



Calhoun: The NPS Institutional Archive

Faculty and Researcher Publications

Faculty and Researcher Publications

2015

Expatriate adjustment in the digital age: The co-creation of online social support resources through blogging

Nardon, Luciara

Elsevier



Calhoun is a project of the Dudley Knox Library at NPS, furthering the precepts and goals of open government and government transparency. All information contained herein has been approved for release by the NPS Public Affairs Officer.

> Dudley Knox Library / Naval Postgraduate School 411 Dyer Road / 1 University Circle Monterey, California USA 93943

http://www.nps.edu/library

International Journal of Intercultural Relations 47 (2015) 41-55

Contents lists available at ScienceDirect



International Journal of Intercultural Relations

journal homepage: www.elsevier.com/locate/ijintrel



Expatriate adjustment in the digital age: The co-creation of online social support resources through blogging



Luciara Nardon^{a,*}, Kathryn Aten^b, Daniel Gulanowski^a

^a Carleton University, Sprott School of Business, 926 Dunton Tower, 1125 Colonel By Drive, K1S 5B6 Ottawa, Canada
^b Graduate School of Business and Public Policy, Naval Postgraduate School, 555 Dyer Road, Monterey, CA, USA

ARTICLE INFO

Article history: Received 28 August 2014 Received in revised form 31 March 2015 Accepted 2 April 2015

Keywords: Expatriate Adjustment Blog Social support

ABSTRACT

Support provided through social contacts in the host environment has long been recognized as critical for expatriate adjustment. Internet technologies are changing the way individuals form and interact with social contacts and access social support. These technologies have the potential to offer expatriates new sources and means for accessing social support. We investigated the role of blogging technology in expatriates' adjustment to foreign environments through a qualitative analysis of a set of blogs written by foreign individuals living in Canada between 2005 and 2012. We found that the blogging system, which is comprised of the blogging technology, bloggers, discussants, and co-created digital discourse, generated online adjustment support resources which were accessed by expatriates. Online adjustment support resources are social support resources, created and residing online, which may help expatriates deal with their experiences of uncertainty, ambiguity and anxiety and include information, interpretation schemas, and comfort.

© 2015 Elsevier Ltd. All rights reserved.

1. Introduction

Millions of people are engaged in work abroad every year resulting from migration, expatriation or short overseas assignments. To succeed, these individuals must adjust to work and non-work conditions in the host country (Farh, Bartol, Shapiro, & Shin, 2010). That is, newcomers living abroad must establish a relatively stable and functional relationship with the host environment (Sobre-Denton & Hart, 2008), such that they are able to predict the behavior of others in the host environment; explain others' attitudes, feelings and behaviors; interact competently (Gudykunst, 1998); and go about their everyday lives with relative ease and a sense of psychological comfort (Farh et al., 2010; Sobre-Denton & Hart, 2008; Ward, Okura, Kennedy, & Kojima, 1998). Understanding the drivers and outcomes of newcomers' adjustment to foreign environments has been a focus of international management research since the late 1970s (see Black, Mendenhall, & Oddou, 1991 for a review) and is of key importance to individuals living and working in foreign contexts and to the organizations that employ them. For parsimony, in this paper we use the term 'expatriates' indiscriminately to refer to different types of newcomers, including migrants, traditional business expatriates, trailing spouses, or short-term sojourners.

Research has established the critical role of social support provided by contacts in the host country to expatriates' adjustment to foreign environments (Farh et al., 2010; Glanz, Williams, & Hoeksema, 2001; Johnson, Kristof-Brown, Van Vianen, & De Pater, 2003; Manev & Stevenson, 2001; Sobre-Denton & Hart, 2008). Contacts in the host country provide social support

http://dx.doi.org/10.1016/j.ijintrel.2015.04.001 0147-1767/© 2015 Elsevier Ltd. All rights reserved.

^{*} Corresponding author. Tel.: +1 613 520 2600x1802. E-mail addresses: luciara.nardon@carleton.ca (L. Nardon), kjaten@nps.edu (K. Aten), danielgulanowski@cmail.carleton.ca (D. Gulanowski).

(Adelman, 1988), which, in the context of adjustment to foreign environments, is defined as communication that helps individuals manage uncertainty and ambiguity and increases their perceptions of control regarding life (Albrecht & Adelman, 1987; Albrecht, Goldsmith, & Thompson, 2003). This definition focuses on social support that addresses uncertainty, ambiguity and anxiety, which are key barriers to expatriates' adjustment to foreign environments (Gao & Gudykunst, 1990; Gudykunst, 1995, 1998, 2005; Sobre-Denton & Hart, 2008).

Traditionally face-to-face encounters were expatriates' primary means of engaging and interacting with contacts and accessing social support for adjustment. Internet technologies, such as blogs, social network sites and wikis, are now widely recognized to be changing the way individuals make and interact with social contacts (Grudin, 2006; McAfee, 2006; Steinhuser, Smolnik, & Hoppe, 2011) and thereby access social support (Mikal, Rice, Abeyta, & DeVilbiss, 2013; Rains & Young, 2009).

Studies have shown that technology-mediated social support has a positive influence on adjustment to a variety of life transitions such as those brought on by parenthood, diagnosis of a serious illness and change of career status (Kralik, Visentin, & Van Loon, 2006). Given the importance of social support from contacts in the host country to expatriates' adjustment to foreign environments (Farh et al., 2010; Glanz et al., 2001) and the growing use of Internet technologies for interacting with others (Rains & Keating, 2011; Treem & Leonardi, 2012), a complete understanding of the process of expatriates' adjustment to foreign environments in the digital age requires an understanding of the role these technologies play in supporting expatriate adjustment. We expand understanding of the potential of Internet technologies in expatriates' adjustment to foreign environments through a qualitative, grounded analysis (Birks & Mills, 2011; Corbin & Strauss, 2008; Locke, 2001) of a set of blogs written by foreign individuals living in Canada.

We found that bloggers (the principal authors of blogs) and readers interacted through blogs with each other, and the texts they created, to generate online adjustment support resources. We define online adjustment support resources as resources created through interaction with social contacts, which may be particularly necessary in helping expatriates deal with their experiences of uncertainty, ambiguity and anxiety. Online adjustment support resources were continually constituted and updated and remained available to current and future expatriates. We conceptualized the blogging system as a technical subsystem ("a space in which work is made possible through the imbrication of social [human] and material [technological] agencies" (Leonardi, 2012, p. 27)) and developed a model explaining the role of the blogging system in expatriates' generation of and access to, online adjustment support resources. We conclude with a discussion of the implications of our findings for theories of expatriates' adjustment to foreign environments. Our study contributes to research on expatriates' adjustment to foreign environments for future research of expatriates' adjustment and more broadly, to research of online social support.

2. Expatriate adjustment and technology-mediated social support

We view expatriate adjustment as a type of transition (see Adelman, 1988; Mikal et al., 2013). Life transitions are instigated by events that require an individual to move from one life context, identity and/or role to another, such as being diagnosed with a serious illness or moving to a foreign country (Kralik et al., 2006; Mikal et al., 2013). Individuals undergoing transition typically experience stress stemming from uncertainty and a disruption to social networks (Adelman, 1988; Mikal et al., 2013). Adjustment to a transition is facilitated by social support (Adelman, 1988; Albrecht & Adelman, 1987; Mikal et al., 2013). Social support has been generally defined as the experience of assistance and reassurance resulting from social relationships (High & Solomon, 2011), what people use when responding to problems of life (Pearlin, 1989), and as the transfer of advice and information to help cope with a stressor (Mikal et al., 2013). More specifically, in the context of adjustment to foreign environments, we focus on social support as "communication that serves to help manage uncertainty and increase perceptions of control regarding one's life" (Rains & Keating, 2011, p. 513). In the next section, we elaborate on the nature of the specific transition facing expatriates, which has implications for the types of social support they may require.

2.1. Expatriate adjustment¹

Expatriates undergo many disruptions similar to other types of life transitions, including disruptions to existing roles, identities and social networks, which result in the experience of uncertainty, ambiguity and anxiety. Research on expatriate adjustment conceptualizes this experience as culture shock (Kim, 2008). To manage culture shock and adjust to the new environment, expatriates need to understand, make sense of, and interact within the new social environment (Glanz et al., 2001). Expatriates' local contacts provide social support that helps expatriates manage their experience of uncertainty (Gao & Gudykunst, 1990; Gudykunst, 1995, 1998, 2005), ambiguity (Adelman, 1988; Glanz et al., 2001), and anxiety (Gao & Gudykunst, 1990; Gudykunst, 1995, 1998, 2005).

An expatriates' experience of *uncertainty* results from the inability to predict or explain behaviors in the host environment (Gudykunst, 1998, 2005; Sobre-Denton & Hart, 2008). An expatriate's experience of *ambiguity* results from the inability to

¹ We explored and integrated literature into our research as our data suggested its relevance as is typical of research adopting a grounded theory approach. For ease of reading, we review the literatures we came to draw on, together, here.

make sense or interpret facts and situations. Expatriates must access local interpretation schemas in order to make sense of their surroundings, including new social and physical environments (Glanz et al., 2001). Even after an expatriate is able to predict the characteristics of the physical and social environment, for example after learning about the habits and norms of locals, he or she may lack an understanding of the meaning or implications of characteristics of the host environment for his or her work and life. An expatriate's experience of *anxiety* results from uneasiness or apprehension about what will happen when he or she interacts with the host environment (Gudykunst, 1998).

Contacts in the host country provide social support that facilitates adjustment by providing personalized information and local interpretation schemas and by sharing personal accounts and stories, which help expatriates make sense of discrepancies or problems, identify solutions and appropriate actions, and feel better about themselves and their situation (Bailey, 1969; Farh et al., 2010; Glanz et al., 2001; Johnson et al., 2003; Long & Roberts, 1984; Wolf, 1966). Social contacts who are also expatriates can additionally provide reassurance that anxiety and frustration is both normal and temporary. This reassurance can help expatriates construct the experience of uncertainty, ambiguity and anxiety as a learning transition and thereby establish a sense of control (Adelman, 1988; Kim, 1977).

Compared to official sources such as the staff and publications of immigration offices, social contacts in the host country can provide expatriates with more relevant and meaningful information. Social contacts in the host country are better able to work through specific problems and issues facing the expatriate and frame information in ways that are personally relevant and meaningful (Dennis, 1994). These contacts can filter information that is relevant to the individual expatriate and his or her circumstances from an overwhelming abundance of stimuli and highlight important information that might otherwise be overlooked. Additionally, other expatriates with a longer tenure in the host environment can provide personal narratives that are more comforting and empowering than the professional, task-oriented information typically provided by official sources (Adelman, 1988; Arntson & Droge, 1987). These arguments are congruent with, and offer a partial explanation for consistent findings that social support provided by social contacts in the host country contacts is critical to expatriates' adjustment.

2.2. Technology and social support in international transitions

Internet technologies are changing the way individuals develop and communicate with social contacts, providing new venues for generating and accessing social support (Chu, Kwan, & Warning, 2012; Mikal et al., 2013; Rains & Keating, 2011; Rains & Young, 2009). Research of Internet technology use by migrants and expatriates is limited and studies have usually focused on the utility of such technologies for facilitating the maintenance of ties with the home country and organization (Cox, 2004; Kim & McKay-Semmler, 2013; Ogan & Ozakca, 2010). Several recent studies, however, suggest that Internet technologies may provide access to social support during transitions to international environments.

Research on Internet use by students abroad showed that multiple, unspecified Internet technologies provided effective channels for transferring information and resources and alleviated stress generated by the transition (Mikal, 2011; Mikal & Grace, 2012; Mikal, Yang, & Lewis, 2014; Ye, 2006). Internet technologies provided students with a sense of community, facilitated interactions with host nationals and other international students, and facilitated access to information (Mikal, 2010; Mikal, 2011; Mikal & Grace, 2012) and also allowed the maintenance of close connections with home-country contacts (Mikal, 2011; Mikal & Grace, 2012; Mikal et al., 2014). One study, which focused on blogging technology and international transitions, found that students who blogged during internships believed that blogging facilitated social support (Chu et al., 2012).

3. Research approach

Our focus on blogs was driven by the importance of social support from contacts in the host country to expatriate adjustment (explained in the previous section) combined with the proliferation and unique affordances of blogs. The definition of blogs is somewhat ambiguous (Garden, 2012). In this paper, we begin with the following and elaborate later in the paper: a blog is a website or parts of website where people post writing and images on a regular basis, in a storytelling fashion, usually in reverse chronological order and where readers can respond by posting comments and links to other blogs (Du & Wagner, 2006).

As described above, studies suggest that Internet technologies in general, and blogs in particular, may provide expatriates a venue for accessing social support and may facilitate their adjustment (Chu et al., 2012; Mikal, 2010; Mikal, 2011; Mikal & Grace, 2012; Mikal et al., 2014; Ye, 2006). Blogs afford new ways of communicating, which we argue, may be of particular value in supporting expatriates' adjustment to foreign environments. Treem and Leonardi (2012) identified four general affordances provided by blogs: visibility, persistence, editability, and association. Blogs allow users to make behaviors, knowledge, preferences and communication networks visible; create text that remains accessible; link to past content; edit communication before it is received; and make connections between individuals and content. These affordances may provide means of generating and accessing social support to deal with uncertainty, which as discussed further below, is a key challenge facing expatriates.

In addition, blogs open new opportunities for research by allowing the non-obtrusive observation of individuals' experiences and thoughts on adjustment, which may provide insights that are not available through data sources often used in the study of expatriates, such as interviews and surveys (Takeda, 2013). Blogs provide longitudinal, rich, present tense accounts of every day events and reflections, which are the foundation of expatriate adjustment. Blogs thus allow a unique window into expatriates' naturally occurring reflections, absent researcher intervention.

We approached our exploration of expatriate blogging and adjustment through a qualitative study, which is appropriate because the existing knowledge of the role of blogging in expatriate adjustment to foreign environments is limited. We analyzed the data using an inductive, grounded approach, allowing initial analyses and findings to inform and focus our research approach and subsequent iterations of analysis (Birks & Mills, 2011; Charmaz, 2014; Corbin & Strauss, 2008; Locke, 2001). In accordance with interpretive research (e.g., Berger & Luckmann, 1967; Orlikowski & Gash, 1994; Smircich & Stubbart, 1985; Weick, 1979), we assumed that expatriate bloggers would act on their interpretations of their environments, specifically by posting in blogs and discussion comments on other bloggers' posts. We further assumed that their interpretations would be evident in the posts and as researchers we would be able to recognize and structure the data comprised by the posts and the ensuing discussions (Gioia, Corley, & Hamilton, 2013).

Our research question became increasingly focused as the study progressed, as is typical of grounded theory approaches (Charmaz, 2014; Corbin & Strauss, 2008; Locke, 2001). We initially set out broadly, to investigate temporal patterns of acculturation and adjustment (e.g., Bennett, 1998; Kim, 2005; Osberg, 1960) by studying expatriate blogs. As we began our analysis, following Charmaz (2014) and Glaser (1978) we asked ourselves, "What is the data a study of?" (Glaser, 1978, p. 57). We observed that expatriates utilized blogs to express frustration and confusion, reflect on discrepancies, and inform and explain, regardless of the duration of their stay in the foreign environment. This directed our attention to the literature on blogs, transition and technology-mediated social support and led us to focus more narrowly on the affordances provided by blogs and on the role blogging technology in supporting expatriate adjustment.

3.1. Data collection and organization²

We identified an initial set of blogs to study through a search in technorati.com in April 2012. Technorati.com was an Internet search engine specializing in searches of blogs that was discontinued in 2014. We searched for the key phrases "Canada immigrant" (43 results), "Canadian immigrant" (19 results), "foreigner Canada" (3 results), "immigrate Canada" (52 results), "Canada expatriate" (21 results), "Canada expat" (59 results), and "expat in Canada" (39 results). We then narrowed the dataset as illustrated in Fig. 1 and explained below.

We reviewed the blog titles and 'about this blog' pages and eliminated duplicates, blogs not written in English, blogs not written by foreigners living in Canada, and blogs not related to immigration or life abroad. We also eliminated blogs that had been inactive for more than 2 years. This resulted in 18 blogs.

We then used snowball sampling to expand the dataset (Biernacki & Waldorf, 1981). We followed links on each of the eighteen blogs and identified twenty-seven additional, potentially relevant blogs. There was one case in which a blogger ran two blogs. We merged the two blogs for our preliminary analysis, resulting in a total set of forty-four blogs.

We then categorized the blogs according to the blogger's apparent motivation for writing the blog as indicated in the 'about this blog' pages. We grouped motivations into four categories: providing immigration and local information (10), sharing life (17), sharing life in Canada (24), and selling or showcasing products and services (7). We then narrowed the dataset to include only blogs in which the blogger specifically identified intent to share his or her experiences of life in Canada. This resulted in 24 blogs.

We then shifted our attention to collecting relevant posts within each blog. We navigated each blog, reading each post and selecting posts that were relevant to our study. We focused on blog posts that had explicit references to living abroad or living in Canada. We did not select posts about general personal interests (e.g., hobbies) or personal events that were not addressed from the point of view of living abroad (e.g., if a blogger wrote a post focused on how as a mother of an infant she is sleep deprived but did not address how this relates to living abroad it would not be included in the study). This process resulted in 945 posts about living in Canada, immigration, and Canadian culture.

Given our interest in a longitudinal analysis of bloggers' accounts of life in Canada, we then eliminated entirely blogs with fewer than ten relevant posts (three blogs), resulting in 922 posts. We further eliminated blog posts in the remaining twenty-one blogs written prior to the blogger's arrival in Canada (171 posts) and those aimed at informing family and friends about the blogger's wellbeing (135 posts). During the early part of the time period covered by our data – starting in 2005 – some bloggers used their blogs to keep family and friends informed as exemplified by the following excerpt from a blog post:

Hello all. Just a short post to declare, "We've Landed!" Our drive across the U.S. with our cat Caesar is finished. We crossed the border with "flying colours" having no issues with Canadian Immigration or Customs. . . It's great to finally be here. More posts to follow regarding our trip across the U.S., our new home, and details about our landing as soon as I catch up on some sleep. Canadian Boomdiada, 2008-08-03

² It this paper, we use the name of the blog to attribute credit to quotes. We have shortened quotes to make them readable, but have not altered names used within the quotes or in comments. These names have been provided by the writers and may or may not be pseudonyms.

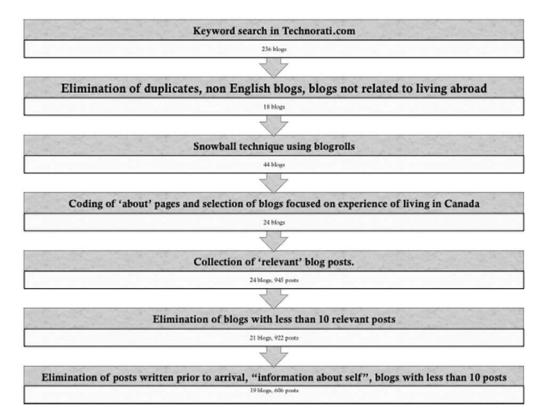


Fig. 1. Data collection and organization.

	Before 2005	2005	2006	2007	2008	2009	2010	2011	2012	# posts
Aiglee		-	-	2	15	2		2	-	21
Alice in Canada		-	-	-	3	10	3	2		18
Canada Immigrant's Blog		-	7	1	6	4	-	2	1	21
Canada Pisani		-	-	-	11	18	10	7	-	46
Canadian Boomdiada		-	-	-	8	4	-	1	-	12
Cooking in someone else's kitchen		-	-	3	5		3	4	-	15
Correr es mi destino		-	2	19	9	9	11	5	7	62
Dear England, Love Canada		-	-	-	-	-	33	8	-	41
Dear to Toronto		-	-		2	4	5	2	4	17
Expat Travels		2	12	9	-	1	-	-	-	24
Expatlogue		-	-	-	-	-	-	34	9	43
Filipino in Canada		-		-	25			1		26
How to live in Canada		-	-	1	28	15			-	44
My journey as a newcomer in Canada		-	-	-	-	-	-	10	-	10
Prairie Road		-	-	15	9	6	2	2	-	34
The Expatriate Mind		-	-	-	-	-	-	-	15	15
The Zieglers Blog		-	-		-	-	20	51	16	87
Welcome Canuck			12	1	1			2	-	16
WMTC		22	6	9	4	4	4	2	3	54
Total number of posts		24	39	60	126	77	91	134	55	606

Fig. 2. Final selection of blog posts.

We speculate that bloggers used their blogs in this way because other venues such as Facebook were not as popular at that time (there were only four posts of this type in 2012). In addition, our focus in this study was to understand how expatriates used blogs for interaction with contacts in the host country as opposed to for maintenance of ties to the home country. The final data set included nineteen blogs and 606 relevant posts as shown in Fig. 2. The shaded areas of the figure represent the years the blogger lived in Canada and the numbers indicate the number of posts included in the data set.

Blog Name	# of Posts	Country of Origin	Gender	Year of arrival
Aiglee	21	Venezuela	Female	2007
Alice in Canada	18	USA	Male	2008
Canada Immigrant's Blog	21	Middle East*	Male	2006
Canada Pisani	46	USA	Family	2008
Canadian Boomdiada	12	USA	Male	2008
Cooking in someone else's kitchen	15	UK	Female	2007
Correr es mi destino	62	France	Female	2004
Dear England, Love Canada	41	UK	Female	2008
Dear to Toronto	17	Middle East*	Male	2007
Expat Travels	24	USA	Female	2007
Expatlogue	43	UK	Female	2010
Filipino in Canada	26	Philippines	Female	2006
How to live in Canada	44	Brazil	Male	2003
My journey as a newcomer in Canada	10	Mexico	Female	2010
Prairie Road	34	USA	Family	2006
The Expatriate Mind	15	USA	Male	2005
The Zieglers Blog	87	Argentina	Family	2005
Welcome Canuck	16	Philippines	Male	1997
WMTC	54	USA	Female	2005

* Country not identified

Fig. 3. Bloggers and input.

	Introspective	Extrospective
Descriptive	Expressing	Informing
	(220 posts)	(201 posts)
Interpretive	Reflecting	Explaining
	(101 posts)	(84 posts)

Fig. 4. Types of posts.

3.2. Blogs and bloggers in the dataset

Fig. 3 summarizes the characteristics and motivations of the bloggers we studied and the number of blogs each entered into the system. Nine bloggers were female, seven were male, and three wrote as a family without clearly identifying who was writing. Bloggers arrived in Canada from 1997 through 2010 and came from at least eight distinct countries (two bloggers identified their region, but not country, of origin). The bloggers' stated reasons for blogging included informing other immigrants (seven bloggers); gaining exposure as a writer (four bloggers); keeping a record of their experiences (four bloggers); and providing opinions, sharing observations, or writing for recreation (four bloggers).

3.3. Analytical approach

After organizing the data, we engaged in an iterative process of coding and theorizing (Gioia et al., 2013; Nag, Corley, & Gioia, 2007) to identify patterns and categorize the data at three levels: the blog post, the discussion (represented by the whole of comments after each post) and individual statements by readers describing the effect that reading the blog and discussion had on them. Two members of the research team initially engaged with the dataset to gain an overall understanding of the data. We grouped segments of text into focusing on processes and actions (Charmaz, 2014), such as providing advice, comparing Canada with home country, and describing Canadian features, using Dedoose, a qualitative data analysis software. Through successive iterations we identified two dimensions (*focus and content*) and four categories (*expressing, reflecting, informing*, and *explaining*) of posts, which we explain in subsequent sections of the paper. The number of posts in each category is shown in Fig. 4.

We next coded the comments and responses to comments that followed each post at the discussion level. That is, we reviewed the comments that ensued from a blog post as a conversation or discussion and categorized each discussion according to the overall theme of the conversation. We drew on our previous analyses and developing understanding, focusing our attention first on the prominent communication and apparent purpose of the discussion. Through successive

Outcome ensuing from post	#
Posts without discussion	251
Posts with discussion	345
Sharing Information	210
Debating	85
Supporting	60
Total posts	606

			ussic	

Acknowledging	#	Examples from Data
Information	82	I was surprised to learn that it is forbidden to drinkin public
		spaces.
		I never knew what "loitering" meant either
		I had no idea what Black Friday was
		About Beaver's tail, I thought it was really beaver's tail.
Understanding	56	Thanksfor your insight, <i>it's nice to get a different perspective</i> [on]
		the practice of tipping.
		Yea, I get what you're saying and I admit <i>I never thought of it that</i>
		way
		I finally realized that, like you said, there was still a class system
		here and that people tended to stay in it.
Comfort	56	Glad to know I am not the only one struggling
		Being an immigrant myself, I am going to say that I relate to this
		post completely.
		This kind of stuff does <i>make me feel lucky</i> to be living here.
		You can't even imagine how I can relate to this article, I really
		enjoyed reading it. It makes me feel better actually.

Fig. 6. Acknowledgment of resources.

iterations of coding, we grouped the discussions into three categories: sharing information, debating and supporting. Fig. 5 shows the number of posts with discussions and the three types of discussion.

We then focused on individuals' comments within the discussion and identified instances in which a discussant (an individual making comments at the end of a post) explicitly acknowledged accessing the text with a positive outcome. These instances included supporting comments and expressions of gratitude directed to the blogger. Through this lineby-line reading (Charmaz, 2014), we distilled three final categories: *acknowledging new understanding, acknowledging new information* and *acknowledging comfort*. Fig. 6 shows the number of instances in each category.

Finally, our focus shifted to emphasize theorizing. We created tables and figures displaying the data, categories and themes (Gioia et al., 2013; Miles & Huberman, 1994). We developed a description of the blogging system (including inputs and outputs) that fully incorporated all the data and developed a model to explain how expatriates use blogging and blogging technology to create and access adjustment resources.

4. Analysis and findings: the blogging system and the co-creation of online adjustment support resources

We conceptualize a blogging system drawing on the notion of a technical subsystem. Leonardi (2012, p. 42) described a technical subsystem (also called a sociomaterial practice), as a space including people and technology artifacts "in which multiple human (social) agencies and material agencies are imbricated" or overlapped. We found the blogging system we studied was comprised of bloggers and discussants, blogging technology and the set of interdependent posts and responses. Through the blogging system, expatriates generated a co-created and accessible electronic discourse, which provided a pool of online adjustment support resources. The blogging system was both available and constituted through its use. Bloggers contributed to the system in the form of blog posts and discussants contributed in the form of discussion comments. These contributions, interacting with the individuals and features of the technology, generated further posts and discussions resulting in co-created online adjustment support resources available to support adjustment, as depicted in Fig. 7 and explained below.

4.1. Blogging technology

Blogging technology includes hardware (e.g. computers) and software, which afford or enable the act of blogging (e.g. the creation of blog posts and discussions). Most bloggers use hosting services that provide blogging tools and server space (Duffy, 2011). The bloggers in our data set used the services Wordpress and Blogger. These services provide blogging tools

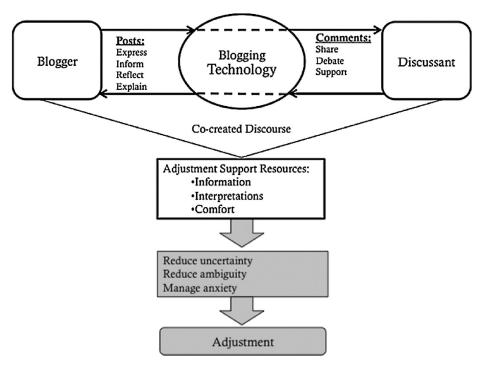


Fig. 7. The blogging system and online adjustment support resources.

including an interface to allow easy sharing of multimedia content; links to other sites; blogrolls, which display frequently referenced sites on a sidebar; and comment and discussion tools including the option to be alerted of new posts or comments.

4.2. Bloggers' contributions: expressing, informing, reflecting and explaining posts

Blog writers, or bloggers, contribute posts to the blogging system. Individuals often fill multiple roles in the blogging system (i.e., blog writers often also read and comment on other bloggers' posts); however, we discuss the inputs of each role separately. While the blog posts in our data set emphasized topics such as Canadian life, legal and administrative advice, and immigration policies and implications, the presentation of the topics varied by focal audience and style. Although blogging is by nature an activity of public communication, some posts focused on the blogger's feelings and thoughts as though to an internal audience. We categorized these posts as *introspective* in focus. Other posts described or explained the environment experienced by the bloggers to others, or an external audience. We categorized these posts as *extrospective* in focus. The posts in our dataset also varied by style. Some posts described practical and objective information (e.g., processes to acquire documentation or perform daily tasks in the new country). We categorized these posts as *interpretive*. Other posts reflected on the blogger's interpretations of events and situations. We categorized these posts as *interpretive*. The two dimensions resulted in four types of posts as shown in Fig. 5: *expressing* (introspective/descriptive – 220 posts), *informing* (extrospective/descriptive – 201 posts), *reflecting* (introspective/interpretive – 101 posts) and *explaining* (extrospective/interpretive – 84 posts).

Expressing posts are introspective and descriptive in nature. Expressing posts describe events, situations, or characteristics of the Canadian way of life from the perspective of the blogger. Rather than informing others about how things are – as do informing posts described below – expressing posts typically express frustration or puzzlement with the way things are. Unlike reflecting posts, which are also introspective and are described below, expressing posts do not show the blogger arriving at a new understanding of why things are the way they are, or how he or she can cope with these frustrations. For example, consider the following post excerpt:

Here's a retail annoyance for a newcomer like me. Nobody displays retail prices WITH taxes!...I am seriously beginning to wonder what exactly is the point for not listing prices with the GST+PST (15%) tax that is added to everything at the end? I mean it is not as if some people pay, while others don't. It's a mandatory tax, right? And it is applicable on everything. So why don't the retailers display the prices WITH the tax added and save us poor newbie souls nasty surprises, or Percentage-101 before getting to the check out counter?... Canada Immigrant's Blog, 12-06-2006

In the post above, the blogger is surprised and frustrated by the way retail prices are displayed in Canada. He describes the way things are, but expresses his puzzlement as opposed to informing others about how to calculate the final purchase

49

price. He also does not engage in written reflection by, for example, discussing his attempts to understand why prices are displayed the way they are or how Canadians cope with this system on a day-to-day basis.

Informing posts are extrospective and descriptive. They are written to share information about life in Canada with others. Most of these posts provide information, although occasionally bloggers also use information posts to solicit practical information (e.g., does anyone know how to...?). These posts describe processes (e.g., how to get a driver license) as well as tips for daily life activities (e.g., where to get groceries, the price of staple products).

For example, consider this excerpt:

Once you've found the house and made an offer, you have to get approved for a mortgage with a particular rate of interest, make the inspection and wait...The mortgage broker will let you know who is going to be your particular lender and how much will be the rate of interest you'll pay....The wait can be from 2 weeks to 6 months, in our case we are waiting 2 months from the date of the offer. What do we do while we wait? Get the money!!! These are the things you need to pay when buying a house of \$336.000 with \$10.000 of deposit and 5% of down payment...And when calculating what you are going to pay monthly for your house, don't forget:- Mortgage- Insurance- Utilities-Taxes

Aiglee, 02-11-2008

The blogger above is writing to an external audience of other foreigners. She has apparently learned how to finance the purchase of a home in Canada and is sharing detailed information about how to calculate the cost of a home with others.

Reflecting posts are introspective and interpretative. Reflecting posts reveal the blogger's process of making sense of a situation. The blogger is writing to an internal audience, reflecting on his or her experience. These posts exhibit a change in the blogger's thoughts, or attitude or achievement of understanding as the blogger writes the post. For example, in reflecting posts, the blogger may begin by describing his or her observation of something that is different in Canada with skepticism, dislike or puzzlement. Then, through the process of describing the experience the blogger concludes with a new interpretation. Consider the excerpts of post below:

I'm currently enrolled in the Marketing program at the Centre for Continuing Education at McMaster. Going back to school was not an easy decision. . . This situation made me think of how different education and getting into a new field are perceived in both countries. In Mexico, people get a degree and they usually find a job and stay in the field for the rest of their professional lives. . . In Canada it is very common for people to go from one field to another. . . I'm not saying there is a right or wrong way to see it. It is just a matter of cultural differences. In my case, going back to school to finally get that Marketing diploma (I have a degree in Communications) has paid off. Not only am I learning and discovering new things, but I've also been lucky enough to meet some great new people. My journey as a newcomer in Canada, 07-10-2011

In this post, the blogger identifies a cultural difference – the perception of education – and reflects upon it noting the positive and negative aspects of the Canadian way. The blogger concludes with her arrived understanding of the implications of this new way of thinking to her own career.

Explaining posts are extrospective and interpretive. They are written to an external audience to help others understand why things are the way they are. These posts explain or interpret puzzling information for others. The fundamental difference between reflecting and explaining posts is that reflecting posts exhibit the blogger's interpretive process, while explaining posts explicate an interpretation the blogger achieved prior to writing. Thus, in explaining posts, the blog post is not a vehicle for reflection (as in a reflecting post) but is instead a vehicle to explain the blogger's understanding to others. Explaining posts differ from informational posts in that the explaining posts focus on describing *why* things are as they are, as opposed to *how* they are.

For example, consider the post below:

... Why do we wear poppies on Remembrance Day?

The poppy worn on Remembrance Day is the red-corn poppy, which grows abundantly in Europe, including Flanders Fields. 'In Flanders Fields' is a poem,...about the small red flowers growing on the battlefields of France amongst the death and blood from the men who died fighting for their country. This is because the corn poppy was one of the only plants that grew on the battlefield...

Canada Pisani, 11-11-2008

This post provides readers with important cultural information to help them make sense of events and activities and by explaining the symbolism behind them. Prior to writing the post, this blogger developed an understanding of the symbolism of poppies related to Remembrance Day and uses the post as a vehicle to share this understanding with others.

4.3. Discussants' contributions: sharing information, debating, and supporting

Discussants are individuals who read a blog post and make a comment on it, generating a conversation or discussion. Often, discussants are also bloggers. While we recognize that not all readers comment on a blog post, readers that do not make a comment leave no trace in our dataset and thus are not part of our study. Our analysis revealed three types of discussions: sharing information, debating and supporting (see Fig. 6).

Sharing discussions focused on imparting information, either complementing comments made by the blogger or other discussants or answering questions others have posed. For example, the following conversation ensued following a post discussing tipping in Canada. One discussant posted information about tipping amounts in response to a question in the blog: "I always tip 20% to servers at a restaurant, if they are a little lame 15%, totally lame 10%, rude 0%...." Another then elaborates, "Lisa had the tipping percentages about right...I'll tip 30% for amazing, 25% for great, 20% for good, 15% for okay, 10% some server errors, 5% for horrible experience." Another offered further clarification, "The wages for employees classified as tipped employees is 1/2 minimum wage. So if minimum wage is \$6, then your average waiter will make \$3 plus tips. Employers that hire tipped employees know how to make sure that the tips get reported to the IRS as well...." Overall, this conversation imparts information about tipping through discussants' clarification and expansion of each other's comments. The outcome of this discussion is that bloggers and readers have a more complete picture of tipping practices in Canada.

Debating discussions offered an assessment or opinion of experience described in the post and may resemble a debate between the blogger and discussants. For example, the following conversation ensued following a post about the immigration process. One discussant assessed the experience described in the post and followed with a reflection on her experience, "*I* really like the freedom part [mentioned in the post]. Once you land, after going through all the immigration paperwork, it feels like you have the world in your hand. I still feel this way. I can do whatever I want, choose my own future." Another added his assessment, "I found more pros in the post (even the cons are pros...) Once one leaves his country or birth place, he leaves his history and he wanders with a new or zero identity. The question is how fast one can make his/her new identity, at least for self satisfaction (to avoid frustration). Yes its tough...yes it may be easy...depends on luck and many other things.!" In these conversations, writers respond to each other, comparing their experiences and reflections on experience with the assessment made by other writers.

Supporting discussions provided encouragement and comfort. Discussants responded to the blog post and others' comments by providing accounts of their own similar experiences, demonstrating understanding and providing words of encouragement. For example, following a post relating the blogger's application for permanent residence a discussant writes, "Let me know if you need some help...Been here, done that! If it can make you feel better, they're sometimes really fast: I got my permanent resident in 5 months top...." And another responds, "Unlike Zhu, my journey has been a long haul that has included 16 months in the queue after filing...Just this week, it was granted and now I'm waiting for my "card"...Good luck!" Although this last comment relates an experience that differs from that of the previous discussant, there is no evaluation or debate. Rather, the discussant is relying on the experience to help set expectations and offer encouragement. The comments build upon each other forming a supportive discussion.

4.4. Online adjustment support resources: information, interpretation, and comfort

The posts and discussions described above generated an accessible, digital discourse, which constituted co-created online adjustment support resources that were then available to expatriates. Traditionally in the expatriate literature, social support resources have been conceptualized as social contacts, often referred to as social brokers (Farh et al., 2010; Glanz et al., 2001; Johnson et al., 2003; Sobre-Denton & Hart, 2008). Given that in a face-to-face setting, an expatriate cannot access a message absent a relationship with a social contact, this conceptualization is not surprising. However, in the blogging system, the supportive communications individuals contribute are durable and searchable and become resources available for access. Expatriates acknowledged accessing adjustment support resources through their interactions with the blogging system. Our analysis of these acknowledgments revealed that expatriates accessed three types of adjustment support resources: information, interpretation, and comfort.

Information support resources included advice and factual information. Expatriates acknowledged accessing information support resources in their posts by describing learning of new processes, rules or definitions using statements such as "I was surprised," "I never knew," and "I had no idea." For example, one expatriate noted learning about a new rule, "*I was surprised to learn that it is forbidden to drink a beer in public spaces.*" Others noted learning new definitions or meanings, with which actions were associated, "*I never knew what "loitering" meant either*..." "*I had no idea what Black Friday was*" and "About Beaver's tail, I thought it was really beaver's tail."³

These acknowledgments demonstrate that expatriates accessed adjustment support resources in the form of information. Information helps expatriates function and problem solve in the new environment (Farh et al., 2010). For example, knowledge of the definition of loitering can help to explain why loitering does not occur, knowledge of the meaning of the term Black Friday can help expatriates predict and explain the actions of shoppers and retailers, and knowledge of what is meant by the term Beaver's tail can help expatriates predict the actions associated with the term, in this case, eating a pastry and not an animal part. Accessing information support resources, which are targeted and filtered by social contacts with whom the expatriate can relate, can potentially reduce uncertainty stemming from the inability to predict or explain behaviors, a key challenge facing expatriates that is not fully addressed by information from more general sources.

³ A Beaver's Tail is a pastry in the shape of a beaver tail sold by Canadian-based pastry BeaverTails.

Interpretation support resources are new schemas. Expatriates must access local interpretation schemas in order to make sense of facts and situations in their new environments and understand their implications (Glanz et al., 2001). Although similar to information support resources, interpretation resources help expatriates interpret and understand puzzling events or Canadian life rather than by providing facts. Expatriates acknowledged accessing interpretation support resources in the blog posts and discussions by describing new or changed understanding using statements such as "I realize," and "I never thought like that." For example, following a blog post and discussion about tipping, an expatriate acknowledged the new perspective presented in the posts, "*Thanks*. . .*for your insight, it's nice to get a different perspective the practice of tipping*." Another writer acknowledged the new perspective and reflected on how this perspective supported better understanding of life in Canada, "*I finally realized that, like you said, there was still a class system here and that people tended to stay in it. If your parents were farmers, you were a farmer.*" These acknowledgments demonstrate accessing support resources in the form of interpretations. Accessing interpretation support resources can potentially help reduce expatriates' experiences of ambiguity stemming from a lack of understanding.

Comfort resources are assurances of adequacy and belonging aimed at reducing anxiety. Anxiety is a key component of culture shock. It is related to the experience of uncertainty and ambiguity and challenges those transitioning to foreign environments. Expatriates' experiences of anxiety result from apprehension about what will happen in the host environment and feelings of isolation (Gudykunst, 1998). Comfort resources are direct statements of caring, concern, sympathy and empathy and narratives and stories that illustrate that the stress caused by the transition is normal and similarly experienced by others. For example, writers provided direct comfort statements as in, "Don't be ashamed!!! It's not the same for everyone, I did it because now I'm going to need a car, but if you don't need it, why hurry?" and "I felt really depressed at times as well. I feel for you" and also "I think what you're experiencing must be very normal. I can't imagine feeling too much different when I get to doing it."

Expatriates acknowledged accessing comfort resources in the blog posts and discussions, by describing their positive feelings resulting from reading using statements such as, "I relate," "glad I am not alone," and "I feel better." Expatriates acknowledged gaining a greater sense of ease about events, situations, or life in Canada, or decreased sense of isolation from reading blog posts and discussions. For example, one acknowledged positive feelings about living in Canada resulting from reading the posts and discussion, "*This kind of stuff does make me feel lucky to be living here.*" Another acknowledged feeling better about his situation, "*You can't even imagine how I can relate to this article.*..*It makes me feel better actually.*" Many acknowledged feeling less isolation as in "*I am glad it's not just me*, and "*Clad to know I am not the only one struggling.*..." These statements acknowledged accessing support resources in the form of comfort. Comfort resources can potentially help expatriates feel better about themselves or their situations and reduce anxiety by letting expatriates know they are not alone and that others have had similar experiences, feelings and concerns.

5. Discussion: the blogging system, support resources and expatriate adjustment

We investigated the use of blogging technology by expatriates in Canada. We found that the blogging system allowed expatriates to create and access online adjustment support resources. Bloggers and discussants generated and accessed online adjustment support resources constituted from the contributions they made to a co-created discourse, through the blogging system. Expatriates acknowledged that through their participation in the blogging system they gained knowledge, new understanding and new perspectives, and felt comforted. These findings suggest that blogging systems can provide expatriates an alternative to face-to-face communication in dyadic relationships for accessing the social support required for adjustment.

5.1. Support resources and expatriate adjustment

We identified three types of online adjustment support resources: information, interpretation, and comfort. Congruent with extant literature on adjustment (e.g., Farh et al., 2010; Gudykunst, 2005), we suggest: information resources can reduce expatriates' experiences of uncertainty by increasing their ability to predict or explain behaviors, function, and problem solve in the host country; interpretation resources can reduce expatriates' experiences of ambiguity by helping them make sense of characteristics of their new environment; and comfort resources, in the form of examples of others' experiences and assurances that problems can be managed, can help expatriates manage anxiety and decrease apprehension. For example, after learning about the steps in the immigration process, an expatriate would be better able to predict what would come next. Accounts and stories of how others have made sense of the extremely low temperatures in Canada could help expatriates understand how very low temperatures may affect their day-to-day lives. And, one expatriates' account of waiting for immigration approval, managing the anxiety engendered by the wait, and eventually overcoming it could provide comfort to another expatriate in similar situation by easing apprehensions about what might come next.

Comparing our findings to the categorizations of face-to-face social support specific to expatriates and to more general categorizations of computer-mediated social support suggests that types of social support required and accessed vary depending on the type of transition and the venue for accessing support. For example, in the context of adjustment to foreign environments, Adelman (1988) suggested that face-to-face supportive communication serves to shift perspectives and to enhance control through acceptance/assurance, venting⁴ or tangible assistance. Communications that shift perspectives and enhance control through assurance are equivalent to the interpretation and comfort resources we identified, respectively. Although we did observe venting of impressions and emotions, we did not find evidence of communications that enhanced control through venting, as discussed by Adelman. Adelman's discussion of enhanced control through venting focuses on sympathetic listening that "enables receivers [of support] to articulate their uncertainties and problems in ways that help them to be more objective and perhaps even resolve the troubling issues that they face" (Albrecht & Adelman, 1987 cited in Adelman, 1988, p. 189). We also did not fine evidence of tangible assistance in our study. We suspect these types of supportive communication may be more dependent upon synchronous, dyadic interactions with contacts, which may have been formed through blogging but leave no trace in the blogging system.

Specific to computer-mediated social support, High and Solomon (2011) reviewed and identified ways in which individuals communicate social support including informational, emotional, and tangible support. High and Solomon's informational and emotion support messages are similar to the information and comfort support resources we identified. Interpretation support resources may be particularly important in supporting transitions to foreign environments and thus more evident in our data than in studies conducted in other contexts, given the high level of ambiguity associated with international transitions. As noted above, we did not find evidence of tangible support or the transmission of such resources, likely due to the public nature of blogging. That is, connections for tangible support may be made, but if such support is transmitted, communications are likely conducted privately. Mikal et al. (2013), provide some evidence that this may be the case noting that International students reported receiving instrumental support such as housing assistance and translation services from contacts made through online support groups.

5.2. Affordances and implications of blogging technology for expatriate adjustment

Blogging technology affords new ways of relating to others, accessing adjustment support resources, and means of generating further co-created resources. Consistent with Treem and Leonardi (2012), we found that blogging technology afforded expatriates the ability to make content persistent over time and associate content with other content or individuals. Our findings suggest nuances of these two affordances relative to expatriate adjustment, which we discuss below. Additionally, our analysis revealed that blogging technology afforded expatriates the ability to search the system and to choose their degree of engagement. As a result, blogging technology rendered access to adjustment support resources less dependent on dyadic relationships and synchronous interaction.

5.2.1. Affordances

Blogging technology makes content persistent over time, allowing expatriates to interact with content and the blogging system at a later time. For example, a newcomer in 2012 could read posts from 2005 and learn from the content created at that time. This persistent, asynchronous communication allowed expatriates to access a broader pool of resources at a given point in time than would have been possible from dyadic, synchronous interactions. In a purely physical system, expatriates' access to adjustment resources is limited by geography, circumstance, and time to the potential contacts in a community. In the blogging system we studied, the network expanded to include newcomers going through the same process in different locales across Canada, expatriates in separate social circles, and expatriates who had gone through the adjustment process in the past.

Information in the blogging system is associated and searchable. Blogging technology allowed expatriates to personalize content to their needs by searching for topics of interest and following links to gain deeper insight into topics that interested them. For example, an expatriate seeking to understand gift giving in Canada could search for "gift giving in Canada," read posts and discussions and follow links provided by others to access information, interpretation schemas and comfort specific to the topic. The expatriate bloggers in our study often commented on how they stumbled upon a blog by searching about particular topics.

Blogging technology allows expatriates to choose their level of engagement with others within the system and with the content that had been created. Expatriates at different points in time could choose to actively engage with the system and contribute to it in the form of blog posts or discussion comments, and to develop different types of relationships with other bloggers, or not. For example, some bloggers were active discussants in other blogs, had links to other blogs within their pages, and participated in ongoing conversations. Other expatriates participated in discussions only occasionally. Still others were invisible readers who interacted with the content but not with individuals within the system. In other words, expatriates could choose to passively absorb information, available interpretation schemas, and comfort by observing others. Alternatively, they could choose to actively engage in an ersatz community and in the ersatz community's collective sensemaking.

We propose that because expatriates can vary their level of engagement without sacrificing their access to the resources, blogging technology provides a low-risk opportunity for accessing social support. Expatriates can take time to learn about others and the blogging system before becoming visible. The ability to be invisible while still benefiting from an ongoing

⁴ Adelman used the term ventilation. We follow recent authors (e.g. Savicki, Downing-Burnette, Heller, Binder, & Suntinger, 2004; Tabor and Milfont, 2013) and use the term venting, which is more widely understood in the context of supportive communication.

discussion may decrease anxiety associated with acceptance and interacting with others, typical of expatriates. This ability could be equated to the hypothetical ability to be invisible at a party and become visible only after one has gathered sufficient information about the others to be confident that the group will be welcoming and interactions will be worthwhile.

5.2.2. Implications of affordances for expatriate adjustment

Prior to the emergence of Internet technologies, face-to-face interactions with individuals with experience in a host country were the primary source of social support for adjustment. Wellman (2002) argues that with the advent of Internet technologies, the small, tight social networks, which constituted support systems of past generations, have given way to more fragmented networks that provide on-demand support. Consistent with Wellman's notion of networked individualism, blogging systems now make it possible for expatriates to "operate...networks to obtain information...support, sociability, and a sense of belonging" on demand (Wellman, 2002, p. 17) (see also Wellman et al., 2003). We propose that as a result of the affordances of the blogging system, tech savvy expatriates may be less dependent on dyadic, face-to-face interactions with local support resources and minimizes limitations posted by time and geography.

Blogging systems reduce the cost of acquiring adjustment support resources, as expatriates do not need to identify, contact, and interact with potential supporters in order to access these resources. While some types of cultural information may be best absorbed through a deeper dyadic relationship with a sociocultural broker, today's expatriates are less dependent on those relationships, especially when dealing with more common adjustment issues.

Our study demonstrates that blogging technology has the potential to transform expatriate support relationships by providing expatriates the ability to interact with supporters across time and geographic space. Interactions occur both within the same time period and across time through the persistent record and searchability of co-created discourse. Newly arrived expatriates can interact in real time with other expatriates who have lived in the foreign environment for different durations, may be geographically dispersed, and have different levels of cultural expertise. Importantly, newly arrived expatriates can also interact with text written by other expatriates in the past, providing newcomers with a record of the reflections and explanatory efforts of others across time. Thus, with the advent of blogging systems, access to social support may become less dependent on specific individuals, geography, opportunity or points in time and be distributed across many individuals, social circles, time and space.

6. Conclusion

We investigated the role of blogging technology in expatriates' adjustment to foreign environments through a grounded analysis of blogs written by expatriates in Canada. We found that expatriates generated and accessed co-created online adjustment support resources through the blogging system, which is comprised of the blogging technology, bloggers, discussants, and co-created digital discourse. We then theorized on the role of the blogging system in expatriate adjustment to foreign environments. As with all studies, this one has some limitations, which suggest areas requiring additional research.

6.1. Limitations

We found that expatriates accessed adjustment support resources and then acknowledged feeling a greater sense of wellbeing, which, their statements suggested stemmed from a greater sense of knowing, understanding, and relating. We did not, however, explore expatriates' long-term interactions within their environments. That is, although the expatriates in our study accessed the types of resources previous studies show are required for adjustment to foreign environments, we cannot know from our data if the expatriates in our study actually established a more functional long-term relationship with the environment as a result of accessing those resources. The online adjustment support resources we identified are similar to more general social support resources in that they provide "…a potential for action, but not action itself (Gore, 1985, p. 266 in Thoits, 1995, p. 59).

We were unable to explore the motivations behind individuals' actions in the blogging system. Our data allowed us to observe different levels of engagement and shifts in an individual's role between blogger and discussant, but we were unable to investigate the reasons behind and outcomes of such actions. Additionally, although we argued that the persistent nature of blog posts provides a potential benefit, there is the possible disadvantage of saturation and accessing outdated information. We could not assess in our data if bloggers in fact accessed outdated resources or felt saturated by the number of blog posts. Similarly, although we argue that blogs decrease the costs of accessing social support resources, it is possible that social support created through online interaction does not generate resources of equal value to support learning about and adjusting to a new cultural environment.

We have focused our research only on blogs written in English. As a result, our data includes posts only of individuals fluent in at least one of Canada's official languages. Our research is restricted to newcomers to Canada. Canada is a multicultural country – comprised of a population that is 20% foreign-born (Migration Policy Institute, 2014) – that prides itself on its openness to other cultures. This context may have influenced the degree to which newcomers felt free to share and debate cultural information.

6.2. Future research

Blogs are a relatively new and understudied in the context of expatriate adjustment to foreign environments. Our study thus provides a needed, initial investigation of this particular context in which social support is recognized to play a crucial role. Future research should focus on understanding what influences expatriates' choices regarding when and how they participate in blogging and the implications that arise from such choices. Future research should also explore the implications of online adjustment support resources versus resources accessed through more traditional face-to-face relationships for the quality and timing of expatriate adjustment and for possible differential effects on their ability to cope, learn, and interact in foreign environments.

Considering the importance of language skills for expatriate adjustment, future research needs to investigate the use of blogs by expatriates in their native languages and should compare the process and outcomes of native language blogging to blogs in a host country's official language. Research should also investigate the use of social media by expatriates in diverse nations, and in particular in nations characterized by more cultural homogeneity and less freedom of speech than Canada.

We identified interpretations as support resources for expatriates. This finding is consistent with the observation that different types of blogs have different characteristics and are driven by different aims (Garden, 2012), which suggests that the types of social support required, generated and accessed may vary across contexts. Further research should elaborate on the role of interpretation support resources in expatriate adjustment as well as expand research on interpretation support resources to include other contexts.

Internet technologies are changing the way people communicate and gather information. Given the increasing intensity of globalization and resulting migration, combined with the increasing reliance on Internet technologies for communicating and interacting with others, there is a need to further understand the role and importance of technology on intercultural interactions. New or modified theoretical and methodological frameworks are needed to help understand the behavior of people across cultures in the digital age. Toward this end, we investigated the role of one Internet technology in the process of expatriate adjustment through an analysis of blogs written by newcomers to Canada. Our findings expand knowledge of expatriate adjustment by describing and explicating how a blogging system facilitates the generation and access of on-line adjustment support resources, discussing the implications of these findings for expatriate adjustment to foreign environments and by suggesting areas for further research. More broadly, this study contributes to research of online social support by extending theorizing to include a previously understudied context.

Acknowledgements

We are grateful for the support of Anna Vesikari in the data collection stages of this project. We are grateful for the helpful comments and suggestions provided by Ali Arya, Mike Hine, Frank Barrett and attendees of the EGOS 29th Colloquium and the AOM's Cognition in the Rough. We are extremely appreciative of the time devoted to our paper by three anonymous reviewers. Your comments and suggestions pushed us to think more clearly about our arguments and made this a better paper.

References

- Adelman, M. B. (1988). Cross-cultural adjustment: A theoretical perspective on social support. International Journal of Intercultural Relations, 12(3), 183–204. Albrecht, T. L., & Adelman, M. B. (1987). Communicating social support. Thousand Oaks, CA: Sage.
- Albrecht, T. L., Goldsmith, D. J., & Thompson, T. (2003). Social support, social networks, and health. In Handbook of health communication.
- Arntson, P., & Droge, D. (1987). Social support in self-help groups: The role of communication in enabling perceptions of control. In Communicating Social Support.
- Bailey, F. G. (1969). Stratagems and spoils: A social anthropology of politics. Oxford: Blackwell.
- Bennett, J. M. (1998). Transition shock: Putting culture shock in perspective. In J. M. Benett (Ed.), Basic concepts of intercultural communication; selected readings (pp. 215–224). Yarmouth, ME: Intercultural Press.
- Berger, P. L., & Luckmann, T. (1967). The social construction of reality. Garden City, NY: Anchor Books.
- Biernacki, P., & Waldorf, D. (1981). Snowball sampling: Problems and techniques of chain referral sampling. *Sociological Methods & Research*, *10*(2), 141–163. Birks, M., & Mills, J. (2011). Grounded theory: A practical guide. Thousand Oaks, CA: Sage.
- Black, J. S., Mendenhall, M., & Oddou, G. (1991). Toward a comprehensive model of international adjustment: An integration of multiple theoretical perspectives. Academy of Management Review, 291–317.
- Charmaz, K. (2014). Constructing grounded theory (2nd ed.). SAGE Publications.
- Chu, S. K. W., Kwan, A., & Warning, P. (2012). Blogging for information management, learning, and social support during internship. *Journal of Educational Technology & Society*, 15(2).

Corbin, J. M., & Strauss, A. L. (2008). Basics of qualitative research: Techniques and procedures for developing grounded theory. Los Angeles: Sage.

- Cox, J. B. (2004). The role of communication, technology, and cultural identity in repatriate adjustment. International Journal of Intercultural Relations, 283(3-4), 201-219.
- Dennis, P. A. (1994). The life of a culture broker. *Human Organization*, 53(3), 303–308.
- Du, H. S., & Wagner, C. (2006). Weblog success: Exploring the role of technology. International Journal of Human-Computer Studies, 64(9), 789–798.

Duffy, J. (2011, July). Best free blogging sites. In *PcMag.com*. Retrieved from. http://www.pcmag.com/article2/0,2817,2388910,00.asp

Farh, C. I. C., Bartol, K. M., Shapiro, D. L., & Shin, J. (2010). Networking abroad: A process model of how expatriates form support ties to facilitate adjustment. Academy of Management Review, 35(3), 434–454.

Gao, G. E., & Gudykunst, W. B. (1990). Uncertainty, anxiety, and adaptation. International Journal of Intercultural Relations, 14, 301–317.

Garden, M. (2012). Defining blog: A fool's errand or a necessary undertaking. *Journalism*, 13(4), 483–499.

Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. Organizational Research Methods, 16(1), 15–31.

- Glanz, L., Williams, R., & Hoeksema, L. (2001). Sensemaking in expatriation A theoretical basis. *Thunderbird International Business Review*, 43(1), 101–119. Glaser, B. G. (1978). *Advances in the methodology of grounded theory: Theoretical sensitivity*. Mill Valley: Sociology Press.
- Grudin, J. (2006). Enterprise knowledge management and emerging technologies. Retrieved from. http://research.microsoft.com/en-us/UM/People/jgrudin/ publications/newwave/HICSS2006.pdf
- Gudykunst, W. B. (1995). Applying anxiety/uncertainty management (AUM) theory: Current status. In R. L. Wiseman (Ed.), Intercultural communication theory (pp. 8–58). Newbury Park, CA: Sage.
- Gudykunst, W. B. (1998). Bridging differences: Effective intergroup communication. Thousand Oaks, CA: Sage.
- Gudykunst, W. B. (2005). An Anxiety/uncertainty management (AUM) theory to intercultural adjustment training. In W. B. Gudykunst (Ed.), *Theorizing about intercultural communication* (pp. 419–457). Thousand Oaks, CA: Sage.
- High, A. C., & Solomon, D. H. (2011). Locating computer-mediated social support within online communication environments. In K. B. Wright, & L. M. Webb (Eds.), Computer-mediated communication in personal relationships (pp. 119–136). New York, NY: Peter Lang Publishing.
- Johnson, E. C., Kristof-Brown, A. L., Van Vianen, A. E. M., & De Pater, I. E. (2003). Expatriate social ties: Personality antecedents and consequences for adjustment. International Journal of Selection and Assessment, 11, 277–282.
- Kim, Y. (2008). Intercultural personhood: Globalization and a way of being. International Journal of Intercultural Relations, 32(4), 359–368.
- Kim, Y.Y. (1977). Communication patterns of foreign immigrants in the process of acculturation. Human Communication Research, 2, 127–224.
- Kim, Y. Y. (2005). Inquiry in intercultural and development communication. Journal of Communication, 55(3), 554–577
- Kim, Y. Y., & McKay-Semmler, K. (2013). Social engagement and cross-cultural adaptation: An examination of direct and mediated interpersonal communication activities of educated non-natives in the United States. International Journal of Intercultural Relations, 37, 99–112.
- Kralik, D., Visentin, K., & Van Loon, A. (2006). Transition: A literature review. Journal of Advanced Nursing, 55(3), 320–329.
- Leonardi, P. (2012). Materiality, sociomateriality, and socio-technical systems: What do these terms mean? How are they related? Do we need them? In P. M. Leonardi, B. A. Nardi, & J. Kallinikos (Eds.), *Materiality and organizing: Social interaction in a technological world* (pp. 25–48). Oxford University Press: Oxford.
- Locke, K. D. (2001). Grounded theory in management research. Thousand Oaks, CA: Sage.
- Long, N., & Roberts, B. (1984). Miners, peasants and entrepreneurs. Cambridge: Cambridge University Press.
- Manev, I. M., & Stevenson, W. B. (2001). Nationality, cultural distance, and expatriate status: Effects on the managerial network in a multinational enterprise. *Journal of International Business Studies*, 32, 285–304.
- McAfee, A. P. (2006). Enterprise 2.0: The dawn of emergent collaboration. Management of Technology and Innovation, 47, 3.
- Migration Policy Institute. (2014). International migration statistics: international migrants by country of destination, 1960–2013. Retrieved from. http://www.migrationpolicy.org/programs/data-hub/international-migration-statistics
- Mikal, J. P. (2010). When social support fits into your luggage: How Internet use affects the creation and maintenance of social support networks during study abroad. University of California: Santa Barbara.
- Mikal, J. P. (2011). When social support fits into your luggage: Online support seeking and its effects on the traditional study abroad experience. Frontiers: The Interdisciplinary Journal of Study Abroad, 21, 17–40.
- Mikal, J. P., & Grace, K. (2012). Against abstinence-only education abroad viewing Internet use during study abroad as a possible experience enhancement. *Journal of Studies in International Education*, 16(3), 287–306.
- Mikal, J. P., Rice, R. E., Abeyta, A., & DeVilbiss, J. (2013). Transition, stress and computer-mediated social support. *Computers in Human Behavior*, 29(5), A40–A53.
- Mikal, J. P., Yang, J., & Lewis, A. (2014). Surfing USA: How Internet use prior to and during study abroad affects Chinese students' stress, integration, and cultural learning while in the United States. *Journal of Studies in International Education*, 1–22.
- Miles, M. B., & Huberman, M. (1994). Qualitative data analysis: An expanded sourcebook. Thousand Oaks, CA: Sage.
- Nag, R., Corley, K. G., & Gioia, D. A. (2007). The intersection of organizational identity, knowledge, and practice: Attempting strategic change via knowledge grafting. Academy of Management Journal, 50(4), 821–847.
- Ogan, C., & Ozakca, M. (2010). A bridge across the bosphorus: returned migrants, their internet and media use and social capital. Social Science Computer Review, 28(1), 118–134.
- Orlikowski, W. J., & Gash, D. C. (1994). Technological frames: Making sense of information technology in organizations. ACT Transactions on Information System, 2(2), 174–207.
- Osberg, K. (1960). Culture shock: Adjustments to new cultural environments. Practical Anthropologist, 7, 177–182.
- Pearlin, L. I. (1989). The sociological study of stress. *Journal of Health and Social Behavior*, 30(3), 241–256.
- Rains, S. A., & Keating, D. M. (2011). The social dimension of blogging about health: Health blogging, social support, and well-being. *Communication Monographs*, 78(4), 511-534.
- Rains, S. A., & Young, V. (2009). A meta-analysis of research on formal computer-mediated support groups: Examining group characteristics and health outcomes. Human Communication Research, 35(3), 309–336.
- Savicki, V., Downing-Burnette, R., Heller, L., Binder, F., & Suntinger, W. (2004). Contrasts, changes, and correlates in actual and potential intercultural adjustment. International Journal of Intercultural Relations, 28(3), 311–329.
- Smircich, L., & Stubbart, C. (1985). Strategic management in an enacted world. Academy of Management Review, 724–736.
- Sobre-Denton, M., & Hart, D. (2008). Mind the gap: Application-based analysis of cultural adjustment models. *International Journal of Intercultural Relations*, 32(6), 538–552.
- Steinhuser, M., Smolnik, S., & Hoppe, U. (2011). Towards a measurement model of corporate social software success Evidences from an exploratory multiple case study. In 44th Hawaii International Conference on System Sciences (HICSS), IEEE.
- Tabor, A. S., & Milfont, T. L. (2013). Family social support during the predeparture period: The experience of British migrants. International Journal of Psychology, 48(3), 291-299.
- Takeda, A. (2013). Weblog narratives of Japanese migrant women in Australia: Consequences of international mobility and migration. International Journal of Intercultural Relations, 37, 415–421.
- Thoits, P. A. (1995). Stress, coping, and social support processes: Where are we? What next? Journal of Health and Social Behavior, 35, 53–79.
- Treem, J., & Leonardi, P. (2012). Social media use in organizations: Exploring the affordances of visibility, editability, persistence, and association. Communication Yearbook, 36, 143–189.
- Ward, C., Okura, Y., Kennedy, A., & Kojima, T. (1998). The U-curve on trial: A longitudinal study of psychological and sociological adjustment during crosscultural transition. International Journal of Intercultural Relations, 22, 277–291.
- Weick, K. E. (1979). The social psychology of organizing. New York: Random House.
- Wellman, B. (2002). The rise (and possible fall) of networked individualism. Connections, 24(3), 30-32.
- Wellman, B., Quan Haase, A., Boase, J., Chen, W., Hampton, K., Díaz, I., et al. (2003). The social affordances of the Internet for networked individualism. *Journal of Computer Mediated Communication*, 8(3), 0-0.
- Wolf, E. (1966). Peasants. Englewood Cliffs, NJ: Prentice Hall.
- Ye, J. (2006). Traditional and online support networks in the cross cultural adaptation of Chinese international students in the United States. Journal of Computer Mediated Communication, 11(3), 863–876.