

# Exploring how immigrant international medical graduates successfully manage complex sociocultural challenges

## Comment les diplômés internationaux immigrants réussissent-ils à affronter avec succès des défis socioculturels complexes ?

Azaria Marthyman,<sup>1,2</sup> Laura Nimmon<sup>1,3</sup>

<sup>1</sup>Centre for Health Education Scholarship (CHES), Faculty of Medicine, University of British Columbia, British Columbia, Canada; <sup>2</sup>Department of Family Practice, Faculty of Medicine, University of British Columbia, British Columbia, Canada; <sup>3</sup>Department of Occupational Science and Occupational Therapy, Faculty of Medicine, University of British Columbia, British Columbia, Canada

Correspondence to: Azaria Marthyman; email: [azaria.marthyman@ubc.ca](mailto:azaria.marthyman@ubc.ca); Twitter: @ubcMedCHES

Edited by: Tim Dubé (section editor); Christina St. Onge (senior section editor); Marcel D'Eon (editor-in-chief)

Published ahead of issue: Sept 19, 2023; published: Dec 30, 2023. CMEJ 2023; 14(6) Available at <https://doi.org/10.36834/cmej.76244>

© 2023 Marthyman, Nimmon; licensee Synergies Partners. This is an Open Journal Systems article distributed under the terms of the Creative Commons Attribution License. (<https://creativecommons.org/licenses/by-nc-nd/4.0>) which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is cited.

### Abstract

**Background:** While immigrant international medical graduates (I-IMGs) contribute significantly to the physician workforce in North America, researchers have highlighted the myriad of ways sociocultural challenges can negatively impact their success. Conceptual understanding that unpacks the complex processes of how I-IMGs effectively manage sociocultural challenges is relatively sparse. In addressing this critical knowledge gap, this study explored how I-IMGs successfully manage sociocultural differences as postgraduate residents.

**Methods:** We interviewed eleven I-IMGs from diverse backgrounds who are in training or recently trained in a distributed multi-site postgraduate medical training program in Canada. We used the lens of sociocultural learning theory to gain insights into the processes of how I-IMGs describe successful management of sociocultural challenges.

**Results:** The overarching storyline of participants emphasized that their experiences were humbling as they grappled with inner struggles, emotions, and vulnerabilities while embracing the ambiguity of not knowing what was expected of them. The following dominant themes from their narratives encapsulate the salient processes for how I-IMGs conceptualize and successfully manage sociocultural challenges: 1) successfully navigating transitions; 2) resisting or altering elements of prior sociocultural norms while embracing the new; 3) living and being in community and having supportive social networks; 4) risk taking to self-advocate and actively seek help.

**Conclusion:** Understanding the strengths and positive strategies for how I-IMGs interface with complex sociocultural challenges has application for medical training institutions. Our insights suggest the need for practical, effective, and continuous assistance within I-IMG training programs to better support future trainees dealing with sociocultural challenges.

### Résumé

**Contexte :** Alors que les diplômés internationaux en médecine immigrants (DIMI) contribuent de manière significative à la main-d'œuvre médicale en Amérique du Nord, des travaux ont mis en évidence le fait que des défis socioculturels peuvent de manières diverses entraver leur réussite. Les processus complexes par lesquels les DIMI réussissent à affronter les défis socioculturels sont peu compris sur le plan conceptuel. Pour combler cette importante lacune, la présente étude a exploré les façons dont les DIMI affrontent avec succès les différences socioculturelles pendant leur résidence.

**Méthodes :** Nous avons interrogé onze médecins résidents étrangers d'origines diverses qui suivent ou qui ont récemment suivi une formation dans le cadre d'un programme de résidence multi-sites au Canada. Nous nous sommes basés sur la théorie socioculturelle de l'apprentissage pour mieux comprendre les processus employés par les DIMI pour faire face efficacement aux défis socioculturels.

**Résultats :** Le récit dominant des participants est d'être aux prises avec des luttes intérieures, des émotions et des vulnérabilités, sans savoir ce que l'on attendait d'eux, une leçon d'humilité. Les thèmes principaux qui en ressortent et qui résument la manière dont les DIMI conceptualisent et gèrent avec succès les défis socioculturels sont les suivants : 1) réussir les transitions ; 2) résister ou revoir des éléments des normes socioculturelles qu'ils respectaient par le passé tout en adoptant de nouvelles normes; 3) participer à la vie de la collectivité et avoir des réseaux sociaux de soutien ; 4) prendre le risque de se faire entendre et de chercher activement de l'aide.

**Conclusion :** Comprendre les points forts et les stratégies positives employées par les DIMI pour faire face aux défis socioculturels complexes serait fort utile pour les établissements d'enseignement médical. Nos observations plaident en faveur de la mise en place d'une assistance pratique, efficace et continue dans les programmes de formation pour mieux soutenir les futurs DIMI confrontés à des défis socioculturels.

## Introduction

For the past four decades, researchers have highlighted the significant sociocultural struggles faced by immigrant international medical graduates (I-IMGs). Different and diverse prior experiences and cultures create challenges for I-IMGs during their postgraduate residency training and they face significant sociocultural challenges that require better supports.<sup>1-15</sup> Medical education programs aimed at supporting I-IMGs through sociocultural challenges tend to focus predominantly on individualistic approaches that deliver information through lectures, workshops, and orientation programs.<sup>3,7,13,16-17</sup> These transmission of information approaches diminish the significance of social influences and thus miss opportunities to support the complexity of I-IMGs' challenges<sup>18</sup> such as managing workplace dynamics<sup>19-20</sup> or decoding organizational contexts.<sup>16</sup> Without richly understanding the ways I-IMGs navigate the social dimensions of their educational experiences, we lack ways to support I-IMGs to effectively manage the sociocultural challenges they encounter. Our research contributes to the call for medical training institutions to deliberately implement and embed effective supports for I-IMGs during their postgraduate medical training.<sup>1-3,5-10,16-17</sup>

A systematic review by Lineberry & colleagues on educational interventions for I-IMGs concluded that research into education for I-IMGs is critically important but remains underdeveloped.<sup>17</sup> The authors found that this body of literature does not offer clear and compelling implications for the science or practice of I-IMG education and support, and that theory and evidence in this domain are relatively nascent.<sup>1-14</sup> I-IMGs are reported to encounter sociocultural challenges in the realm of unacceptable behaviour and therefore educational interventions have focused on remediation and individual behavioural change.<sup>1-14</sup> For example, when an I-IMG who comes from a prior culture with steep hierarchies in healthcare is offended when questioned by a nurse on a clinical decision, this I-IMG may be perceived as unprofessional. Highlighting unexpected behaviours conducted by I-IMGs and then introducing remedial educational mechanisms to address these has drawn attention primarily to the singular individual who engages in the infraction. These types of examples become the foci of behavioural interventions without adequately addressing complex organizational, training, and workplace contexts.<sup>4,16-17</sup> This study took a strengths-based approach and aimed to better understand the positive processes that enable I-IMGs to integrate into

and succeed in practice settings where I-IMGs undergo postgraduate training. We thus sought to gain insights into how I-IMGs successfully integrate into new cultural practice norms and how they manage the challenges they encounter in this process.

## Methods

### Research design

This was an exploratory qualitative study on how I-IMGs manage sociocultural challenges. We approached our study as a phenomenon that is socially and experientially based.<sup>21-27</sup> We drew on sociocultural learning theory that attends to the ways learning occurs through participation in social contexts.<sup>25-29</sup> More specifically, this lens illuminates the taken for granted routines, tools, roles, and power relations entrenched in social contexts.<sup>30</sup> Sociocultural learning theory falls under the larger umbrella of sociocultural theory that emphasizes how behaviour and mental processes are shaped in part by their social and/or cultural context, including race, gender, and nationality.<sup>31</sup> We used a fully theory-informed inductive study design because sociocultural learning theory permeated all facets of the study.<sup>32</sup> This study was conducted after behavioural research ethics board approval (certificate H19-03072).

### Setting and participants:

This study took place in a large distributed postgraduate medical education program in Canada where I-IMGs make up 20-30% of 1400 postgraduate trainees across 20 different training sites. These I-IMGs are situated to train and learn within real world multicultural social contexts in authentic environments of small and large communities, and rural and urban settings.

We engaged in purposeful sampling<sup>33,34</sup> for this research and recruited immigrant IMGs who completed their medical degree at another country and thus were *not* likely to be familiar with the sociocultural context of North American medical training. International medical graduates who lived in Canada or the USA prior to obtaining their medical education abroad and who then returned to do further postgraduate training were *not* included. We did *not* include these individuals as we assumed they would *not* face the same sociocultural challenges as immigrant trainees who are unfamiliar with the Canadian culture and norms. In order to capture the breadth of sociocultural experiences and reflections of I-IMGs, sampling was across the various levels/stages of

postgraduate training, including those who recently graduated.

**Data collection**

We conducted virtual semi-structured interviews (60-90 minutes) between January to November 2020 with eleven I-IMG participants who provided insights into their management of sociocultural challenges and differences, and how they adjusted into new sociocultural environments during their training experiences. Ten of the participants were recruited through the family medicine postgraduate program and one through the internal medicine postgraduate program. The participants in this study did not speak English as their primary language, however they did pass a national English proficiency test prior to their entry into their postgraduate medical training program.

Semi-structured interviews were conducted by AM who is a primary care physician who had no relationship to participants in this research. AM used a semi-structured interview guide (Table 1) for all the participants. The interview questions were shaped by the tenets of sociocultural learning theory and probed into the ways formal and informal learning occurred through participation in social contexts.<sup>21-24,30</sup> Sociodemographic data (Table 2) was obtained during each interview.

*Table 1. Interview guide*

1.	As an immigrant international medical graduate, how do you manage sociocultural challenges while in your postgraduate residency training? Can you provide me with some examples when managing sociocultural challenges was successful?
2.	How do you come to understand and handle the norms of your cultural background versus the new cultural norms of where you are training?
3.	How do these cultural differences affect how you behave and adapt?
4.	Are there times when you resist the new cultural norms that you experience during your training? If yes or no, why and how, and what were the consequences? Do you do this quietly or do you speak out?
5.	Are there times when you resist the norms of your cultural background?
6.	What resources or social interactions have helped you manage these sociocultural challenges?
7.	Have you experienced anything that created barriers to your success in managing sociocultural challenges?
8.	If you could change some things during your training that would potentially help others successfully manage the sociocultural challenges that you have faced, what would these changes be?

*Table 2. Information about participants*

Country	Birth origin	Where undergraduate medical school completed	Current Post-graduate level	
Japan	1	1	Family medicine residency year 1	4
India	4	2	Family medicine residency year 2	4
Indonesia	1	1	Recently completed family medicine residency program	2
Iran	1	1	Internal medicine residency year 1	1
Ireland		1		
Kazakhstan		1		
Philippines	1	1		
Russia	1	2		
Ukraine	1	1		
United Emirates	1			

**Data analysis**

Our analysis was tuned to focus on the ways I-IMG trainees successfully manage sociocultural challenges; we were not sensitized to struggles as these are so widely reported in the literature. Inductive thematic analysis of the data<sup>35-37</sup> involved coding the data in three stages, first at the level of basic codes, then capturing meaningful patterns within and across the codes, and finally developing conceptually generated themes. We developed themes through employing sociocultural learning theory as an interpretive lens to enrich our understanding of the research question.<sup>21-24,35-37</sup> Integrating this theory during analysis allowed us to be attentive to social interactions and the ways that learning occurs through internalization of social behaviours and norms.<sup>24,27,38</sup>

Ongoing discussions and collaboration with the senior author LN, a social scientist, occurred throughout the various stages of data collection and analysis. As well, numerous discussions to expand interpretation of analysis occurred through conversations with other researchers and educators involved in health professions education. By drawing on these multiple perspectives, AM and LN were

able to bring a comprehensive understanding of the research question while never claiming convergence. They sought to invite different perspectives and various angles to provide a richly complex understanding of the research question.<sup>37</sup> As a final step in analysis, a previously interviewed participant was presented with the themes who confirmed that the meaning of the themes resonated. The authors then agreed that a richly textured understanding of the data was achieved, thus achieving meaning saturation.<sup>39</sup>

Iterative and interpretive reflexivity was conducted collaboratively by the co-authors as the study progressed. The first author AM is a visible minority and an experienced primary care physician who engages daily in clinical workplace dynamics and is accustomed to the multi-cultural Canadian society, health care system, and medical culture. AM has cross cultural experiences working as a clinician internationally in multiple countries and is a first-generation immigrant to Canada. AM was aware that his cross-cultural background and own personal challenges encountered in many different sociocultural contexts could foster unconscious biases in the collection and interpretation of data. AM kept a detailed analytic reflexive memo where he documented any possible biases that emerged as he carried out the study. The senior author LN holds various and intersecting social positions as a woman, mentor, and white social scientist scholar and has had cross-cultural experiences working as an educator internationally in multiple countries. AM and LN were reflexive and forthcoming about how their expertise and lived experiences might both enrich and unconsciously bias interpretation of the data.

## Results

The eleven I-IMG participants in this study came from a range of countries with diverse cultures and various levels of prior post-graduate medical training (Table 2). Navigating sociocultural differences appeared to pose significant challenges before and during their workplace postgraduate residency training. Successfully managing complex sociocultural challenges was described as a humbling non-linear process that involved learning over time the meaning of people's actions and words. Participants described existential dimensions of successfully managing sociocultural challenges which encompassed managing inner struggles, complex emotions, and vulnerabilities, while embracing the ambiguity of not knowing what is expected of them.

The following themes encapsulate the salient processes of how I-IMGs conceptualize and successfully manage sociocultural challenges during their postgraduate medical training: 1) successful transitions at the workplace; 2) resisting or altering elements of prior sociocultural norms while embracing the new; 3) participation in the community and workplace, - having supportive social networks; 4) risk taking to self-advocate and actively seek help.

### Successful transitions at the workplace

New workplaces, clinical rotations, preceptors, co-workers, and expectations experienced were described as stressful factors during I-IMGs' training. Each new clinical context confronted them with a myriad of new challenges that are complex. Most develop preparatory strategies for managing each new clinical setting as well as becoming a resource for other I-IMGs. Many emphasized that sociocultural learning involved expecting, embracing, and "taking on transitions" as a continuous process. There is a continuum of transitions between clinical contexts, teams, and preceptors.

*You need to learn before you go in rotation. You need to find information, what to expect from that rotation... In the end, I start sharing information I know with other I-IMGs who are coming for that rotation. I was happy to help because I know how much trouble I had before I collected the information.*  
(I-IMG 10)

### Near peer social networks.

Near peers in this study are those who are within their cohorts and those ahead of them in training level. These peers, both Canadian trained and foreign trained, appeared to be human mediators for successful transitioning to their new workplace environment's expectations, culture, team work, and way of doing clinical care. Some emphasized that it is essential to observe the culture and dynamics in the workplace. Others described having to fit in to succeed as part of the team.

*I draw some of the information which I navigate like the healthcare system here via colleagues who are originally from Canada... So, I tend to get in touch with them and just ask them about how things are done.* (I-IMG 09)

### Learning from preceptors.

I-IMGs recognize the importance of learning from their preceptors. I-IMGs who successfully manage transitions between preceptors appeared to take an active role in developing meaningful connections with each preceptor. They understand the importance of their preceptors' role in their evaluations. A few of them shared insights into feedback that felt like judgements rather than constructive feedback.

*When you have that connection, then they're going to teach you. But if you don't have that connection, they keep on judging you. They want you to improve based on the judgement... but those hurt. When you establish that connection, once you have that communication you will be okay. (I-IMG 11)*

### Understanding the culture within systems.

Each situated learning context comes with system issues that I-IMGs need to successfully transition into. Most I-IMGs highlighted the importance of quickly understanding the workplace culture embodied within the tools being used such as the preferred data entry / electronic charting templates, the pre-set work algorithms, or the standardized ordering sets of clinical management. Many I-IMGs succeeded by putting extra effort on their own time and by being resourceful in getting help. Their successful transitions come with the resolve to being open to change, to adjust, and to work at managing the challenges.

*Each specialty, each service, each team has different culture. I usually take time to observe the culture and habit or tendency of the team dynamics and working place and try to accommodate or try to adjust myself to it. (I-IMG 04)*

### Resisting or altering elements of prior sociocultural norms while embracing the new

**Embracing the new.** All the I-IMG participants in this study highlighted grappling with new expectations of what it means to be in clinical practice. They described suspending judgement of what is happening as they encountered new sociocultural norms that are experientially foreign to them. Several participants emphasized how successful transitioning involved embracing being a learner again and letting go of a rigid past identity. A few participants developed a coping mindset that helped manage their internal struggles by accepting and positioning themselves as being there to learn.

*We knew that we have to accept this country as our new home... I had to go back to be a learner. So, I have to start again from scratch in Canada. This mindset helped me to just tolerate all challenges and to be motivated to continue. (I-IMG 05)*

Successful transitioning into a new culture appeared to require active reflection, the willingness to behave differently, and to develop different mannerisms.

**Resisting or altering elements of prior sociocultural norms.** Invariably, I-IMGs have to either resist or alter elements of their own prior sociocultural norms in order to embrace new ways of being a physician. This was conceptualized by a participant as a process of unlearning and relearning. A few participants elaborated how past norms can foster some biases in their current sociocultural context.

*I just try to get to know the new environment and so the curiosity or understanding of my background culture as not universal standard helps me. (I-IMG 04)*

Many participants shared the experience of having to reconceptualize their role and identity in the healthcare sociocultural context. An example is the use of first name basis among team members or being challenged or questioned as to their clinical management decisions. The participants highlighted major adjustments in a new value system around patient centered care. For some, the concept of patient centered care is incongruent from what their practice norms were in their previous training context. Most described transitional challenges as they alter from their prior norms to embrace the value systems and the meaning of being a physician in the present context.

*The workplace culture is very different from what I'm used to as a physician back home. Where I worked you are almost top tier. We were not on a first name basis. Here everybody in the health sector is on a first name basis mostly which is initially a bit of a challenge. It takes a lot of adaptation for me to realize that it's not about disrespect, but more about collegiality and friendliness and making sure an ease of the team. (I-IMG 01)*

On what appeared to be a personal existential dimension of experience, some I-IMGs talked about going against their own customs, spiritual beliefs, or religion as they provided evidence-based health care. One I-IMG gave an account of the tensions experienced, putting aside

personal beliefs and values. Another participant shared a story about grappling with reconceptualizing the cultural expectations around end-of-life discussions. Fitting into current practice expectations for patient informed medical care meant overriding prior cultural norms for one I-IMG who came from a society where a bad cancer diagnosis is not revealed to the patient but only to the family instead:

*If a patient gets diagnosed with cancer, my culture would never tell the patient directly that you have cancer. But here we have to tell the patient, so that is very difficult. I had to practice it many, many times by myself how to break bad news. (I-IMG 08)*

All the I-IMG participants in this study gave account that they resist or alter elements of their prior sociocultural norms in order to embrace the new as they undergo their postgraduate training.

#### Participating in the community and workplace; having supportive social networks

The I-IMGs in this study described their adjustment to a new way of living requires them to be living, working and interacting in their respective communities as a way of understanding and adjusting to sociocultural differences. Some actively sought help from resources within the community and their broad social network to improve their applied English language skills and contextually relevant phrases: *"I found a teacher, English teacher...she helped me to improve my grammar and my comprehension in English."* (I-IMG 10)

Their informal conversational language skills helped them gain confidence. One individual explained the use of nonverbal gestures and cues as useful tools for communication.

*Best way to deal with language barrier is to speak to people. There are other things you can employ. You can use gestures in a very subtle way... you can use nonverbal cues while expressing yourself. (I-IMG 07)*

The active process of self-advocacy and seeking help developed social connections and a sense of security integrating into their new sociocultural space:

*I feel so comfortable here... I always felt supported. People are welcoming. I think that kind of security helps me to accept those new culture and make me open to the new environment. (I-IMG 04)*

A range of social connections help to bridge I-IMGs into their new environments. An example is a participant's account of seeking out the nursing staff to help navigate the system. I-IMGs seek out colleagues or other team members to help them. One participant reflected that learning and applying ethics, clinical practice standards, patient safety, and professionalism cannot be learned from textbooks alone but are observed and modelled, gradually altering behaviour and practice while participating in the workplace learning environment. Another participant explained that navigating the values within the Canadian healthcare system such as patient confidentiality happens by participating in the work environment. An I-IMG explains that they cannot learn without their preceptors' guidance and without experiencing many different contexts:

*My instructor said..you shouldn't have talked like this [a boss]. So be gentle, and it seems that you are super confident so it's not good in Canadian culture... And for me the best way to get used to that was being in environment and seeing more patients in Canadian system. If you just do on your own you cannot learn. (I-IMG 05)*

I-IMGs appreciate their program coordinators who are administrative in their role but provide psychological safety to listen to I-IMGs' frustrations, to provide emotional support, to help find resources, and to patiently explain sociocultural differences:

*We have a very wonderful program coordinator who we can talk to about anything. And she's always on our side. And it is great to have those people who I can trust and who I know always supported me. (I-IMG 04)*

Many I-IMGs highly valued their informal social networks with other I-IMG and non-I-IMG peers. A number of participants use social media tools to connect with I-IMG peers in real time, serving as an emotional outlet and psychological safety net. Most I-IMGs also described how friends and family in Canada and abroad are essential for their well-being. A common thread was that I-IMGs rely on various supports to help them succeed and manage.

*Sharing with colleagues helps me a lot to feel comfortable and it makes me feel, oh, I am not alone to feeling that way... We have a WhatsApp chat group. So, we oftentimes chat each other... it is great to have some place to safely vent out our emotional distress ... although our backgrounds are very different. We're all*

*from different countries and we're all from different cultures. (I-IMG 04)*

#### **Risk taking to self-advocate and actively seek help**

Many participants succeeded in their sociocultural learning and growth by overcoming their own insecurities, having courage to make social connections and actively seeking help. A number of participants described having to overcome the risk of being judged while asking for help, but ultimately this helped them work through their inner struggles. Most I-IMGs strategically find individuals they feel safe with and solicit their help. They also assess whether it is safe to speak up and will select when and how it may be appropriate to self-advocate. At times, I-IMGs are not willing to reveal uncertainties in terms of sociocultural norms among the health care team members. They thus must manage awkward or difficult moments during their interactions with patients. Two participants appeared to self-advocate by revealing to their patients their language and sociocultural struggles as I-IMGs. Interestingly, this led to patients demonstrating compassion and understanding and sometimes even helping them to overcome these barriers.

*I found that it's helpful to mention I'm an I-IMG, 'I have an accent and I also have a mask. So, it can be difficult for you to understand me...' So, I do not try to hide my accent. I do not try to hide my I-IMG background. I just mention it right away and that's it. (I-IMG 07)*

I-IMGs worked through and overcame significant inner struggles in order to seek out the help that they needed. Through these social interactions, they engaged in a process of learning and became familiar with their new sociocultural environments.

## **Discussion**

At the outset of our study, we were interested in exploring the complex processes of how I-IMGs successfully and effectively manage sociocultural challenges. Our insights revealed that culture had an impact on how I-IMGs think about themselves and respond to their social world.<sup>40</sup> In the following, we interpret the insights for the reader while attending to how learning occurred through relationships between people and through participation in social practices.

#### **Managing ongoing transitions, an intricate phenomenon**

I-IMGs are challenged with new expectations in clinical practice as they face different sociocultural norms, managing transitions, making adjustments, and adapting

each time. The results of this study join the conversation on supporting transitions and resonate with the work of Yardley & colleagues whereby transitions should *not* be viewed as one moment in time, but a continuum of successive transitions.<sup>41</sup> The participants emphasized the need to quickly adapt to each new clinical rotation. Each transition poses opportunity and/or threat as proposed by Teunissen and Westerman, emphasizing the ambiguity of transitions in medical education.<sup>42</sup>

Although I-IMGs found the orientation they received at the beginning of their postgraduate residency program helpful, they also stated that it was inadequate. I-IMGs cannot prepare for the complex dynamics in workplace culture as they are in essence thrown into each new context that requires them to quickly learn and adjust. This insight is consistent with the conclusions of Kilminster & colleagues, emphasizing that “preparedness” is not enough and that medical educators need to understand that transitions are critically intensive learning periods.<sup>43</sup> In fact, periods of disorientation are commonly experienced by I-IMGs that they must navigate through.<sup>6,7,19,44</sup> This non-linear process of adaptation to new situations is also brought up by Tan & colleagues describing I-IMGs “transitional disorientation” while training.<sup>45</sup> Medical training institutions need to consider how they can support I-IMGs through their continuous transitions where each new context brings various complex sociocultural challenges.

#### **Adjusting to a new society; altering from prior norms**

When it comes to I-IMGs undergoing training, it appears that they are the ones who have to alter their socioculturally shaped approaches and practices if they are to succeed. Thus, our insights point to the importance of accounting for the fluid, non-linear aspects of human behaviour and the contextual complexities immigrants face. The I-IMGs in this study described having to manage sociocultural dynamics that are beyond their role as individuals, unfolding as a process that is situated in a rich sociocultural context aligned with the tenets of sociocultural learning theory.<sup>22,24,30</sup> This study highlights the need for training programs to fully embrace responsibilities that ensure positive learning environments and to enact continuous supports for I-IMGs in their sociocultural learning.

#### **Situated learning, active participation, and social networks**

The I-IMG participants in this study who adeptly succeed actively participate in their community and workplace. They develop supportive social networks and learn through

observation and modeling. New behaviours are enacted as the result of continuous reciprocal interactions between cognitive, behavioral, and environmental influences, consistent with concepts drawn from sociocultural learning theory.<sup>21-24</sup> Much of how people interact, what their values are, the appropriate use of words and phrases, and what meanings relate to certain mannerisms or behaviour are implicit and nuanced. The lack of language fluency and not knowing contextually relevant phrases and terms pose significant barriers for I-IMGs.<sup>1,5,46</sup> The insights show how social connections help to bridge I-IMGs into their new sociocultural environments. It is critical to frame their sociocultural learning from a constructivist paradigm whereby complex human behaviour is understood contextually, requiring meaningful social interactions.

I-IMGs need to navigate and understand the sociocultural norms and expectations of the medical professional community where they are situated. This affirms the findings of Teunissen & colleagues which highlight that *how* one is supposed to interact and participate in a given work context is embedded in work-related activities.<sup>47</sup> These authors described how cultural information is often taken for granted and that people are unconscious of cultural aspects that shape their work-related activities. The I-IMGs in this study described that the meanings behind actions, words, and customs of the health care community are not always explicit and that workplace culture cannot always easily be interpreted. I-IMGs cannot readily know or identify what is unknown or foreign to them. The notion of developing contextual competence<sup>48</sup> - when it relates to cross-cultural or sociocultural learning by I-IMGs - cannot be accomplished by cognitive processes alone. I-IMGs need to be supported to experientially develop and understand meaning for the actions and words of those they interact with.

### Overcoming insecurities, seeking help, and psychological safety

Our insights reveal how I-IMGs succeed in their sociocultural learning and personal growth by overcoming their insecurities such as the fear of feeling judged or appearing incompetent. They succeeded by taking psycho-emotional risks to self-advocate and ask for help. They gained skills and became familiar with their new society by engaging others, and by actively seeking opportunities to learn rather than remaining passive about their limitations and difficulties.

Our insights also illuminated the role of program coordinators who provided psychological safety as they supported I-IMGs with sensitivity to their experiences. These program coordinators are embedded within the program but have no involvements in assessment or evaluation, thus being perceived as a safe space. Uncoupling the role of assessment from the supportive role seems to be a factor in fostering this sense of safety. The program coordinators at each training site are described as willing and ready to help, supporting I-IMGs with necessary resources and helping them navigate sociocultural challenges.

Participants who reported active management of their relationships with their preceptors described how they influenced aspects of their preceptors' perceptions of their competence. They do this by asking questions, by engaging in purposeful discourse, and by expressing vulnerabilities. Participants who proactively engage their preceptors pertaining to sociocultural and clinical practice dimensions appeared to increase the quality of their relationships with their preceptors. I-IMGs who described psychological safety with their preceptors also reported receiving feedback that felt non-judgemental. Notably, Tsuei & colleagues describe how students' sense of psychological safety appeared to free them to focus on learning without considering the consequences of their actions. The authors also discovered how feeling safe seemed to facilitate trust and relationship building with the mentors.<sup>49</sup>

Our insights demonstrate how transitions are critically intensive learning periods and postgraduate medical training inherently involves a continuum of successive transitions. Medical education institutions and workplace clinical settings need to anticipate and facilitate transitions for I-IMGs' success with every new workplace entry. This requires ongoing support to be embedded in and throughout the program. Michalski & colleagues point to the need for better training of I-IMGs on dimensions of managing sociocultural differences as well as attending to systems level clinical workplace dynamics such as acronyms, electronic medical record systems, and differences in workplace medical culture.<sup>12</sup> We anticipate involving I-IMGs in the co-design of these supports would be productive although research is needed to explore this potential approach. The insights in this study also suggests that there is little to no space for I-IMGs to resist medical practice norms if they are to successfully complete their postgraduate training program. Being able to resist or alter their own prior norms while embracing the new is a



necessary attribute of I-IMGs. Those around them, especially in the workplace, could contribute by helping I-IMGs understand the nuances and meanings of sociocultural experiences in their new contexts. The I-IMG participants in this study described how more formal interactions with instructors or preceptors could expand their contextual and sociocultural competence. Instruction around communication, tone of voice, and appropriate use of words when engaging patients were described by participants as important learning opportunities. Concepts of patient centered care, confidentiality, and informed consent following observations of I-IMGs during the course of working together can provide timely, credible and trusted feedback and are thus worthwhile educational strategies for supporting I-IMGs. Training institutions and preceptors also need to embody psychological safety to provide the learning environments where I-IMGs thrive and feel safe to actively seek out the help they need. Moreover, I-IMGs should participate in the workplace and societal community to appreciate and acquire dynamic sociocultural understanding and as such, informal and formal social networks should be encouraged and facilitated whenever possible.

## Limitations

The I-IMGs who participated were primarily from the family medicine postgraduate program and our data set only included one I-IMG trainee from the department of internal medicine. As such, the results of this study may be limited in transferability to other postgraduate training programs. However, we observed that the internal medicine I-IMG corroborated themes that were aligned with other I-IMG participants in the study. This suggests that the themes discovered may resonate with other postgraduate clinical training contexts. Moreover, we can appreciate that these insights were generated in a specific sociocultural context in a Canadian setting where there are potential subtle differences from other countries in terms of entry requirements, training models, and sociocultural norms. Others will need to determine if the conceptual insights developed in our study resonate with their I-IMG trainees and are transferable to their institutional context. Future research would advance understanding by employing a cross-cultural comparative approach among I-IMGs from across North America (Mexico, USA, Canada).

We also acknowledge that we did not reveal the participants' gender, length of time in Canada, age or other demographic data. We sought rich I-IMG perspectives on

the phenomenon of successfully managing sociocultural challenges to achieve naturalistic generalizability. Moreover, with a small sample size and some participants still in training we were sensitive to not reveal demographic data that could reveal their identity. Future research should specifically take a strengths-based approach to explore the ways I-IMGs manage sociocultural challenges based on race or ethnicity, gender, age and/or length of time in Canada to enrich our overarching insights.

## Conclusion

Our study revealed how I-IMGs cannot successfully manage sociocultural challenges by simple orientation initiatives focused on the individual; they require active participation, and a supported process of being and becoming in their environments.<sup>21-24,25-27</sup> Our insights emphasize that although I-IMGs encounter significant sociocultural challenges, many successfully overcome them through a myriad of ways. Their learning and familiarization of new sociocultural norms appear to be a non-linear process. I-IMGs have to manage their continual transitions well, and grapple with the complexity of embracing new sociocultural norms. Many overcome these challenges by being and participating in the workplace and in their community, and actively seeking help from others. By understanding how I-IMGs successfully manage sociocultural challenges, medical educators can better ensure success by embedding continuous and strategic supports that meet their diverse needs.

**Conflicts of Interest:** The authors declare no conflicts of interest.

**Funding:** A small grant funding for transcription services was received from the Island Medical Program, Faculty of Medicine, University of British Columbia.

**Acknowledgements:** The authors wish to extend their sincere appreciation to Dr. Rabia Khan for sharing her perspectives and insights about the theoretical framing of this work, and to Dr. Janneke Frambach for her valuable feedback on various aspects of this study.

## References

- Bates J, Andrew R. Untangling the roots of some IMGs' poor academic performance. *Acad Med*. 2001;76(1):43-46.
- Bhat M, Ajaz A, Zaman N. Difficulties for international medical graduates working in the NHS. *BMJ*. 2014;348:g3120.
- Chen PGC, Curry LA, Bernheim SM, Berg D, Gozu A, Nunez-Smith M. Professional challenges of non-U.S.-born international medical graduates and recommendations for support during residency training. *Acad Med*. 2011;86(11):1383-1388. <https://doi.org/10.1097/ACM.0b013e31823035e1>
- Fiscella K, Roman-Díaz M, Lue BH, Botelho R, Frankel R. 'Being a foreigner, I may be punished if I make a small mistake': assessing transcultural experiences in caring for patients. *Fam Pract*. 1997;14(2):112-116.
- Hall P, Keely E, Dojeiji S, Byszewski A, Marks M. Communication skills, cultural challenges, and individual support: Challenges of international medical graduates in a Canadian healthcare environment. *Med Teach*. 2004;26(2):120-125. <https://doi.org/10.1080/01421590310001653982>
- Harris A, Delaney C. International medical graduates in transition. *Clin Teach*. 2013;10(5):328-332. <https://doi.org/10.1111/tct.12021>
- Hashim A. Educational challenges faced by international medical graduates in the UK. *Adv in Med Ed & Prac*. 2017;8:441-445. <https://doi.org/10.2147/amep.S126859>
- Jha V, Mclean M, Gibbs TJ, Sandars J. Medical professionalism across cultures: A challenge for medicine and medical education. *Med Teach*. 2015;37(1):74-80. <https://doi.org/10.3109/0142159X.2014.920492>
- Kalra G, Bhugra DK, Shah N. Identifying and addressing stresses in international medical graduates. *Acad Psych*. 2012;36(4):323-329. [Doi.org/10.1176/appi.ap.11040085](https://doi.org/10.1176/appi.ap.11040085)
- Klinger C, Ismail F, Marckmann G, Kuehimeyer K. Medical professionalism of foreign-born and foreign trained physicians under close scrutiny: a qualitative study with stakeholders in Germany. *PLoS ONE*. 2018;13(2): e0193010. <https://doi.org/10.1371/journal.pone.0193010>
- McDonnell L, Usherwood T. International medical graduates – Challenges faced in the Australian training program. *Aus Fam Phys*. 2008;37(6):481-484.
- Michalski K, Farhan N, Motschall E, Vach W, Boeker M. Dealing with foreign cultural paradigms: A systematic review on intercultural challenges of international medical graduates. *PLoS ONE*. 2017;12(7):e0181330. <https://doi.org/10.1371/journal.pone.0181330>
- Najeeb U, Wong B, Hollenberg E, Stroud L, Edwards S, Kuper, A. Moving beyond orientations: a multiple case study of the residency experiences of Canadian-born and immigrant international medical graduates. *Adv Health Sciences Ed*. 2019;24:103-123. <https://doi.org/10.1007/s10459-018-9852-z>
- Skjeggstad E, Gerwing J, Gulbrandsen P. Language barriers and professional identity: A qualitative interview study of newly employed international medical doctors and Norwegian colleagues. *Pat Educ Counselling*. 2017;100:1466-1472.
- Triscott JAC, Szafran O, Waugh EH, Torti JM, Barton M. Cultural transition of international medical graduate residents into family practice in Canada. *Intern J Med Ed*, 2016;7:132-141. <https://doi.org/10.5116/ijme.570d.6f2c>
- Kehoe A, McLachlan J, Metcalf J, Forrest S, Carter M, Illing J. Supporting international medical graduates' transition to their host-country: realist synthesis. *Med Ed*, 2016;50(10):1015-1032. <https://doi.org/10.1111/medu.13071>
- Lineberry M, Osta A, Barnes M, Tas V, Atchon K, Schwartz A. Educational interventions for international medical graduates: A review and agenda. *Med Ed*. 2015;49(9):863-879. <https://doi.org/10.1111/medu.12766>
- Philpott J, Batty H. Learning best together: social constructivism and global partnerships in medical education. *Med Ed*. 2009;43:923-924.
- Billett S. Learning throughout working life: A relational interdependence between personal and social agency. *British J Educ Studies*. 2008;56(1):39-58.
- Wenger E. *Communities of Practice: Learning, meaning, and identity*. Cambridge: Cambridge University Press; 1998.
- Bandura A. *Behavioral modification through modeling practices*. In L. Krasner & L. Ullman (Eds.), *Research in behavior modification* (pp. 310-340). New York: Holt, Rinehart & Winston; 1965
- Bandura A. *Social learning theory*. Englewood Cliffs, NJ: Prentice Hall; 1977
- Bandura A. *Self-efficacy: The exercise of control*. New York: W.H. Freeman; 1997.
- Lave J, Wenger E. *Situated learning: Legitimate peripheral participation*. Cambridge, England: Cambridge University Press; 1991.
- Hodges BD, Kuper A. Theory and practice in the design and conduct of graduate medical education. *Acad Med*. 2012;87(1):25-33.
- Mann KV. Theoretical perspectives in medical education: past experiences and future possibilities. *Med Ed*. 2011;45:60-68. <https://doi.org/10.1111/j.1365-2923.2010.03757.x>
- Vygotsky LS. *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press; 1978.
- Bergman E, de Feijter J, Frambach J, et al. AM last page: a guide to research paradigms relevant to medical education. *Acad Med*. 2012;87(4):545.
- Varpio L, Aschenbrenner C, Bates J. Tackling wicked problems: how theories of agency can provide new insights. *Med Ed*. 2017;51:353-365. <https://doi.org/10.1111/medu.13160>
- Kahlke R, Bates J, Nimmon L. When I say...sociocultural learning theory. *Med Ed*. 2019;53:117-118. <https://doi.org/10.1111/medu.13626>
- Sanderson CA. *Social Psychology*. John Wiley & Sons; 2009.
- Varpio L, Paradis E, Uijtdehaage S, Young M. The difference between theory, theoretical framework, and conceptual framework. *Acad Med*. 2020;95(7):989-994. DOI: <https://doi.org/10.1097/ACM.0000000000003075>
- Creswell JW. *Chapter 7: 'Collecting qualitative data'. In Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Boston: Pearson; 2014.
- Etikan I, Musa SA, Alkassim RS. Comparison of convenience sampling and purposive sampling. *Amer J Theoretical Applied Statistics*. 2016;5(1):1-4.

35. Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psych*. 2006;3(2):77-101.
36. Braun V, Clarke V. What can “thematic analysis” offer health and wellbeing researchers? *Intern J Qual Studies Health Well-being*. 2014;9.
37. Varpio L, Ajjawi R, Monrouxe LV, O'Brien BC, Rees CE. Shedding the cobra effect: problematizing thematic crystallization, triangulation, saturation and member checking. *Med Ed*. 2016;51(1): 40-50.
38. John-Steiner V, Mahn H. Sociocultural approaches to learning and development: a Vygotskian framework. *Educa psychol*. 1996;31(3-4):191-206.
39. Hennink MM, Kaiser BN, Marconi VC. Code saturation versus meaning saturation: how many interviews are enough?. *Qual health res*. 2017;27(4):591-608.
40. Matsumoto D, Yoo SH. Toward a new generation of cross-cultural research. *Perspect psychol sci*. 2006;1(3):234-50.
41. Yardley S, Westerman M, Bartlett M, Walteon JM, Smith J, Peile E. The do's, don't and don't knows of supporting transition to more independent practice. *Perspect Med Ed*. 2018;7:8-22. <https://doi.org/10.1007/s40037-018-0403-3>
42. Teunissen PW, Westerman M. Opportunity or threat: the ambiguity of the consequences of transitions in medical education. *Med Ed*. 2011;45(1):51-59.
43. Kilminster S, Zukas M, Quinton N, Roberts T. Preparedness is not enough: understanding transitions as critically intensive learning periods. *Med Ed*. 2011;45:1006-1015.
44. Wong A, Lohfeld L. Recertifying as a doctor in Canada: international medical graduates and the journey from entry to adaptation. *Med Ed*. 2008;42:53-60.
45. Tan A, Hawa R, Sockalingan S, Abbey SE. (Dis)Orientation of international medical graduates: an approach to foster teaching, learning, and collaboration (TLC). *Acad Psych*. 2013;37(2):104-107.
46. Jain P, Krieger JL. Moving beyond the language barrier: The communication strategies used by international medical graduates in intercultural medical encounters. *Patient Educ Counselling*. 2011;84:98-104. <https://doi.org/10.1016/j.pec.2010.06.022>
47. Teunissen PW, Scheele F, Scherpier A, et al. How residents learn: qualitative evidence for the pivotal role of clinical activities. *Med Ed*. 2007;41:763-770. <https://doi.org/10.1111/j.1365-2923.2007.02778.x>
48. Teunissen PW, Watling CJ, Schrewe B, et al. Contextual competence: How residents develop competent performance in new settings. *Med Ed*. 2021;00:1-10. <https://doi.org/10.1111/medu.14517>
49. Tsuei SHT, Lee DH, Ho C, Regehr G, Nimmon L. Exploring the Construct of Psychological safety in medical education. *Acad Med*. 2021;94(11S):S28-S35. <https://doi.org/10.1097/ACM.0000000000002897>