		Instruments
				Cr.	L.	
Acedera et al. (2018)	N = 80 migrant wives and their left-behind partners	PHL	Transnational families	x	x	Interviews
Acedera et al. (2019)	N = 30 migrant wives and left-behind husbands	PHL	Transnational families	x	x	Interviews
Ahn (2017)	N = 30 migrant mothers	KOR	Transnational families	x	x	Interviews
Bacigalupo and Bräuninger (2017)	N = 22 international students	NS	Transnational families	x	x	Interviews, focus group
Barakji et al. (2018)	N = 460 American and migrant university students	USA	Transnational families	x	x	Questionnaire
Barrie et al. (2019)	N = 60 parents and their adult children	USA	In-country long distance families	x	x	Interviews
Brown (2016)	N = 33 migrant workers	PHL/IDN	Transnational families	x	x	Interviews
Cabalquinto (2018a)	N = 6 migrant adult children	PHL	Transnational families	x	x	Interviews
Cabalquinto (2018b)	N = 26 migrant workers and their left-behind family members	PHL	Transnational families	x	x	Interviews, photo elicitation, field notes
Cabalquinto (2018c)	N = 26 migrant workers and left-behind family members	PHL	Transnational families	x	x	Interviews, photo elicitation, field notes
Cabalquinto (2019)	N = 21 migrant workers and left-behind family members	PHL	Transnational families	x	x	Interviews, photo elicitation, field notes
Chib et al. (2013)	N = 42 migrant workers	PHL/IND	Transnational families	x	x	Questionnaire, focus group, interview
Clayton et al. (2018)	N = 22 mobile workers, n = 11 family interviews	GBR	Work	x	x	Interviews
Doty and Dworkin (2014)	N = 649 parents of adolescents	USA	In-country long distance families	x	x	Questionnaire
Francisco (2015)	N = 75 migrant workers and left-behind family members	PHL	Transnational families	x	x	Interviews, focus group, observation
Gonzalez and Katz (2016)	N = 336 Latino or hispanic parents and their children	NS	Transnational families	x	x	Interviews
Gordano Piela and Ros Hijar (2016)	N = 25 Spanish speaking young adults	ESP	Transnational families	x	x	Interviews, field notes
Harper et al. (2017)	N = 10 homeless adults	GBR	Homelessness	x	x	Interviews, Communication design exploration
Hsu (2018)	N = 18 working holiday adults	TWN	Transnational families	x	x	Interviews
Ivan and Hebblethwaite (2016)	N = 13 grandmothers	ROU / CAN	Transnational families	x	x	Interviews
Kalavar et al. (2015)	N = 70 adults n = 20 focus group (60 - 85 years)	IND	Transnational families	x	x	Questionnaire, focus group
Kang (2012)	N = 53 migrants	CHN	Transnational families	x	x	Interviews
Kelly (2015)	N = 5 Grandparents and grandchildren	AUS/GBR	Transnational families	x	x	Interviews, participants diaries, observation
Lam (2013)	N = 12 migrant or in-country workers	CHN	Transnational families	x	x	Interviews
Lim and Pham (2016)	N = 60 university students	IND/VNM	Transnational families	x	x	Interviews, media diary, media deprivation
Madianou (2014)	N = 13 migrants	PHL	Transnational families	x	x	Interviews
Madianou (2016)	N = 13 migrants	PHL	Transnational families	x	x	Interviews
McClure et al. (2015)	N = 186 parents of toddlers	USA	In-country long distance families	x	x	Questionnaire
Nedelcu (2017)	N = 101 migrants	ROU	Transnational families	x	x	Interview, participant observation
Nedelcu and Wyss (2016)	N = 39 migrants	ROU	Transnational families	x	x	Interviews
Neustaeder et al. (2015)	(3) N = 84 participants	CAN	In-country long distance families	x	x	Questionnaire
Nishitani (2014)	N = NS migrants	TON	Transnational families	x	x	Interview, participant observation
Ohashi et al. (2017)	N = 12 adults (21 - 38 years)	JPN	In-country long distance families	x	x	Interviews, scenarios of use, re-enactments
Platt et al. (2016)	N = 239 migrant workers	IDN	Transnational families	x	x	Questionnaire, interviews
Plaza and Below (2014)	N = 111 migrants	TTO	Transnational families	x	x	Questionnaire, interviews
Pustulka (2015)	(1) N = 37 migrant mothers (2) N = 40 migrant parents	POL	Transnational families	x	x	Interviews
Quan-Haase et al. (2018)	N = 41 adults (65+ years)	CAN	In-country long distance families	x	x	Interviews
Rea et al. (2015)	N = 10 military spouses	USA	Work	x	x	Interviews
Rain (2015)	N = 36 Irish adults and their migrant partners	IRL	Transnational families	x	x	Interviews
Ryan et al. (2015)	N = 73 migrants	FRA/USA	Transnational families	x	x	Interviews
Sandel (2014)	N = 23 American and international students	USA	Transnational families	x	x	Interviews
Shaker (2018)	N = 25 migrant women	IRN	Transnational families	x	x	Interviews
Share et al. (2017)	N = 36 parents	POL	Transnational families	x	x	Interviews
Shiau (2015)	N = 12 exchange students	TWN / USA	Transnational families	x	x	Interviews
Sinanian et al. (2018)	N = 31 adults	AUS/MYS/JPN	Transnational families	x	x	Interviews
Smith et al. (2012)	N = 19 university students	USA	In-country long distance families	x	x	Interviews
Storch and Ortiz Juarez-Paz (2019)	N = 26 adults (30 - 70 years)	USA	In-country long distance families	x	x	Interviews
Thulin and Bertil (2017)	N = 780 adults (20 - 29 years)	SWE	In-country long distance families	x	x	Questionnaire, interviews
Yang (2018)	N = 28 university students	USA	In-country long distance families	x	x	Interviews
Yoon (2016)	N = 38 migrants	KOR	Transnational families	x	x	Interviews
Zhao (2019)	N = 28 international students	CHN	Transnational families	x	x	Interviews

Data synthesis

Findings were reviewed and aggregated into categories based on similarity in meaning. These categories were further pooled together into four synthesized findings as presented in Figure 2: (1) doing family in a social media environment; (2) performing family through stories and rituals; (3) nature of online family communication practices; and (4) privacy, conflict and the quality of family relationships.

Figure 2. *Results of the Meta-synthesis*

Findings

The following section discusses four broad themes identified in the data. The first theme, *doing family in a social media environment* describes how individuals engage in functional and transactional tasks by selecting different modes of social media for various tasks. For example, families participate in bonding activities through the use of audiovisual calls or group chats. This theme includes a discussion of barriers to success, such as restricted internet access, lower socioeconomic status, or limited digital literacy (Gonzalez and Katz, 2016; Nishitani, 2014). The second theme, *performing family through stories and rituals* explores how families display geographic resilience in recreating face-to-face rituals over social media. The third theme, *nature of online family communication practices* considers how long-distance families engage in communication practices to nurture or gain desired features of relationships (e.g., commitment and social support: Canary and Stafford, 1992). The final theme, *privacy, conflict and the quality of family relationships* explores how individuals control their social identities and negotiate in-group conflict. The evolution of these themes is displayed in Figure 2 above.

Doing family in a social media environment

Families are not committed to any particular social media site or feature. The following section discusses how individuals use the affordances of audiovisual, audio, chat, and collapsed contexts such as Facebook to engage with family practices or “do family” (Bacigalupe and Bräuninger, 2017; Gordano Peile and Ros Hijar, 2016; Hsu, 2018). For example, synchronous methods such as voice or audiovisual calls over Skype might be used for leisurely conversations, and asynchronous methods such as Facebook or chat used for phatic communication or sharing tasks (Acedera and Yeoh, 2019; Madianou, 2014). *Digital natives* (Prensky, 2001) consider perpetual connectivity a natural state, and their daily routine includes regular checks of the status of other members of their social network (Madianou,

2014, 2016; Sandel, 2014). This ‘always-on’ culture does not always lead to emotional reassurance. For relationships that are in distress, it can create further conflict, mainly through increased opportunities for surveillance (Madianou, 2016).

Ambient copresence is facilitated by audiovisual. In the transnational context, 86.8% (33/38) of studies found that families used audiovisual calls to share everyday interactions. Audiovisual communication provided non-verbal cues which facilitated the development of more “natural” grandparent-grandchild ties; allowed absent adults to view the growth of children; and parents to scaffold conversations for very young children (Bacigalupe and Bräuninger, 2017; Cabalquinto, 2018b; Francisco, 2015; Ivan and Hebblethwaite, 2016; Kalavar et al., 2015; Madianou, 2016; McClure et al., 2015; Nedelcu, 2017; Pustułka, 2015; Riain, 2015; Share et al., 2017; Storch and Ortiz Juarez-Paz, 2019).

Ito and Okabe (2005) suggest some transnational families use video calls over many hours, known as *ambient co-presence*. This shared virtual space mimics the experience of being together in the family home where one might not be in direct communication with others, but tangentially aware of others. Also known as *open connections*, some families connect via Skype over hours, sometimes “all day” to share their everyday lives (Neustaedter et al., 2015). In this practice individuals peripherally observe their communication partners while attending to their own daily routines (Acedera and Yeoh, 2018; Brown, 2016; Cabalquinto, 2018b; Francisco, 2015; McClure et al., 2015; Nedelcu and Wyss, 2016). Also widely reported is the use of video for *direct co-presence*. These calls involve conversing or sharing activities, with an emphasis on family group calls for rituals such as Christmas and birthdays (Ahn, 2017; Bacigalupe and Bräuninger, 2017; Nedelcu and Wyss, 2016; Neustaedter et al., 2015). Conversely, people sometimes avoid contact using audiovisual mode as its relative richness and immediacy can increase feelings of homesickness (Acedera and Yeoh, 2018; Clayton et al., 2018). Other individuals avoid audiovisual in favour of audio

so they can simultaneously engage in other activities without breaching a perceived communication etiquette of facing the camera (Acedera and Yeoh, 2019).

Regular use of audiovisual modes for open or direct communication was a behaviour found only in the transnational context. Of the 13 studies of in-country long-distance families, only eight reported any audiovisual use, and only for two purposes: rituals such as weddings, and conversing with small children.

Asynchronous nature of chat useful for bond maintenance and conflict avoidance. Chat has grown to be one of the dominant forms of mediated communication for families, both co-resident and long-distance (Ling, 2012) This is due to its facility for phatic communication, and that people can discretely chat when engaged in other tasks. Long-distance families perceive that chat minimizes intrusions into communication partners' time and compensates for global time differences (Acedera and Yeoh, 2018; Fingerman et al., 2011; Kang, 2012). Individuals often select chat as a communication mode for emotionally-charged conversations. It can reduce confrontation by allowing people time to consider and moderate their responses (Barrie et al., 2019; Harper et al., 2017; Zhao, 2019).

The *family group chat*, characterized by frequent messages comprising text, photos, and other content is used by long-distance families to affirm their relationships (Brown, 2016; Cabalquinto, 2019; Doty and Dworkin, 2014; Kang, 2012; Ohashi et al., 2017; Platt et al., 2016; Sinanan et al., 2018; Yoon, 2016; Zhao, 2019). There is evidence the family group chat is used by co-located families as a communal diary shaping collective memories (see Chan, 2018; Karapanos et al., 2016) and to share phatic messages to promote bonding (Padilla-Walker et al., 2012).

Facebook for ambient awareness of family activity. Facebook's collapsed context is useful for the family diaspora, particularly for grandparents who use Facebook to stay connected to family members' everyday lives (Barrie et al., 2019; Ivan and Hebblethwaite,

2016; Madianou, 2016; Nedelcu, 2017; Quan-Haase et al., 2018; Rea et al., 2015; Shaker, 2018). The followed individuals feel more emotionally connected to distant family members who regularly interact with their posts, even if they do not directly communicate (Plaza and Below, 2014). Absent mothers monitor children's Facebook accounts to gain information that will inform the parenting advice they deliver over Skype (Cabalquinto, 2019; Chib et al., 2013; Madianou, 2014). This type of surveillance can be perceived as care and concern (Yang, 2018) but is not always welcome and can cause conflict particularly when older adults attempt to exert control (Chib et al., 2013; Madianou, 2016; Nishitani, 2014).

Sharing photographs on Facebook is a highly valued feature (e.g., Ahn, 2017; Cabalquinto, 2019; Ohashi et al., 2017; Plaza and Below, 2014; Quan-Haase et al., 2018; Sinanan et al., 2018). Family tagged their absent members in Facebook posts to include them in celebrations and nostalgic photographs (Cabalquinto, 2018c, 2019). Young adults actively used Facebook to share their lives with family and simultaneously implemented privacy features to hide posts that could damage their desired self-presentation to family authority figures (Smith et al., 2012; Yang, 2018; Yoon, 2016). For those with strained parent-child relationships, communication via Facebook was valued for its semi-public nature. For example, all posts or interactions with parents are viewed by others in their friend lists, thus protecting young people from parental judgement (Harper et al., 2017).

Digital inequality is a barrier to access. For some individuals, access, cost, and digital literacy remain barriers to successful social media communication. Both time zone differences and poor broadband connectivity frequently pose challenges to use of synchronous media such as video calls (Gordano Peile and Ros Hijar, 2016; Ryan et al., 2015; Sandel, 2014). Digital inequality can be evident in restricted access to social media applications by governments, or when the low socioeconomic status of the left-behind family means technology is unaffordable (Cabalquinto, 2018a; Shaker, 2018). Some degree of

digital literacy is necessary for the comfortable use of social media and without this knowledge, individuals can be left behind (Smith et al., 2012). While connecting with family was a key motivator for older people to purchase technology and learn to use social media (Gonzalez and Katz, 2016; Hsu, 2018; Kelly, 2015; Lam, 2013), the financial and practical assistance of their digital native kin was the key to successful use (Bacigalupe and Bräuninger, 2017; Peile and Hijar, 2016; Kalavar et al., 2015; Ohashi et al., 2017). Even with assistance, there was some evidence of a disconnect between the desires of an older generation for video and audio calls and their children's preference for asynchronous communication (Barrie et al., 2019).

Performing family through stories and rituals

Family rituals are events or activities that contribute to the establishment and preservation of a family's identity (Wolin and Bennett, 1984). The memories of these rituals are included in family stories to create a shared identity (Crespo et al., 2011). The following section discusses the ways that families engage in three types of rituals online: *family celebrations* include cultural holidays such as Christmas and rites of passage such as weddings; *family traditions* are less culture-specific activities such as birthdays and family holidays; and *patterned family interactions* are everyday routines such as shared meals, greetings, and household activities (Wolin and Bennett, 1984).

Family celebrations and traditions. Families call each other using audio and audiovisual, send messages and content, and share information on Facebook to celebrate rituals such as Christmas (Cabalquinto, 2018c; McClure et al., 2015; Storch and Ortiz Juarez-Paz, 2019). The virtual co-presence of absent members via audiovisual calls is encouraged for special events to facilitate emotional connection (Neustaedter et al., 2015). Absent family members are tagged in Facebook posts about these events to create and maintain shared family values (e.g., Cabalquinto, 2018b, 2019; Yang, 2018). These adaptative continuances

of family rituals do not provide the same satisfaction as being physically present with each other but do help members to feel connected (Bacigalupo and Bräuninger, 2017).

Patterned family interactions. Long-distance families have developed highly individualized patterned routines designed to work over social media. The routine may be as simple as a daily wakeup call, yet the repetitive nature of the act provides meaning and value to the relationship (Acedera and Yeoh, 2018; Ohashi et al., 2017). Daily greetings via chat or Facebook accompanied by photographs of everyday items cultivates intimacy and positive affect (Clayton et al., 2018; Sinanan et al., 2018; Yang, 2018). Many transnational parents report satisfaction in a routine of regular assistance with their children's homework activities using audiovisual platforms (Brown, 2016; Chib et al., 2013; Nedelcu, 2017; Neustaedter et al., 2015; Platt et al., 2016). Types of open connection routines include family music sessions, virtual cooking, or sharing a meal (Cabalquinto, 2018a; Francisco, 2015). Grandparents value the routine of game playing online to establish a sense of familiarity and connectedness with their distant grandchildren (Kelly, 2015; Storch and Ortiz Juarez-Paz, 2019).

However, these types of rituals not only require a high level of commitment, but also the ability to adapt routines so they do not become tedious or meaningless (Wolin and Bennett, 1984). Some families report constant communication about mundane everyday life can become repetitive and boring, and consequently, ties are weakened (Acedera and Yeoh, 2018; Ahn, 2017).

Photos connect families with their identity and stories. Photographs have long been used as artefacts to construct continuity in relationships by invoking nostalgic recollection of the stories that bind them (Merolla, 2010). Family members today share photos with social media to recall their stories about people in their networks, their rituals, and to imagine the possibility of seeing each other again (Cabalquinto, 2019; Sinanan et al.,

2018; Zhao, 2019). Shared images add emotion and ambience to communication, and foster a sense of connectivity (Cabalquinto, 2019; Ohashi et al., 2017; Plaza and Below, 2014; Quan-Haase et al., 2018). The flow of images allows for an ambient awareness of the family diaspora (Plaza and Below, 2014). Photographs are also a source of inspiration for direct communication (Madianou, 2014; Sinanan et al., 2018; Thulin and Vilhelmson, 2017; Yang, 2018). For example, amusing photos might prompt shared and private discussions between family members (Cabalquinto, 2018c; Yang, 2018).

Kinkeepers promote online family rituals. Wolin and Bennet (1984) proposed that families with high levels of commitment to completing rituals have members who exert control over other family members to ensure compliance with the repetition and continuity of rituals. Rosenthal (1985) found the role of *kinkeeper* involves completing tasks such as initiating contact, encouraging members of the family group to interact, maintaining contact with distant kin, organizing family rituals, encouraging member participation, and facilitating caregiving. This gendered role has traditionally fallen to women, and women are also maintaining contact and intimacy online (Shaker, 2018). However, men do take a role in online kinkeeping by facilitating regular participation in the family group chat (Cabalquinto, 2019; Shaker, 2018; Sinanan et al., 2018). Some kinkeepers reported their primary motivation to use Facebook was to keep in touch with the family diaspora, and allow their children to become familiar with their distant kin (Gonzalez and Katz, 2016; Plaza and Below, 2014).

Nature of online family communication practices

The following section discusses how long-distance families engage with four communication practices identified by Canary and Stafford (1992) to maintain their relationships. (1) *openness* or the disclosure of thoughts and feelings, (2) *positivity* characterized by open and cheerful communication, (3) *assurances* or assuring behaviour

indicating a commitment to the ongoing relationship, and (4) *sharing tasks* where both parties take responsibility for mutual tasks in the relationship

Openness. Families who use any mode of social media to regularly share their emotional triumphs and tragedies can experience social support, emotional connection, and reduced homesickness (Bacigalupe and Bräuninger, 2017; Brown, 2016; Kalavar et al., 2015; Lim and Pham, 2016; Nedelcu and Wyss, 2016; Platt et al., 2016; Pustułka, 2015). Frequent open communication is linked to increased feelings of intimacy and care and makes time spent apart more tolerable (Barakji et al., 2018; Cabalquinto, 2018c; Gonzalez and Katz, 2016; Kang, 2012; Shaker, 2018; Thulin and Vilhelmsen, 2017). Close families can engage in very frequent communication and inexplicable breaks can trigger immediate concern for the well-being of the disconnected family member (Bacigalupe and Bräuninger, 2017; Barrie et al., 2019; Francisco, 2015; Shiau, 2015; Smith et al., 2012).

Positivity. Families display positive communication behaviour through a myriad of methods including cheerful photographs, messages, posts, conversations, the use of cute emojis, Facebook likes, and GIFs (Cabalquinto, 2019; Ivan and Hebblethwaite, 2016; Rea et al., 2015; Shiau, 2015; Yang, 2018; Yoon, 2016). Individuals filter their communication to remove worrying information that might concern distant family members (Acedera and Yeoh, 2019; Ahn, 2017; Cabalquinto, 2018b; Pustułka, 2015; Rea et al., 2015). For example, a resident parent may only share happy, or ordinary stories about their children with the absent parent (Ahn, 2017), a daughter might suppress feelings of frustration with her parents to keep conversations cheerful and uncritical (Cabalquinto, 2018b), parents hide illnesses and their problems from children (Pustułka, 2015), and spouses fail to address conflict in favour of keeping the peace (Acedera and Yeoh, 2019; Ahn, 2017; Rea et al., 2015). However, there are risks associated with habitual positivity at the expense of openness as it can lead to

superficial communication, emotional distance, and weakened ties (Acedera and Yeoh, 2019; Ahn, 2017).

Assurances. Assurances form an important part of families' daily routines (Acedera and Yeoh, 2019; Lim and Pham, 2016; Ohashi et al., 2017). Often these short calls and messages to say hello, share everyday trivia, or to ask about unimportant things fulfil a phatic function (Chib et al., 2013; Pustułka, 2015; Rea et al., 2015; Zhao, 2019). Even hearing sound over an open web-cam without any direct communication provides assurance the relationship exists (Francisco, 2015; Zhao, 2019). Assurances on Facebook can take the form of liking posts and making comments about "missing" the individual who posted them (Madianou, 2016). Some individuals share family members' images and posts on Facebook as a display of valuing the other person and their ideas (Cabalquinto, 2019). These repeated and frequent actions mimic a virtual "tap on the shoulder" reminding the other party the relationship exists and that it is important (Ito and Okabe, 2005).

Sharing tasks and instrumental communication. In a transnational context social media is frequently used for instrumental communication by absent parents to engage in such tasks as supporting left-behind children to complete homework, providing discipline, or advice (Ohashi et al., 2017). Other organizational tasks completed over social media include organizing remittance of money and goods (Brown, 2016; Cabalquinto, 2019; Chib et al., 2013; Francisco, 2015; Madianou, 2016; Platt et al., 2016), practical care and assistance for distant family members (Cabalquinto, 2018a; Nedelcu and Wyss, 2016; Plaza and Below, 2014; Shaker, 2018), and sharing recipes (Nedelcu and Wyss, 2016).

Privacy, conflict and the quality of family relationships

The frequent sharing of information does however on occasions lead to concerns regarding privacy and can lead to conflict within the relationships. The following discussions reflect some of the tensions associated with relationship maintenance via social media.

Controlling one's social identity. Individuals disclose specific information in order to control their social identity (Petronio, 2002). The balance of maintaining kinship ties, preserving privacy, and managing impressions in a collapsed context such as Facebook requires careful organization. Some individuals—particularly young adults—perform impression management by accepting friend requests from senior family adults, then restrict that person's access to their newsfeed, or restrict their visible activity by removing tagging privileges of friends (Ohashi et al., 2017; Smith et al., 2012; Yang, 2018; Zhao, 2019). People manage their identity by sharing prudently curated photos, or carefully preparing their physical appearance before direct video communication to deliver an impression of success and well-being to the family (Shiau, 2015; Sinanan et al., 2018).

One of the methods used for managing privacy is to withdraw from communication via *mediated absence* (Acedera and Yeoh, 2019; Cabalquinto, 2018a). People may use broken technology as an excuse to avoid offending family members (Nishitani, 2014; Pustułka, 2015). Communication approaches using synchronous modes such as audio are ignored; individuals choose respond via asynchronous messages (Harper et al., 2017; Storch and Ortiz Juarez-Paz, 2019). Parental questions and curiosity may be seen as burdensome or interpreted as a form of control and thus children may avoid contact to ease this perceived pressure (Nedelcu and Wyss, 2016; Shiau, 2015; Zhao, 2019).

Conflict management. Conflict occurring between family members online is often flagged by a *demand–withdraw sequence*. This sequence occurs when an individual attempts to contact a communication partner about an issue and the partner avoids discussion (Caughlin and Vangelisti, 2000). The demander can see their communication partner's online activity, sometimes in multiple applications, yet the demander does not get any response to their communication requests (Acedera and Yeoh, 2018, 2019; Chib et al., 2013; Harper et al., 2017; Hsu, 2018). In close relationships where frequent contact is normal, this withdrawal

can be used to punish the demander for a transgression. For example, a wife refuses to answer her absent husband's audio calls for three days because she is angry with him (Ahn, 2017) or a father refuses to talk with his left-behind daughter until she obeys her mother (Cabalquinto, 2018a). The rejection of attempted contact can be a cause for hurt, irritation, or sorrow for the demander (Ahn, 2017; Barrie et al., 2019; Madianou, 2014; Shiao, 2015; Storch and Ortiz Juarez-Paz, 2019).

When social media is the only method of contact and the relationship is in conflict, mediated absence can cause great anguish. For example, the distressed husband who suspects his absent wife of having an affair and can see she is active online but she ignores his many attempts via multiple channels to contact her (Acedera and Yeoh, 2019). Conflict can also occur when an individual's post or status on Facebook leads to arguments between the individual and absent family (Barrie et al., 2019; Nishitani, 2014; Yang, 2018). For example, an "always-on" status on Facebook alerted a parent to the fact that her son had dropped out of school (Madianou, 2016). Negative emotional responses such as shame can also ensue from misunderstood posts, such as the parent who incorrectly interpreted an image to accuse their son of smoking illicit drugs (Storch and Ortiz Juarez-Paz, 2019).

Discussion

This systematic review provides a narrative synthesis of published peer-reviewed research focusing on long-distance family practices over social media. Two research questions were posed to understand better the patterns of social media use and the family practices in which they engage. The first research question concerned what patterns of social media are used by long-distance families, and the second what family practices are engaged in over social media. The analysis identified that the use and practices varied depending on the specific focus for the interactions. For example, when considering only social media platforms, people commingle their choice of platform or mode according to the practice they

are engaged in at any time. Families maintain an ambient awareness of each other's lives by monitoring activity in collapsed contexts such as Facebook. They frequently connect using various social media modes such as audio and audiovisual calls, and share media and messages in individual and family group chats (e.g., Bacigalupe and Bräuninger, 2017; Neustaedter et al., 2015). These rituals are not considered substitutes for face-to-face interaction, but for families with limited opportunities to see each other, they help maintain the family identity and relationships (e.g., Cabalquinto, 2018a; Ohashi et al., 2017). While patterned routines can be fulfilling, they require an ongoing time commitment. One of the less explored aspects in this body of research is the role of the family kinkeeper in promoting participation in online activities.

In contrast, families with relationships in distress use social media to minimize their contact in a way that does not break the bonds of kinship. They quietly 'unfriend' family members (Barrie et al., 2019) or claim their mediated withdrawal is due to broken technology (Nishitani, 2014). Chat is valued as a medium for emotionally charged conversations and conflict resolution. Communication can be slowed down in chat so messages can be carefully curated, and withdrawal is easy (Lam, 2013; Madianou, 2014). Chat is increasingly the preferred method of communication for teenagers (Rideout and Robb, 2018), thus understanding how this cohort negotiates their relationships over chat may well be an important future direction for research.

Limitations and future directions

Despite efforts to create a comprehensive review, there are limitations. The social media landscape changes quickly, and consequently some findings may be quickly outdated. For example, youth engagement in Facebook appears to be shrinking (Kemp, 2019) and thus grandparents may find it more challenging to use this collapsed context to gain ambient awareness of their grandchildren's lives.

Much of the literature comprising this review (38/51 studies) relates to transnational families. For transnational families, it is clear that open audiovisual connections were used frequently by migrants and their left-behind family (e.g., Cabalquinto, 2018c). Yet, the existing within-country studies reported no instances of this activity. Future studies could investigate if this practice does exist for within-country families or whether other activities fulfil this need for bonding. The relative lack of information around in-country long-distance family use of social media represents a significant gap in the literature.

The need to understand social media's role in maintaining relationships among long-distance families has become critical, particularly in light of the COVID-19 pandemic. This pandemic has resulted in millions of families unexpectedly navigating separated relationships, their regular family practices disrupted. With no indication as to when they may be able to meet face-to-face again, social media now becomes a potential medium to maintain their bonds. For these individuals, learning to nurture ties, negotiate conflict and fulfil family functions using mediated communication has never been more important. To better understand these maintenance behaviours facilitated by social media, the explicit and frequently pivotal role of the kinkeeper should be further explored. This will allow better understanding of the nuances underpinning the often delicate negotiation of managing long-distance family relationships.

References

- Acedera KA and Yeoh BSA (2018) Facebook, long-distance marriages, and the mediation of intimacies. *International Journal of Communication* 12: 4123–4142. Available at: <https://ijoc.org/index.php/ijoc/article/view/9667/2475>.
- Acedera KA and Yeoh BSA (2019) ‘Making time’: Long-distance marriages and the temporalities of the transnational family. *Current Sociology* 67(2): 250–272. DOI: 10.1177/0011392118792927.
- Ahn K (2017) Ambivalent gender power in interstitial space: The case of transnational South Korean mothers. *Asian Journal of Women’s Studies* 23(2): 139–162. DOI: 10.1080/12259276.2017.1317701.
- Bacigalupo G and Bräuninger I (2017) Emerging technologies and family communication: The case of international students. *Contemporary Family Therapy* 39(4): 289–300. DOI: 10.1007/s10591-017-9437-7.
- Barakji F, Maguire KC, Reiss H, et al. (2018) Cultural and transnational influences on the use of information communication technologies in adult long-distance family relationships: An extension of media multiplexity theory. *Journal of Family Communication* 19(1): 30–46. DOI: 10.1080/15267431.2018.1530675.
- Barrie CK, Bartkowski JP and Haverda T (2019) The digital divide among parents and their emerging adult children: Intergenerational accounts of of technologically assisted family communication. *Social Sciences* 8(3): 83. DOI: 10.3390/socsci8030083.
- Boyd danah m and Ellison NB (2007) Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication* 13(1): 210–230. DOI: 10.1111/j.1083-6101.2007.00393.x.
- Brown RH (2016) Multiple modes of care: Internet and the formation of care networks in Israel. *Global Networks* 16(2016): 237–256. DOI: 10.1111/glob.12112.

Cabalquinto EC (2018a) Home on the move: Negotiating differential domesticity in family life at a distance. *Media Culture & Society* 40(6): 795–816. DOI: 10.1177/0163443717737611.

Cabalquinto EC (2018b) ‘I have always thought of my family first’: An analysis of transnational caregiving among Filipino migrant adult children in Melbourne, Australia. *International Journal Of Communication* 12: 4011–4029. Available at: <https://ijoc.org/index.php/ijoc/article/view/9661>.

Cabalquinto EC (2018c) ‘We’re not only here but we’re there in spirit’: Asymmetrical mobile intimacy and the transnational Filipino family. *Mobile Media & Communication* 6(1). SAGE Publications: 37–52. DOI: 10.1177/2050157917722055.

Cabalquinto EC (2019) ‘They could picture me, or I could picture them’: ‘Displaying’ family life beyond borders through mobile photography. *Information Communication and Society*: 1–17. DOI: 10.1080/1369118X.2019.1602663.

Canary DJ and Stafford L (1992) Relational maintenance strategies and equity in marriage. *Communication Monographs* 59(3): 243–267. DOI: 10.1080/03637759209376268.

Carvalho J, Francisco R and Relvas AP (2015) Family functioning and information and communication technologies: How do they relate? A literature review. *Computers in Human Behavior* 45: 99–108. DOI: 10.1016/j.chb.2014.11.037.

Caughlin JP and Vangelisti AL (2000) An individual difference explanation of why married couples engage in the demand/withdraw pattern of conflict. *Journal of Social and Personal Relationships* 17(4–5): 523–551. DOI: 10.1177/0265407500174004.

Chan M (2018) Mobile-mediated multimodal communications, relationship quality and subjective well-being: An analysis of smartphone use from a life course perspective. *Computers in Human Behavior* 87: 254–262. DOI: 10.1016/j.chb.2018.05.027.

Chib A, Malik S, Aricat RG, et al. (2013) Migrant mothering and mobile phones:

- Negotiations of transnational identity. *Mobile Media & Communication* 2(1): 73–93.
- DOI: 10.1177/2050157913506007.
- Clayton W, Jain J, Ladkin A, et al. (2018) The ‘digital glimpse’ as imagining home. *Mobilities* 13(3): 382–396. DOI: 10.1080/17450101.2017.1365473.
- Crespo C, Kielpikowski M, Pryor J, et al. (2011) Family rituals in New Zealand families: Links to family cohesion and adolescents’ well-being. *Journal of Family Psychology* 25(2): 184–193. DOI: 10.1037/a0023113.
- Denny B, Gavidia-Payne S, Davis K, et al. (2014) Strengthening Australian families: Socioeconomic status, social connectedness, and family functioning. *Australian Social Work* 67(3): 438–450. DOI: 10.1080/0312407X.2014.911927.
- Doty J and Dworkin J (2014) Parents’ of adolescents use of social networking sites. *Computers in Human Behavior* 33: 349–355. DOI: 10.1016/j.chb.2013.07.012.
- Facebook (2020) Control who can see what you share [Facebook Help Centre]. Available at: https://www.facebook.com/help/1297502253597210/?helpref=hc_fnav (accessed 20 February 2020).
- Fingerman KL, Brown BB and Blieszner R (2011) Informal ties across the life span: Peers, consequential strangers, and people we encounter in daily life. In: Fingerman KL, Berg CA, Smith J, et al. (eds) *Handbook of Life-Span Development*. New York, NY: Springer Publishing Company, pp. 487–511.
- Francisco V (2015) ‘The internet is magic’: Technology, intimacy and transnational families. *Critical Sociology* 41(1): 173–190. DOI: 10.1177/0896920513484602.
- Gonzalez C and Katz VS (2016) Transnational family communication as a driver of technology adoption. *International Journal of Communication* 10: 2683–2703.
- Available at: <https://ijoc.org/index.php/ijoc/article/view/5321/1673>.
- Gordano Peile C and Ros Hijar A (2016) Immigrants and mobile phone uses: Spanish-

- speaking young adults recently arrived in London. *Mobile Media & Communication* 4(3): 405–423. DOI: 10.1177/205015791665537.
- Haddaway NR, Collins AM, Coughlin D, et al. (2015) The role of Google Scholar in evidence reviews and its applicability to grey literature searching. *PLoS ONE* 10(9): 1–18. DOI: 10.1371/journal.pone.0138237.
- Harper R, Watson R and Woelfer JP (2017) The Skype paradox: Homelessness and selective intimacy in the use of communications technology. *Pragmatics* 27(3): 447–474. DOI: 10.1075/prag.27.3.06har.
- Hertlein KM (2012) Digital dwelling: Technology in couple and family relationships. *Family Relations* 61(3): 374–387. DOI: 10.1111/j.1741-3729.2012.00702.x.
- Houltberg BJ, Henry CS, Merten MJ, et al. (2011) Adolescents' perceptions of family connectedness, intrinsic religiosity, and depressed mood. *Journal of Child and Family Studies* 20: 111–119. DOI: 10.1007/s10826-010-9384-5.
- Hsu JF-Y (2018) Negotiating gendered media: Learning ICTs in transnational Taiwanese families. *Continuum: Journal of Media and Cultural Studies* 32(2): 239–249. DOI: 10.1080/10304312.2017.1409341.
- Ito M and Okabe D (2005) Technosocial situations: Emergent structurings of mobile email use. In: Ito M, Okabe D, and Matsuda M (eds) *Personal, Portable, Pedestrian: Mobile Phones in Japanese Life*. Cambridge, MA: MIT Press, pp. 257–273.
- Ivan L and Hebblethwaite S (2016) Grannies on the net: Grandmothers' experiences of Facebook in family communication. *Romanian Journal of Communication and Public Relations* 18(1): 11–25. DOI: 10.21018/rjcpr.2016.1.199.
- Jansson A (2016) Polymedia distinctions. *Nordicom Review* 36(2): 33–50. DOI: 10.1515/nor-2015-0015.
- Kalavar JM, Zarit SH and Ferraccio BJ (2015) Transnational support of Asian Indian elderly

- in India: Examining patterns of exchanges. *Care Management Journals* 16(3): 141–149. DOI: 10.1891/1521-0987.16.3.141.
- Kang T (2012) Gendered media, changing intimacy: Internet-mediated transnational communication in the family sphere. *Media, Culture and Society* 34(2): 146–161. DOI: 10.1177/0163443711430755.
- Karapanos E, Teixeira P and Gouveia R (2016) Need fulfillment and experiences on social media: A case on Facebook and WhatsApp. *Computers in Human Behavior* 55: 888–897. DOI: 10.1016/j.chb.2015.10.015.
- Kelly C (2015) ‘Let’s do some jumping together’: Intergenerational participation in the use of remote technology to co-construct social relations over distance. *Journal of Early Childhood Research* 13(1): 29–46. DOI: 10.1177/1476718X12468121.
- Kemp S (2019) The global state of digital [Blog Post]. Available at: <https://wearesocial.com/blog/2019/10/the-global-state-of-digital-in-october-2019> (accessed 18 January 2020).
- Koerner AF and Fitzpatrick MA (2004) Communication in intact families. In: Vangelisti AL (ed.) *Handbook of Family Communication*. Mahwah, NJ: Lawrence Erlbaum Associates Publishers, pp. 177–195.
- Lam SSK (2013) ICT’s impact on family solidarity and upward mobility in translocal China. *Asian Journal of Communication* 23(3): 322–340. DOI: 10.1080/01292986.2012.739186.
- Licoppe C (2004) ‘Connected’ presence: The emergence of a new repertoire for managing social relationships in a changing communication technoscope. *Environment and Planning D: Society and Space* 22(1): 135–156. DOI: 10.1068/d323t.
- Licoppe C and Smoreda Z (2005) Are social networks technologically embedded? How networks are changing today with changes in communication technology. *Social*

- Networks* 27(4): 317–335. DOI: 10.1016/j.socnet.2004.11.001.
- Lim SS and Pham B (2016) ‘If you are a foreigner in a foreign country, you stick together’: Technologically mediated communication and acculturation of migrant students. *New Media & Society* 18(10): 2171–2188. DOI: 10.1177/1461444816655612.
- Ling RS (2012) *Taken for Grantedness the Embedding of Mobile Communication into Society*. Cambridge, Mass: MIT Press.
- Lizarondo L, Stern C, Carrier J, et al. (2017) Chapter 8: Mixed methods systematic reviews. In: Aromataris E and Munn Z (eds) *Joanna Briggs Institute Reviewer’s Manual*. The Joanna Briggs Institute. Available at: <https://reviewersmanual.joannabriggs.org/>.
- Lockwood C, Munn Z and Porritt K (2015) Qualitative research synthesis: Methodological guidance for systematic reviewers utilizing meta-aggregation. *International Journal of Evidence-Based Healthcare* 13(3): 179–187. DOI: 10.1097/XEB.0000000000000062.
- Machin T (2018) *Children and Social Media*. Oxford University Press. DOI: 10.1093/OBO/9780199791231-0198.
- Madianou M (2014) Smartphones as polymedia. *Journal Of Computer-Mediated Communication* 19(3): 667–680. DOI: 10.1111/jcc4.12069.
- Madianou M (2016) Ambient co-presence: transnational family practices in polymedia environments. *Global Networks* 52(2): 193–201. DOI: 10.1111/glob.12105.
- Madianou M and Miller D (2011) Mobile-phone parenting: reconfiguring relationships between Filipina mothers and their children in the Philippines. *New Media & Society* 13(3): 457–470. DOI: 10.1177/1461444810393903.
- McClure ER, Chentsova-Dutton YE, Barr RF, et al. (2015) ‘Facetime doesn’t count’: Video chat as an exception to media restrictions for infants and toddlers. *International Journal of Child-Computer Interaction* 6: 1–6. DOI: 10.1016/j.ijcci.2016.02.002.
- Merolla AJ (2010) Relational maintenance and noncopresence reconsidered: Conceptualizing

- geographic separation in close relationships. *Communication Theory* 20: 169–193. DOI: 10.1111/j.1468-2885.2010.01359.x.
- Moher D, Liberati A, Tetzlaff J, et al. (2009) Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *Physical Therapy* 89(9): 873–880. DOI: 10.1371/journal.pmed.1000097.
- Morgan (2011) *Rethinking Family Practices*. Springer.
- Munn Z, Porritt K, Lockwood C, et al. (2014) Establishing confidence in the output of qualitative research synthesis: The ConQual approach. *BMC Medical Research Methodology* 14(1): 1–7. DOI: 10.1186/1471-2288-14-108.
- Munn Z, Moola S, Lisy K, et al. (2015) Methodological guidance for systematic reviews of observational epidemiological studies reporting prevalence and cumulative incidence data. *International Journal of Evidence-Based Healthcare* 13(3): 147–153. DOI: 10.1097/XEB.0000000000000054.
- Munn Z, Aromataris E, Tufanaru C, et al. (2019) The development of software to support multiple systematic review types: the Joanna Briggs Institute System for the Unified Management, Assessment and Review of Information (JBI SUMARI). *International journal of evidence-based healthcare* 17(1): 36–43. DOI: 10.1097/XEB.0000000000000152.
- Nedelcu M (2017) Transnational grandparenting in the digital age: Mediated co-presence and childcare in the case of Romanian migrants in Switzerland and Canada. *European Journal of Ageing* 14(4, SI): 375–383. DOI: 10.1007/s10433-017-0436-1.
- Nedelcu M and Wyss M (2016) ‘Doing family’ through ICT-mediated ordinary co-presence: Transnational communication practices of Romanian migrants in Switzerland. *Global Networks* 16(2): 202–218. DOI: 10.1111/glob.12110.
- Neustaedter C, Pang C, Forghani A, et al. (2015) Sharing domestic life through long-term

- video connections. *ACM Transactions on Computer-Human Interaction* 22(1): 1–29. DOI: 10.1145/2696869.
- Nishitani M (2014) Kinship, gender, and communication technologies: Family dramas in the Tongan diaspora. *The Australian Journal of Anthropology* 25(2): 207–222. DOI: 10.1111/taja.12089.
- Ohashi K, Kato F and Hjorth L (2017) Digital genealogies: Understanding social mobile media Line in the role of Japanese families. *Social Media and Society* 3(2). DOI: 10.1177/2056305117703815.
- Padilla-Walker LM, Coyne SM and Fraser AM (2012) Getting a high-speed family connection: Associations between family media use and family connection. *Family Relations* 61(3): 426–440. DOI: 10.1111/j.1741-3729.2012.00710.x.
- Petronio S (2002) *Boundaries of Privacy: Dialectics of Disclosure*. Albany, NY: State University Of New York Press.
- Platt M, Yeoh BSA, Acedera KA, et al. (2016) Renegotiating migration experiences: Indonesian domestic workers in Singapore and use of information communication technologies. *New Media & Society* 18(10): 2207–2223. DOI: 10.1177/1461444816655614.
- Plaza D and Below A (2014) Social media as a tool for transnational caregiving within the Caribbean diaspora. *Social and Economic Studies* 63(1): 25–56. Available at: www.jstor.org/stable/24384098.
- Pope C, Popay J and Mays N (2007) *Synthesising Qualitative and Quantitative Health Research: A Guide to Methods*. Maidenhead, England.
- Prensky M (2001) Digital natives, digital immigrants. *On the Horizon* 9(5): 1–6. DOI: 10.1108/10748120110424816.
- Pustułka P (2015) Virtual transnationalism: Polish migrant families and new technologies.

- Studia Migracyjne-Przeglad Polonijny* 41(3 (157)): 99–122. Available at:
http://cejsh.icm.edu.pl/cejsh/element/bwmeta1.element.desklight-2bbd7b47-b72b-42c2-9e61-362892362883/c/St_Migr_3_15_6_P.Pustulka.pdf.
- Quan-Haase A, Wang H, Wellman B, et al. (2018) Weaving family connections on-and offline: the turn to networked individualism. In: Neves BB and Casimiro C (eds) *Connecting Families?: Information & Communication Technologies, Generations, and the Life Course*. Bristol University Press, p. 59. DOI: 10.2307/j.ctv2867xm.
- Rea J, Behnke A, Huff N, et al. (2015) The role of online communication in the lives of military spouses. *Contemporary Family Therapy* 37(3): 329–339. DOI: 10.1007/s10591-015-9346-6.
- Riain RCK (2015) Emotional streaming and transconnectivity : Skype and emotion practices in transnational families in Ireland. *Global Networks* 15(2): 256–273. DOI: 10.1111/glob.12072.
- Rideout V and Robb MB (2018) Social life media: 2018 teens reveal their experiences. *Common Sense Media*: 72. DOI: 10.1016/j.ijheatmasstransfer.2016.02.015.
- Rosenthal CJ (1985) Kinkeeping in the familial division of labor. *Journal of Marriage and Family* 47(4): 965–974. Available at: <https://www.jstor.org/stable/352340>.
- Ryan L, Klekowski Von Koppenfels A and Mulholland J (2015) ‘The distance between us’: A comparative examination of the technical, spatial and temporal dimensions of the transnational social relationships of highly skilled migrants. *Global Networks* 15(2): 198–216. DOI: 10.1111/glob.12054.
- Sandel TL (2014) ‘Oh, I’m here!’: Social media’s impact on the cross-cultural adaptation of students studying abroad. *Journal of Intercultural Communication Research* 43(1): 1–29. DOI: 10.1080/17475759.2013.865662.
- Schrock AR (2015) Communicative affordances of mobile media: Portability, availability,

- locatability, and multimediality. *International Journal of Communication* 9(1): 1229–1246. Available at: <https://ijoc.org/index.php/ijoc/article/view/3288>.
- Shaker SF (2018) A study of transnational communication among Iranian migrant women in Australia. *Journal of Immigrant and Refugee Studies* 16(3): 293–312. DOI: 10.1080/15562948.2017.1283078.
- Share M, Williams C and Kerrins L (2017) Displaying and performing: Polish transnational families in Ireland Skyping grandparents in Poland. *New Media & Society* 20(8): 3011–3028. DOI: 10.1177/1461444817739272.
- Shiau H-C (2015) Beyond the cultural dichotomy, what do we share?: An ethnographic study of intergenerational smartphone MMS use in sojourning experiences. *Journal of Asian Pacific Communication* 25(1): 42–62. DOI: 10.1075/japc.25.1.03shi.
- Sinanan J, Hjorth L, Ohashi K, et al. (2018) Mobile media photography and intergenerational families. *International Journal of Communication* 12(17): 4106–4122. Available at: <https://ijoc.org/index.php/ijoc/article/viewFile/9666/2477>.
- Smith ME, Nguyen DT, Lai C, et al. (2012) Going to college and staying connected: Communication between college freshmen and their parents. In: *Proceedings of the ACM 2012 conference on computer supported cooperative work*, 2012, pp. 789–798. ACM. Available at: <https://dl.acm.org/citation.cfm?id=2145322> (accessed 23 May 2019).
- Stafford L (2004) Romantic and parent-child relationships at a distance. *Annals of the International Communication Association* 28(1): 37–85. DOI: 10.1207/s15567419cy2801_2.
- Storch SL and Ortiz Juarez-Paz A V (2019) The role of mobile devices in 21st-century family communication. *Mobile Media and Communication* 7(2): 248–264. DOI: 10.1177/2050157918811369.

- Thulin E and Vilhelmsen B (2017) Does online co-presence increase spatial flexibility? On social media and young people's migration considerations. *CyberGeo: European Journal of Geography*. DOI: 10.4000/cybergeo.28811.
- Tufekci Z (2008) Can you see me now? Audience and disclosure regulation in online social network sites. *Bulletin of Science, Technology & Society* 28(1): 20–36. DOI: 10.1177/0270467607311484.
- Vitak J (2012) The impact of context collapse and privacy on social network site disclosures. *Journal of Broadcasting and Electronic Media* 56(4): 451–470. DOI: 10.1080/08838151.2012.732140.
- Vitak J (2014) Facebook makes the heart grow fonder: Relationship maintenance strategies among geographically dispersed and communication-restricted connections. *Proceedings of the 17th ACM conference on Computer supported cooperative work & social computing*: 842–853. DOI: 10.1145/2531602.2531726.
- Whiting A and Williams D (2013) Why people use social media: A uses and gratifications approach. *Qualitative Market Research: An International Journal* 16(4): 362–369. DOI: 10.1108/QMR-06-2013-0041.
- Wilding R (2006) ‘Virtual’ intimacies? Families communicating across transnational contexts. *Global Networks* 2(2): 125–142. DOI: 10.1111/j.1471-0374.2006.00137.x.
- Wolin SJ and Bennett LA (1984) Family rituals. *Family Process* 23(3): 401–420. DOI: 10.1111/j.1545-5300.1984.00401.x.
- World Health Organization (2020) Virtual press conference on COVID-19 [Press release]. 11 March. Available at: https://www.who.int/docs/default-source/coronavirus/transcripts/who-audio-emergencies-coronavirus-press-conference-full-and-final-11mar2020.pdf?sfvrsn=cb432bb3_2.
- Yang C (2018) Social media as more than a peer space: College freshmen encountering

parents on Facebook. *Journal Of Adolescent Research* 33(4): 442–469. DOI: 10.1177/0743558416659750.

Yoon K (2016) The media practice of ‘KaTalk’ in the face of Facebook: young Koreans’ use of mobile app platforms in a transnational context. *Critical Arts* 30(2): 217–232. DOI: 10.1080/02560046.2016.1187797.

Zhao X (2019) Disconnective intimacies through social media: practices of transnational family among overseas Chinese students in Australia. *Media International Australia*. DOI: 10.1177/1329878X19837684.