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From way across the sea: Information overload and international students during the COVID-19 pandemic

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Abstract

This panel examines the interaction between being a transient migrant, using international students as a salient example, and information behaviors in a time of COVID-19. We address issues such as information overload, selection of information sources, and social networking. The aim of this panel is to bring together interested researchers in the areas of information practices, higher education, and intercultural communication.

KEYWORDS

digital journeys, information behavior, information overload, international students

1 | INTRODUCTION

The advent of COVID-19 has resulted in an unprecedented level of digital global communication. With social distancing practices, there is an increased volume of online activities and also increased production of online information from both organizations and individuals. The use of social networking has increased dramatically as people use these tools as a substitute for in-person social gatherings (Koeze & Popper, 2020). Social media has likely also become a substitute for person-to-person information seeking, which makes up half of all information seeking (Savolainen, 1995), and is particularly important for disadvantaged groups (Agosto & Hughes-Hassell, 2005). The use of these online tools has become particularly salient for migrant communities, who are no longer able to return "home" or who are watching closely both the situation in the country they live as well as in the country where their families are.

Higher education is a clear example of the changes wrought by COVID-19. Universities and institutes have transitioned to virtual campuses, where all communication, teaching and learning, and support for students occur online.

The impact of universities' transition to online mode is still in progress and hard to assess. While there is a general acceptance that this transition is inevitable under the circumstances, there is not a lot of sophisticated understanding about its impact on students. Generally, we know that information overload is in a feedback loop with anxiety: information overload produces anxiety (Bawden & Robinson, 2009), and increased cognitive load decreases information seeking performance (Griffiths & Brophy, 2005). Ko, Kua, and Fones (1999) found that information overload needed to be reduced in order to help first year medical and law students cope better. This was before the widespread use of the internet and before the virtual campus phenomenon. More recently Chen, Pedersen, and Murphy (2012) found that information overload did have a negative impact on some students' participation and engagement, but that other students had learned to manage information overload. Ha, Joa, Gabay, and Kim (2018) also found that there was heterogeneity in student behavior in coping with the range of

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information from official university emails. Looking to student experience, there is significant evidence that social cohesion and orientation is important for student retention, particularly among minority students (Burgette & Magun-Jackson, 2008; Pitkethly & Prosser, 2001). All these pre-COVID 19 studies point to the implication that there is diversity amongst the student body, in the way they use technology platforms and how they cope with information overload. There is certainly a need to understand the diversity of information behaviors amongst different groups of students but also to understand what they are going through during high stress contexts such as the current COVID-19 pandemic, where social distancing and isolation are in play.

International students, while not the only group of affected students, have particular challenges around information: some are seeking information about their host country and their home simultaneously, and some are attempting to integrate into a university community without ever setting foot on campus. This group of students will also have to take on new information from the "host institution" very quickly. In addition, it is well documented that international students come from different home learning practices and this affects their approaches to education and communication (Moon, Zhang, Larke, & James, 2020). International students' behaviors are also tightly linked to the digital journeys they make, transitioning from old, familiar platforms, information sources, and information seeking strategies to those used in their adopted countries (Binsahl, Chang, & Bosua, 2020; Chang & Gomes, 2017). In many cases, international students are accessing information differently to domestic students, and are often potentially receiving information from their home countries as well. Therefore, in the case of emergencies and crisis, the potential for overload of information is very present for international students.

While this panel focuses on international students and COVID, it will engender lessons likely to support all students, and in a range of crises. We use this intersection as an example and focal point to develop best practice recommendations for crisis information.

2 | UNDERSTANDING THE INFORMATION BEHAVIORS OF INTERNATIONAL STUDENTS

People cross transnational borders for a range of reasons such as education, employment, humanitarian and/or lifestyle. While some migrants may be forced, others uproot themselves voluntarily. Likewise, some migrants are permanent settlers while others are transient, thus

making migrant experiences varied according to agendas and experiences (Gomes, 2019).

Looking at transient migrants, the international student body is one of the most diverse that is ever categorized as just a single group. Gomes, Berry, Alzougool, and Chang (2014) clearly articulate the diversity of international students, not just based on their countries of origin but also the nature of their social networks. This diversity leads to different information behavior amongst this truly diverse groups of students. Chang and Gomes (2017) highlighted that part of the diversity in information behaviors of international students is directly linked to the digital journeys students may or may not make when they move across countries. Digital journeys refer to the transition international students make in the digital environment, taking on new sources of information, and adopting new digital platforms, rather than relying on old familiar sources and platforms. Chang and Gomes (2017) suggest that international students who are more connected to new social networks based in their new host countries are more likely to make the digital journey. Huang and Bilal (2017) point out a different kind of journey, from looking for experiential information to looking for authoritative information when choosing a university. Such digital journeys are not only reported amongst international students but also in older migrants (Caidi, Du, Li, Shen, & Sun, 2020). As Caidi et al. (2020) pointed out, the information behaviors of many older migrants do shift over time because of the need and connections with local communities. Therefore, in both groups, local engagement is an important part of the transition to new information behaviors that are adapted to new host countries. During COVID-19, social distancing laws and policies are widespread, minimizing such social engagements. What does this mean for international students and new migrants?

3 | CURRENT INFORMATION PROVISION PRACTICE IN THE COVID-19 CONTEXT

Chang, Gomes, and McKay (n.d.) pointed out that it is crucial for Universities to understand the information behaviors of their international students in order to engage effectively with this diverse cohort of students. Yet, in the current context, much communication is carried out from the perspective of the information provider. Understandably, at all levels, Universities are providing information in excess to try to reassure students and staff. With all subjects and student services moved online, the onus is on students to seek out the information. It can be argued that this excess of information in trying to help

students, is causing the paradox of the information being ignored, forgotten, or just overlooked because it is a highly stressful and anxious period (Griffiths & Brophy, 2005). Once ignored, the information becomes difficult to find, especially if students cannot describe their information needs in the same language as their institutions (Marchionini, 1997). This information is seldom housed in a single browsable location, leaving search—notoriously poor for lightly specified information needs (Marchionini, 1997; McKay, Makri, Chang, & Buchanan, 2020)—as the only option. For example, there are various reports from students indicating that they are not aware of available support despite all the information on said support. For international students, this is even more acute if they are new to the host country or are studying offshore with a foreign institution they have never physically attended due to travel restrictions.

At the same time the changing nature of the pandemic is also leading to higher anxiety levels within the community, the threat of visas running out, changes in government policies and position on non-citizens, as well as the loss of part-time jobs. This means that information on health and wellbeing, community and family engagement, visa and government policies, part-time jobs which normally would not require high cognitive engagement every single day, suddenly requires the students' attention as the situation changes. Hence, it is important to understand the impacts on international students' information behaviors during the current crisis.

4 | PANEL OVERVIEW

The panel brings together researchers in the fields of information behavior, migration studies, and international students together to discuss the topics outlined. In addition, four panelists also have responsibilities for international student experiences within their institutions. Our panelists combine research, practice and lived experiences to provide insights into the information behaviors of international students. The panel will discuss how these insights might impact future information behavior research and methodologies. The panel will also involve participants in an interactive discussion by exploring all attendees' experiences of the challenges and opportunities for research in the field of information behaviors of new and transient migrants during a crisis situation.

The aim of this panel is to foster discussion and potential research collaborations among participants. We have divided the panel into themed discussions, so that participants have the opportunity to interact even in an online discussion. Panelists are currently working on research proposals in this field, ultimately this panel could lead to publications not just for panelists, but also for participants.

5 | PANELISTS

While our panelists are located in two cities, they are all migrants to those cities, and represent more than five countries of origin and four continents.

TABLE 1 Proposed flow of panel

Time (in min)	Activity
5	Shanton Chang will introduce the panel and provide an overview of the overarching questions that drive the panel discussion
10	Dana McKay and Nadia Caidi will discuss what Digital Ecologies look like for international students and recent migrants
15	Antonette Mendoza (University of Melbourne), Catherine Gomes (RMIT University), and Cansu Ekmekcioglu (University of Toronto) will highlight examples of engagement practices at each of their institutions. The audience will be invited to share some of their experiences too for a later interactive session.
10	Antonette Mendoza, Nadia Caidi, and Catherine Gomes discuss innovative methodologies and pedagogical challenges related to doing research with International Students
20	Breakout session, participants may choose to participate in any one of the following • Understanding information barriers and overload in international students (facilitated by Cansu Ekmekcioglu) • Digital Ecologies and Higher Education: Research methods for examining engagement with international students (facilitated by Shanton Chang) • Other [to be determined by audience]
15	Groups report back (3 min per group)
5	Shanton Chang, Nadia Caidi and Dana McKay will discuss how research agenda around pedagogy and internationalization of education might need to be re-examined through an information science lens (using the pandemic as a context)
5	Shanton Chang and Catherine Gomes will wrap up and outline next steps

6 | STRUCTURE OF THE PANEL

This panel is designed to be highly interactive, and provoke ideas, questions, and potential new collaborations for all participants. We anticipate an audience of 30–50 participants (Table 1).

This is an important panel not just because it discusses the issues of information behaviors of migrants; it also highlights the potential of digital access and equity challenges. If the communication strategies of governments, service providers and universities do not consider these needs, equity issues will arise. With the world moving the bulk of its activities online during a pandemic, digital access and equity and effective engagement need addressing more urgently than ever, particularly for vulnerable populations such as recent migrant groups or international students.

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AUTHOR BIOGRAPHIES

Dr Shanton Chang is an associate professor in information systems. His research areas are focused on information needs and information behaviors within educational, societal and business context. His teaching and learning practice has been recognized nationally in Australia where he was the Australian Computer Society's 2017 ICT Educator of the Year. He also received in National Citation in 2011 for "Excellence in providing students with cross-cultural learning experiences through internationalize curricula that builds cultural awareness and promotes peer-learning among students from diverse backgrounds". He is currently the associate dean (International) at the Melbourne School of Engineering.

Dr Dana McKay recently finished her PhD in information interaction, looking at how people browse for

books. This work was born of ten years' practical experience as a user experience professional in an academic library, where the project described in this submission took place. Dana worked on a range of challenges in her professional role, including making user-centric interface decisions while implementing web scale search, understanding how readers approached the shelves, and understanding how library users used the study space available in the library. Dana's current research is similarly information focused and industry-engaged; she is working on information seeking and use problems with GLAM sector industry partners.

Dr Nadia Caidi is an associate professor at the Faculty of Information, University of Toronto. She is also the Director of International Student Engagement at the Faculty. Her research examines the dynamics around engagement and effective use of resources that cater to the ways of knowing of marginalized communities, whether it be migrants and refugees, aboriginal communities in remote and isolated regions, or language speakers in a minority context. Dr. Caidi was the 2011 President of the Canadian Association for Information Science (CAIS) and the 2016 President of the International Association for Information Science & Technology (ASIS&T). In 2019, the Association of LIS Education awarded her the Pratt-Severn Faculty Innovation Award.

Dr Antonette Mendoza is a senior lecturer in Computing and Information Systems. Her work recognizes outstanding leadership and innovation in enhancing academic teaching, resulting in enriched student-learning experience. She is nationally recognized through a citation for "Outstanding Contributions to Student Learning" in the 2017 Australian Awards for University Teaching; and the 2018 Computing and Research Education (CORE) teaching award. Antonette's research and teaching impacts on two areas: disadvantaged socio-technical contexts and engineering education. Her research focuses on design and change behavior methodologies in software engineering and information systems using emotional attachment pedagogies.

Dr Catherine Gomes is an associate professor in the School of Media and Communication at RMIT University. Her work contributes to the understanding of the evolving migration, mobility, and digital media nexus. Catherine specializes in international students, their wellbeing and their digital engagement. Catherine is a specialist on the Asia-Pacific with Australia and Singapore being significant fieldwork sites. She has authored and edited nine books. She was awarded an RMIT Teaching Award for "teaching a diverse student body" in 2012.

Cansu Ekmekcioglu is a PhD student in the Faculty of Information (iSchool), University of Toronto. Her research interests include information and migration, human computer interaction, and health communication. She currently focuses on information culture and practices of organizations serving underrepresented and non-dominant communities, including refugees, migrants, and international students. She is also founder of Sharing and Knowing – a network aims to elevate voices and experiences of the first-generation scholars who study and work outside their country of origin.