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Evaluating the “McMUST” global learning partnership: resident insights on knowledge exchange to enhance learning in postgraduate medical education

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Abstract

Background To critically evaluate a global learning partnership called “McMUST,” which was initiated collaboratively between Mbarara University of Science and Technology (MUST) in Uganda and McMaster University in Canada in 2014.

Methods A combination of quantitative and qualitative data collection methods was used. Evaluation forms were used to collect satisfaction and learning experience data from Canadian and Ugandan psychiatry residents during eight of 11 visits to Uganda by Canadian faculty and residents. The visits occurred between 2015 and 2023 and involved Canadian faculty and residents collaborating with local counterparts in psychiatry at MUST. Quantitative data were analyzed using means and standard deviations, while qualitative comments underwent conventional content analysis.

Results Satisfaction ratings from 56 evaluations out of a total possible of 62 were consistently high across all visits (Range = 3.83–5.00 / 5.00, $M = 4.52$, $SD = 0.41$). Qualitative findings revealed five themes: (1) *Enriched learning*, highlighting the transformative experience for residents in challenging existing perspectives; (2) *Effective pedagogy*, emphasizing the value of diverse learning strategies; (3) *Navigating cross-cultural and professional roles*, focusing on Canadian residents’ transformative learning journeys; (4) *Patient experiences—Humanizing psychiatric education*, underscoring a shared focus on humanistic patient care; and (5) *Enhancing future visits*, addressing challenges and suggesting improvements, such as extending visit durations, supporting ongoing connections between residents, and advocating for bidirectional travel.

Conclusions The consistently high satisfaction ratings across multiple visits indicate that the global learning partnership between MUST and McMaster University has been successful in providing an enriching learning experience for residents participating in collaborative clinical work and learning of psychiatry in Uganda. Despite many positive findings, our partnership was not immune to some of the equity-related problems that have been documented in the literature. Going forward, advocacy efforts to gather resources that will allow for bidirectional

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travel for residents will be essential. Our findings also highlight opportunities to evaluate impact longitudinally, especially on participants' clinical practice and patient outcomes.

Keywords Global learning partnership, Global health, Knowledge exchange, Postgraduate medical education, Residency education, Psychiatry

Background

In 2010, the Lancet Commission on Education of Health Professionals for the 21st Century underscored the importance of equipping healthcare providers with the skills to address local and global health inequities [1]. Recognizing the value of exposing learners to global health encounters, medical education programs have increasingly integrated these experiences to develop knowledge and clinical skills relevant to diverse settings [2–4]. Despite the rise in global learning partnerships, ensuring a robust educational experience necessitates evaluation.

Kronfol and colleagues [5] noted that program evaluation is critical for the success and sustainability of program development. However, such evaluation data are often limited, particularly in psychiatry and mental health, making it challenging to determine if students are gaining essential global health knowledge, skills, and attitudes. Evaluation data from participation in an international fellowship in undergraduate medical education showed increased knowledge in specific global health domains from international fellowship participation [6]. Subsequent studies, such as Samuels et al. [7], highlighted improved communication and collaboration skills among Canadian students engaged in online learning with international peers.

While there have been robust descriptions of psychiatry global learning partnerships [e.g., 8, 9], evaluation data on postgraduate global learning partnerships are limited compared to the undergraduate context. With respect to the existing evaluation data, Umoren et al. [10] found significant test score increases for Master's students in a postgraduate global health partnership. Similarly, Asgary et al. [11] reported improvements in global health knowledge among postgraduate learners in a global health training stream. Hayward et al. [12] demonstrated that residents engaging in short-term global health experiences scored better in specific training domains compared to those without such encounters.

A unique qualitative contribution by Sawatsky et al. [13] explored identity formation among postgraduate learners in international health electives, revealing these experiences deeply influenced residents' professional identity development. These findings align with transformative learning theory [14], emphasizing shifts in underlying assumptions through critical reflection.

Despite their benefits, global learning partnerships have been critiqued in the literature [e.g., 15, 16, 17],

especially for elements of “white saviourism.” These types of partnerships often involve brief, unidirectional travel from high-income to low- or middle-income settings with limited opportunities for critical engagement or reflection [17]. Such trips can be inaccessible due to cost for people from low-income backgrounds and therefore privilege those who can pay for a travel experience in another location. These unidirectional partnerships have been criticized for perpetuating colonial and racist attitudes [15]. The inherent inequities in the structure of many global learning programs are evident, as highlighted by Crump, Sugarman, and the Working Group on Ethics Guidelines for Global Health Training (WEIGHT) [18]. Lastly, the literature often describes global learning programs without including a focused evaluation or collecting rigorous assessment data, leaving a gap in understanding what makes global learning partnerships “transformational.”

Given the relevance of evaluating global learning partnerships, we sought to evaluate a decade-long global learning partnership in psychiatry between Mbarara University of Science and Technology (MUST) in Uganda and McMaster University in Canada. We adopted a critical lens in our evaluation, given the known problems with global learning partnerships. Our intention is to publicly share our experiences with this long-standing partnership program and provide insights to encourage reflection on the lessons we have learned throughout this process.

Method

The “McMUST” global learning partnership was initiated collaboratively between our institutions, Mbarara University of Science and Technology (MUST) in Uganda and McMaster University in Canada in 2014. Our goal was mutual learning and capacity building for faculty and residents. We enabled this through regular two-week visits to MUST by Canadian faculty and residents, and in more recent years, visits to Canada by Ugandan faculty and MUST graduates. Due to resource constraints, fewer Ugandans have traveled to Canada than vice versa, and to date, no Ugandan residents have had the opportunity to visit Canada.

At the time of its development, the McMUST educational collaboration was congruent with both our departments' visions and strategic plans. It was supported as a concrete example of our commitment to global health engagement. We collaboratively developed program

objectives, including the development and expansion of educational systems for specialty postgraduate training. An important focus of our partnership has been providing leadership training opportunities for faculty and residents at MUST. Our efforts also involve participating in curriculum development and assessment and examination processes, as well as supporting collaborative research projects for residents and faculty at both institutions.

Preparing for cross-cultural exchange

We provide extensive pre-departure training for Canadian residents traveling to Uganda. This includes several virtual opportunities for Ugandan and Canadian residents to meet each other prior to their in-person meetings. During these sessions, we share learning expectations and develop a teaching schedule. Both Ugandan and Canadian residents are responsible for developing presentations that are in line with the MUST curriculum. In addition to these “meet and greet” sessions, Canadian residents participate in a series of pre-departure training sessions specific to participating in the daily activities within the Department of Psychiatry at MUST. These sessions cover topics such as getting oriented to safe travel, learning objectives and logistics, what to expect in Mbarara, preparing educational materials, and ethical considerations and decolonizing learning.

Our pre-departure reading materials include a review of the history of Uganda, as well as the influence of colonialism and poverty on health. Information about population distribution, determinants of health, and culture are also reviewed as part of our visit preparations. All participants, including residents from both countries, create learning objectives that are reviewed before, during, and after the visit. Prior to travel, residents prepare reflections that include identifying and articulating assumptions and values that guide their professional work.

An article by Guiles and colleagues is included in the preparation materials for Canadian residents and encourages residents to understand different types of learner engagement during global health encounters, such as that of a hero, observer, tourist, or partner [19]. We discuss and apply these “learning stances” in various scenarios that may be encountered. During the visit, patient-centred care is central, and the use of biopsychosocial formations help make this a focal learning point for psychiatry residents. Regular debriefing sessions take place among Canadian residents, facilitated by a Canadian faculty member, to understand what experiences are salient and/or challenging. During these sessions, residents are encouraged to be critical learners by identifying frameworks of thought and judgment that may be impacting what they are seeing and experiencing, as well as

Table 1 Prompts to guide residents’ post-visit reflections

- Pre-departure training and readiness for partnership engagement
- Personal preparation for the visit
- Expectations prior to travel in relation to the actual experience
- Specific visit components (i.e., teaching, weekend activities, accommodations, etc.)
- Experiences with local culture and its interface with medicine and/or medical education
- Experiences with supervision
- Personal learning points and “aha” moments
- Visit impact on home context for global mental health engagement
- Visit impact on current and future learning and/or career plans

Table 2 Residents’ satisfaction ratings, on a scale of 0 = Poor and 6 = Excellent, from 56 evaluations out of a total possible of 62, across eight of 11 visits to Uganda

Date	Number of Evaluations	Mean Rating	Standard Deviation
Sept 2015	3	5.00	0.00
Jan 2016	6	3.83	0.75
Jun 2016	6	4.00	0.63
Jan 2017	4	4.75	0.50
Sept 2018	5	4.20	0.45
Nov 2019	5	5.00	0.00
Jun 2022	16	4.81	0.40
Oct 2023	11	4.55	0.52
Mean	7 (Total = 56)	4.52	0.41

personal uncertainties that may be affecting their learning. A debrief session follows the completion of a written post-visit reflection (see Table 1 for prompts).

During our teaching sessions and clinical learning within the visit, we explicitly encourage all residents to think about power dynamics and to engage critiques of the existing empirical literature, including by and for whom it is authored, in its potential applications in the Ugandan context. We also encourage residents to locate African publications about various topics and to identify impactful pedagogical practices demonstrated by MUST faculty and patients.

Evaluation framework

In this study, we used the Context Input Product Process (CIPP) evaluation framework [20] to assess the broader impact of the McMUST partnership. The evaluation of the learning encounters within this article focuses on visits to Uganda by Canadian faculty and residents and reflects the “Product” and “Process” components of the CIPP model.

Evaluation process

The evaluation process covered eight of 11 visits to MUST between 2015 and 2023, which are the focus of this study. Although Ugandan faculty and MUST graduates have traveled to Canada, these visits followed a

different structure and did not involve residents due to resource constraints; thus, our focus in this study on visits during which Canadians traveled to Uganda.

During each visit, a faculty member and one or more residents in psychiatry traveled from McMaster University to MUST, engaging in shared clinical work and collaborative learning with local faculty and residents in psychiatry. At the conclusion of each visit, all participating residents from each institution were asked to complete a paper-based evaluation form with a single item for rating their educational experience (“Considering the visit from McMaster University faculty and residents for educational purposes, how would you rate your experience over the last two weeks?”) on a six-point Likert-type scale ranging from 0 = Poor to 6 = Excellent. A single-item rating scale was used to quantify participants’ overall experiences with the visits while maintaining brevity to facilitate completion of the evaluation forms. The evaluation form was developed specifically for this study (Supplementary File 1). Additionally, residents were invited to expand, in writing, on three questions regarding highlights, challenges, and suggestions for improvement. Written post-visit reflections completed by Canadian residents separately from the evaluation forms were also included in the study as qualitative data.

Data analysis

We entered quantitative satisfaction data from the paper forms into an electronic spreadsheet, and computed means and standard deviations using the Statistical Package for the Social Sciences, version 25 (IBM, SPSS Inc.) to determine residents’ satisfaction during each visit. We used conventional content analysis, as outlined by Hsieh and Shannon [21], to code each comment and create thematic summaries. SH and AA developed an initial coding scheme through line-by-line coding. We then grouped codes into categories based on related content and ideas. Categories were further developed into themes through discussions involving the broader research team, including SH, GZR, SM, and AA. While we did not engage in line-by-line coding of the Canadian residents’ written post-visit reflections due to their length, we read each reflection in detail and used it to triangulate the themes developed from the written comments on the evaluation forms.

Trustworthiness, reflexivity, and researcher positionality

Reflecting on our identities as researchers and how this impacted our interpretations of the data was an important component of this study [22]. The first author, SH, is a senior psychiatrist, educator, and qualitative researcher. She was first introduced to the African health system during medical school and completed part of her

postgraduate training at Makerere University in Uganda. She has developed and sustained relationships with Ugandan psychiatrists and academics over 20 years, and regularly travels to and leads visits to MUST in Uganda, where she holds an honorary faculty appointment. The second and third authors, GR and SM, are senior psychiatrists who have held national leadership positions in mental health and continue to be engaged in administration, teaching, and supervision at Mbarara University of Science and Technology. Both GR and SM are actively engaged in research and research supervision. Together with SH, GR and SM were instrumental in establishing and sustaining McMUST. The last author, AA, is a PhD-trained researcher in health professions education. She was invited to join this study by the partnership leads to assist with the scholarly aspects of this work, to which she brought the perspective of an “outsider.”

Throughout the analytic process, we documented our decision making and reflections. These reflections continue to be frequently discussed among our team and incorporated into the analytic process and the writing of this article. For example, as someone intimately involved with McMUST, SH had considerable “insider” knowledge, enabling a nuanced understanding that included her own lived experiences as a white scholar working and teaching in Africa. Given this familiarity, SH appreciated AA’s outside perspectives on the data, which helped ensure that SH was not “overinterpreting” the data. In her reflections, AA acknowledged her entry into the study with few preconceived notions about learners’ educational experiences with McMUST. Unlike SH, she lacked a history of sustained engagement with MUST outside of this project, prompting her to consider how her identity as an outwardly privileged, white scholar might influence her perceptions of the data and people’s trust in her as a researcher. AA’s engagement in the study over a three-year period involved learning about mental healthcare in Africa through literature, study data, and discussions with MUST collaborators. For the entire research team, the opportunity to collaboratively learn and “unlearn” was seen as both valuable and generative.

Ethics approval and consent to participate

Ethics approval was waived by the Hamilton Integrated Research Ethics Board as the study was considered quality improvement/program evaluation. Verbal informed consent was sought from all participants, and participation in the study was optional.

Results

Fifty-six evaluation forms from a total of 62 participants in the global learning partnership were collected across eight of 11 visits to Uganda between 2015 and 2023. The forms were completed by residents at MUST ($n = 49$

evaluations) and McMaster ($n=7$ evaluations). While not everyone completed an evaluation form during each visit, most participants (i.e., 90%) did. All Canadian residents who participated in the global learning partnership completed an evaluation: $n=1$ in 2015, $n=2$ in 2018, $n=2$ in 2022, and $n=2$ in 2023. Satisfaction ratings from 56 evaluations revealed consistently high ratings across all visits (Range = 3.83–5.00/5.00, $M=4.52$, $SD=0.41$; see Table 2). Given the consistently high ratings (i.e., 4's and 5's) from both Ugandan and Canadian residents across visits, we did not statistically compare the two groups.

Qualitative findings

The qualitative findings from the evaluations comprised five themes: 1) Enriched learning, 2) Effective pedagogy, 3) Navigating cross-cultural and professional roles, 4) Patient experiences—Humanizing psychiatric education, and 5) Enhancing future visits.

Theme 1: Enriched learning

Residents expressed that they saw the McMUST learning experience as highly beneficial, providing a depth of learning not typically encountered in their education. Meeting psychiatry colleagues from other parts of the world presented a unique opportunity for residents to challenge existing perspectives and knowledge when conceptualizing patient presentations.

According to a Canadian resident, a highlight of the visit was “meeting and working with MUST residents and learning about the contextual differences and similarities in terms of how psychiatry is practiced.” For Canadian residents, developing specific clinical skills, including skills in cultural competency, was a direct outcome of encountering patients in unfamiliar contexts, requiring a sense of curiosity and inquiry not typically present in their home setting.

While Canadian residents' comments tended to focus on the development of skills in cultural competency, Ugandan residents' comments often highlighted the acquisition of new clinical skills. Many Ugandan residents commented on how they benefited from viewing patients through the questions posed by their Canadian counterparts, providing a fresh perspective in their patient interactions. One Ugandan resident expressed appreciation for “being able to clerk patients in partnership with the Canadian residents and professor,” noting the valuable knowledge gained from these interactions.

During clinical learning encounters in Uganda, residents often worked in groups due to human resource shortages and a lack of direct clinical supervision. Canadian residents, accustomed to independent work, adapted quickly to the group learning approach used in the Ugandan training setting. Residents from both settings formed large groups or subgroups, learning

collaboratively in both clinical encounters and structured teaching sessions. One Ugandan resident shared: “I enjoyed the interactions [the most], where different perspectives were shared. The multi-cultural discussions on most topics [were] very interesting to me.” A Canadian resident also highlighted the value of “learning to work as a team within a global context,” emphasizing the power and richness of the learning experience when “I adopt cultural humility and give up the desire to be an ‘expert.’” Overall, a collaborative learning environment fostered diverse perspectives and enriched the educational experience for residents from both Canada and Uganda.

Theme 2: Effective pedagogy

Resident responses highlighted the types of pedagogical strategies that were implemented in facilitating learning across cultures. Case-based learning, repetition, clinical learning in small groups, test-enhanced learning, experiential learning, gamification, as well as flipped classroom methodologies were highlighted as particularly valuable. Residents from both the Canadian and Ugandan setting referred to these strategies as an effective use of learning tools to address learning needs in a complex, global setting, where developing a sense of criticality was a crucial element of the learning process. For example, a Canadian resident shared, “The [session on] attachment was incredible. It allowed me to [critique] widely adopted Western literature and see that Western theories are not always applicable to different cultures.” Another Canadian resident shared, “... experiences like this are essential for further work in addressing racism, classicism, and decolonization of medicine.”

Another strategy included making learning pleasurable, which particularly resonated with the Ugandan residents. One Ugandan resident shared, “The teaching sessions were insightful, the consultation liaison sessions equally as educative, fun, and a good learning experience. The jeopardy game was a very interesting twist!” Another Ugandan resident commented, “I've had the best two weeks in my internship. Thank you!!”

Theme 3: Navigating cross-cultural and professional roles

This theme pertained primarily to Canadian residents, whose reflections revealed the uncertainty and emotional vulnerability attached to navigating cross-cultural exchange. One resident acknowledged that such experiences are not something someone can ever fully prepare for:

So much of what we imagine or think as preparation is based on our own perception of our understanding of the city, the country, the people, and the health-care system, and I think this is strongly dependent on the individual. Was I truly “ready” for the engage-

ment we had ahead of us? I suspect I was not, but this was not a negative aspect.

Many Canadian residents also struggled to immediately discern their roles within the Ugandan healthcare system, as evidenced by the following comment: “In the beginning, I had difficulties understanding my role in this context. I struggle with uncertainty[,] which made the first few days hard.” Specifically, residents spoke about the large volumes of patients, the acuity of illness, and the limited human resources compared to their own settings, which in many cases did not reflect routine clinical uncertainty but profound culture shock rooted in stark differences in resources and care structures compared to what residents were accustomed to at home:

Having never witnessed this severity of [medication] side effects myself, I found this experience to be both shocking and distressing. I also found it hard to understand why the agent aimed at preventing or minimizing the associated side effects was not often used. While this still remains a question in my mind, it allows me to reflect on the idea of change and the many reasons why change can be so hard to implement, whether it is on an individual, systems, or organizational level.

However, these statements of acknowledged uncertainty also marked the initiation of a transformative learning journey. Over time, Canadian residents reported being able to not only navigate their own personal and clinical discomfort, but also move towards a more generous, humane understanding of what they were experiencing through humility, openness, and a willingness to challenge their own assumptions. This mindset enabled them to lean into the discomfort and, in doing so, recognize the beauty and cultural strengths embedded in the Ugandan clinical care context. One resident stated:

The other beautiful thing I witnessed in Uganda was the joy that communal living brings. In our ever-widening search for individuality and autonomy in the Western world, we have lost the joys of communal activities, communal “doing,” with its inefficiencies and its conflicts ... I hope that we in Canada can learn how to be more generous with our time and resources when we have plenty, knowing that in Uganda, even those with little are generous.

Throughout the visit, debriefing sessions emerged as crucial spaces for reflection, aiding residents in comprehending their evolving roles. The same resident who had previously struggled with uncertainty shared, “I have since come to find that uncertainty is inevitable and part

of the process. I appreciated the debriefs as it created a safe space to discuss these challenges.”

For the Canadian residents, their visit to Uganda also created a space to begin deconstructing previously held assumptions shaped by my privilege, such as the shared belief among both Canadian and Ugandan residents that Western knowledge and clinical practices were inherently superior. Throughout this experience, residents came to recognize and value the important knowledge and insights their Ugandan colleagues contributed to the learning environment. One Canadian resident shared:

I cannot describe enough how grateful I am to have met and worked with my Ugandan colleagues. In many parts of Africa, both medical students and residents have reported beliefs that they “know less” than their North American counterparts, or refer to their way of practicing as being “less than.” In actuality, the knowledge base is ... quite [equal] to my co-residents in Canada.

Theme 4: Patient experiences—Humanizing psychiatric education

Although residents came from very different backgrounds, one specific pedagogical tool was to intentionally focus on the experience of the patient as a way of reinforcing common values between residents and highlighting the critical importance of shared humanity. This orientation to humanism was described by all residents as welcome and helpful in thinking about conceptual issues such as diagnostics, treatment considerations, patient-centred care, and challenging the negative effects of stigma. Some residents had transformative experiences in coming to terms with the discrepancy between a written account of the patient in a medical chart and what the lived experience was like for the individual. While a humanistic approach to patient care may seem obvious in psychiatric training, the stringent clinical demands and institutional practices have the potential to inhibit practitioners from focusing on the individuality of the patient. The pedagogical approach within the partnership, which assumed a patient-focused orientation, was experienced as an antidote to cognitive bias. A Ugandan resident was moved by the opportunity to bring “the patient ‘to life’ from the pages of the patient’s file, crushing the myths held by society ... about substance use and related disorders.” Meanwhile, a Canadian resident shared:

This experience allowed me to reflect on how I come to my own place of understanding regarding a patient’s experience and ultimately their diagnosis. ... I understand the value of employing narrative practice in that it allows us to learn more about

our patients and their experiences in a manner that facilitates compassionate, person-centred care.

Theme 5: Enhancing future visits

While there were many strengths shared about the visits, some challenges were also noted, having mostly to do with resources. Residents from both settings noted that the length of the visits were shorter than desired; thus, “more time should be allocated for [the] visit” (Ugandan resident). Multiple Ugandan residents articulated a desire to visit Canada “to learn how psychiatry is practiced out there.” Similarly, a Canadian resident suggested “consider[ing] ways to continue to support Ugandan residents outside of the trip,” such as through, “learning resources, research project[s], grant opportunities, reciprocal exchange (if feasible), and ongoing contact via social media / Zoom call[s].”

Ugandan residents, unlike their Canadian counterparts, had to self-fund their training in Uganda while being full-time postgraduate learners. They also faced numerous competing demands on their time, which sometimes made it challenging for them to be present for shared learning encounters. Some residents noted that the volume of patients needing to be seen by Ugandan learners was difficult to accommodate, at times “clashing with our learning programme” (Ugandan resident).

Both Ugandan and Canadian residents noted that there was a language barrier when interacting with some patients, given the patients who frequently travel from different parts of the country speak many different local languages that may be unfamiliar to their healthcare providers. Interpreters were frequently required for clinical encounters, but no formal interpreters were available. As a result, medical students, residents, healthcare staff, other patients, or patients’ family members were frequently relied on to interpret during clinical encounters, and the presence of multiple dialects added further complexity. These interpretation demands for Ugandan and Canadian residents alike and could result in confusion, as well as increased demands on time.

Discussion

Although several global learning partnerships have been described in the health professions education literature, few have been evaluated in a systematic manner and with learner representation from both the Global North and South. Nonetheless, lessons learned from various partnerships can help orient our own findings to the knowledge that currently exists. Prioritizing the relational nature of the collaboration with a clear understanding that it is the host country who “owns” the program while Northern countries act as a support [8] has emerged as an important key takeaway for potential collaborators.

This includes a focus on the art and science of cultural competence as program development occurs [23]

In our evaluation, the “lessons learned” represent the perspectives of the learners involved in the program and the pedagogical approaches that may explain them. From a practical perspective, this study may act as an example of the type of positive educational impacts that can occur within the context of a well-developed collaborative program. The quantitative data obtained in our study supported a consistently successful learning experience for all learners across a decade of partnership. While this specific finding is positive, it is the narrative comments from the residents that bring to the fore a sense that something unique is happening in the learning encounter, which is not reflected in the quantitative ratings. The collective elements described in the study, as supported by the specific themes, potentially represent what is referred to in the education literature as transformative learning. While the evaluation framework was not specifically aligned to transformative learning theory in its design and implementation, the findings point to a kind of learning engagement that occurred in our global education program that aligns with it. “Transformative learning is defined as the process by which we transform problematic frames of reference (mindsets, habits of mind, meaning perspectives) – sets of assumption and expectation – to make them more inclusive, discriminating, open, reflective and emotionally able to change. Such frames are better because they are more likely to generate beliefs and opinions that will prove more true or justified to guide action.” [14] Transformative learning was likely achieved through the unique situation the learners were put in, which included working as a collective (i.e., seeing patients together in groups) and expert facilitation by faculty. During the visits, faculty would ask residents to explicitly name clinical thinking and potential biases in group learning, which allowed residents to compare perspectives and ideas. This resulted in a rich, in-situ opportunity to challenge any potential “problematic frames of reference,” irrespective of where the resident was from.

Why is transformative learning important in health professions education and in global learning partnerships? Much of health professions education relies on the development of knowledge predicated on a degree of certainty and a development of professional identity associated with expertise. While these aspects of knowledge, attitudes, and skills are important for patient care, they also need to be suspended at times to address patient problems that do not readily align with textbook answers. As learners become more senior in their clinical encounters and closer to experiences of independent practice, there are increasingly fewer teaching opportunities to suspend what they think they know about themselves, patients, the systems they work in, and the cultures

that shape them. This necessary reorientation is similar to the concept of “perspective exchange” discussed by Chaukos and colleagues [23, 24], which was described as being important to help tolerate uncertainty and assist in expert skill development in response to complex patient problems and settings. This educational perspective also aligns with Mezirow’s approach to transformative learning [14], which always starts with a “disorienting dilemma.” In other words, Mezirow is suggesting that the ability to tolerate uncertainty is an important educational progenitor to knowing.

Residents’ experiences with the McMUST program appeared to assist in providing an opportunity to challenge biases through a suspension of certainty as an important entry into the shared education that occurred. The need to “suspend knowing” may have been the more obvious challenge for the Canadian residents to acknowledge the Ugandan clinical reality where they were immersed in a cultural setting totally unknown to them but was also experienced by Ugandan residents in navigating care provision for complex patients together with their Canadian counterparts. Learning together afforded both Canadian and Ugandan residents new learning opportunities, which was made unique by talking to each other and hearing each other’s varied perspectives. While some aspects of clinical phenomenology were familiar, discussions often led to new ideas about familiar diagnoses such as psychosis or depression. Groups of learners created their own pedagogical experiences framed by respectful critique and consideration of their own and others’ observations, similar to the notion of “epistemic humility,” which is integral to transformative learning. Similarly, a group of American psychiatric educators recently published an editorial on the critical importance of humility in psychiatric education, which corresponds with an ability to openly consider multiple and divergent perspectives [25]. They highlighted the uniqueness of psychiatry as a practice that includes not only a scientific orientation to diagnosis and treatment, but also a fundamental “moral dimension” that cannot be addressed by science alone [25]. It is interesting to note that in our study, the concept of humility appeared multiple times in the comments made, particularly by Canadian residents, and at times, in the context of simultaneously dealing with moral dilemmas related to observations about Ugandan psychiatric practice. This may signal that encountering the moral dilemmas as well as typical dilemmas associated with clinical care among others who were providing their perspectives was essential to adopting an attitude inherent in the notion of humility.

One of the elements consistently at the centre of all discussions for the residents was the patient and the patient’s account. Very few lectures or didactics occurred without consideration given to the patients that had

been encountered by the group and how the learning may be applied to their specific circumstance. This orientation allowed personal structures of assumptions to be challenged, irrespective of where learners were from. In doing so, the essential curricular element that emerged is the patient and the patient’s problem from the patient’s perspective. Through this learning lens, there were important opportunities to iteratively shift thinking towards the perspective of the patient and how the patient’s articulated concerns either aligned with “medical knowledge” or offered another orientation to the problem at hand. Although this case-based approach may seem commonplace in postgraduate medical education, the qualitative findings underscore the salience of this approach, with some learners alluding to it as being an important opportunity to learn how to care about the patients they serve. This finding is also in keeping with findings from Chaukos and colleagues [23], where the focus of developing adaptive expertise also involved leaning into the experience of the patient, irrespective of diagnostic certainty or opacity. In doing so, learners are indirectly speaking about the development of a new frame of reference, which is in keeping with the concept of transformative learning. This observation also aligns with the observations of Sawatsky and colleagues [13], who found that postgraduate learners who had participated in international electives were deeply affected by their experiences in ways that shaped their professional identities. Although the evaluation focus for McMUST learners is not on identity formation, specifically, the qualitative comments that were offered also support the notion that the scope of clinical work is being expanded beyond taxonomies of symptom recognition to a professional orientation that requires an understanding of the patient’s cultural values and beliefs. This is necessary to inform a kind of psychiatric treatment intended to be effective, beyond the expertise of empirical evidence.

As with all global health initiatives, it is imperative to consider equity as it relates to the McMUST partnership. One observation about the inherent challenges within the current program is that psychiatry residents from Canada were generally more willing to speak about and articulate observed inequities. This is likely because the experience of traveling from a high-resource to a low-resource setting forced Canadian residents to directly encounter their own privileges, while the Ugandan residents did not leave their home settings and therefore would not have experienced the same shift in their frames of reference. However, Ugandan residents repeatedly indicated through the evaluation data that they would like opportunities to be exposed to other practice settings, in the same way that the Canadian residents had. This proposed bidirectional program where Ugandan residents would also be able to

travel to Canada for a clinical encounter is the pedagogical gold standard and a programmatic ideal [26].

Global health initiatives have been problematized, and justifiably so. While the McMUST partnership was intentionally designed to help address inequities and promote a decolonized approach to learning, it is not immune to the challenges that have previously been described in the literature. For example, due to the inequitable distribution of resources, it is easier for Canadians to travel to Uganda than vice versa. Also, while the primary author has a history of sustained engagement with Uganda and has built relationships there, Canadian residents who travel with her generally go once. While the psychiatry residents are encouraged to actively engage in the process of “unlearning expertise” through tolerating uncertainty that inevitably marks the type of learning that Canadian residents encounter before, during, and after the visit, their engagement with Uganda over time is much more limited and may ultimately benefit them more than it benefits Ugandans. Lastly, a privileging of Western expertise, which is deeply ingrained among both Canadians and Ugandans, was observed. One example of this is when Canadian residents would routinely refer to “Canadian guidelines” during discussions, implying a kind of certainty about standards of care. This presented an important learning opportunity, facilitated by the faculty leader, that encouraged residents to think about guideline authorship, populations studied in the research that contributed to guidelines, generalizability of guidelines, as well as how guideline application can sometimes give an impression of certainty and clarity in situations where this may be less than desired. This was one example of a transformative learning moment for many Canadian residents, who came to the realization that there may be fewer clear answers in psychiatry than they initially expected—a challenge shared by Ugandan and Canadian psychiatrists alike.

Limitations

This study has several limitations. We were only able to evaluate eight of 11 visits. We did not evaluate the bidirectional model, even though the exchange had bidirectional components embedded in it. Our evaluations focused on immediate learner reactions and perceptions. Participants’ experiences with the visits were captured using a single item; however, the wording of “rate the experience” could be interpreted in different ways by participants, which is a potential limitation of the study. However, the qualitative responses, which we highlight in the article, offered insight into the varied dimensions of the experience (e.g., learning, social, cultural). Future studies might consider using a larger number of items that evaluate different program elements, such as

satisfaction with the curriculum, pedagogical approaches, and cross-cultural learning.

The small sample size (i.e., between three and five respondents in some years) limits the generalizability of findings, though it nonetheless provides useful exploratory insight into the perspectives of both Ugandan and Canadian residents. We were also unable to provide unique identifiers for each quote given that some residents participated anonymously across multiple years, making it difficult for readers to know how varied the responses were. Additionally, our evaluations did not always capture pre-departure training experiences nor post-visit reflection activities for Canadian residents, and we see an opportunity for more robust pre-departure training for Ugandan residents, which is currently less structured than for Canadian residents.

Furthermore, we did not employ a theoretical orientation in our evaluation, such as the use of transformative learning theory nor a focus on educational outcomes consistent with Kirkpatrick’s model [27], which highlights and seeks to measure change at different levels, ranging from reactions to results, such as patient outcomes. Although we used our evaluation data to continuously improve our global learning partnership, we have not yet done longitudinal follow up with Canadian or Ugandan residents to see if the experience deeply impacted personal knowledge, attitudes, or practice. Additionally, we believe that the evaluations were highly contextually dependent on the teachers/supervisors present at the time of the learning encounter in Uganda. Pedagogical techniques would not have been consistent from visit to visit, reflecting real-world teaching environments. Lastly, the practice of psychiatry is organized through the lens of diagnostics, which are predicated on symptom taxonomies. This Western approach to psychiatry is used in both Uganda and Canada. However, this biomedical framework is not particularly reflective of cultural nuances affecting psychiatric problems in Uganda and therefore preferentially reinforces learning predicated on Western ideologies of mental health.

Conclusion

This article presents evaluation data on a sustained global learning partnership, offering insights from both Ugandan and Canadian participants through a critical lens. The data depict a beneficial experience for participants, showcasing evidence of transformative learning. While future evaluations could explore dimensions beyond participant satisfaction, incorporating concepts of transformative learning into an evaluation framework, akin to the approach by Sawatsky and colleagues [13], holds promise for deepening our pedagogical understanding. Despite the overall positive findings, our partnership faced some challenges consistent with those documented in the

literature on global learning partnerships. Our findings underscore the importance of explicitly addressing equity issues and proposing evaluative frameworks that emphasize ethical engagement—an essential focus for all global learning partnership evaluations.

Abbreviations

CIPP	Context Input Product Process
McMUST	McMaster University-Mbarara University of Science and Technology
MUST	Mbarara University of Science and Technology
WEIGHT	Working Group on Ethics Guidelines for Global Health Training

Supplementary Information

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Supplementary Material 1.

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Authors' contributions

SH, SM, and GR developed the partnership and conceptualized the study. SH developed the data collection instrument and collected the data. SH and AA analyzed the data. The findings of the study were discussed and interpreted by all authors. SH and AA wrote the manuscript. All authors reviewed the manuscript.

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Data availability

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

Declarations

Ethics approval and consent to participate

Ethics approval was waived by the Hamilton Integrated Research Ethics Board as the study was considered quality improvement/program evaluation. Verbal informed consent was sought from all participants, and participation in the study was optional.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

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