Canadian and Iranian Graduate Students' Conceptions of Critical Thinking: A Comparative Study

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Abstract

This study compares Canadian and Iranian international students' conceptions of critical thinking during their graduate studies in Canada. Critical thinking is an essential skill in Canadian higher education. It enables students to make reasoned judgments from their observations and experimentation. This narrative inquiry using open-ended interviews describes the narratives of eight students from different master's programs at a university in western Canada to examine their experiences and notions of critical thinking. The preliminary findings reveal that while all Canadian participants had knowledgeable perspectives about critical thinking, Iranian participants required more knowledge to build their critical thinking conceptualizations. Moreover, content knowledge, instructors' competence, and teaching methods significantly influenced students' critical thinking development. Results offer a comprehensive understanding of how Canadian higher institutions and curriculum developers need to provide appropriate opportunities and curricula for cultivating and developing critical thinking among local students while paying attention to Iranian students' needs and academic preparedness.

Introduction

In western higher education, critical thinking (CT) is one of the main learning outcomes for students. CT encourages students to appraise knowledge and values critically in their studies (Zhong & Cheng, 2021). While there is no specific definition for CT, Ennis (1985) defines one meaning that higher education professionals regularly cite. He noted that "critical thinking is reflective and reasonable thinking that is focused on deciding what to believe or do" (p. 45). CT is recognized as a necessary skill for students, which leads them to enhance their reasoning, communication talents, and problem-solving skills (Zara & Othman, 2013). Additionally, Islamiyah and Sholakhuddin Al Fajri (2020) highlighted international students who had completed schooling in non-western academic contexts need to adapt to this western

academic convention, which might differ from what they have learned in their home countries' education systems, to meet the requirements of the academic community. Moreover, O'Sullivan and Guo (2010) explained that while some Canadian-educated learners are unprepared to engage in the expected level of criticality when they enter university, international students who were educated in various cultural contexts and vastly diverse educational systems face significantly greater intellectual challenges because of different learning approaches and lack of teaching CT as the core component in their educational systems. Hence, in their investigation, Howe and Xu (2013) stressed the importance and need of incorporating transcultural thinking and education into curriculum, teaching and learning that aims to develop people's critical views to value different local and international cultural contexts. Therefore, there is a need to focus more on the needs of international students to meet the standards of educational evaluation, which is recognized on the premise that "knowledge exists in and through critical thought" (Paul, 1992, p. 5).

In this regard, while there have been several research on how international students develop their CT during their studies in western countries, no studies were found to examine international students' perceptions of CT in Canadian universities. Therefore, this study aims to analyze Canadian and Iranian international students' conceptions of CT to clarify their knowledge about CT and discover the factors that affect their CT development during their higher education.

Research Design

Research Problem

The participation of international students pursuing a higher-level educational degree in western countries has been increasing due to the open-door policy and marketization of institutions in recent decades. Although passing different language tests such as IELTS (International English Language Testing System) is a mandatory requirement for non-English speaking students to show their English proficiency to enter universities; these exams nonetheless do not indicate students' critical academic literacy (Mat Daud et al., 2011; Ewert, 2011). Nevertheless, international students must demonstrate CT in an academic context, such as scholarly content production. Therefore, entering a western academic community and becoming a critical thinker might be challenging for some international students, and their educational outcomes might be below academic standards. Consequently, this study aims to look deeply into the experiences of Iranian international students as the concept of CT, developed in the western world, is absent in the Iranian educational system (Eghbali et al., 2021). The research intends to discover their stories about CT and the impact of Canadian academic experiences on their CT development and compare their conceptions with Canadian students.

Research Questions

This comparative study focuses on two research questions: 1) What are Canadian and Iranian graduate students' conceptions of critical thinking? 2) How does the experience of studying at a Canadian university impact graduate students' critical thinking?

Literature Review

CT is rooted in three primary academic disciplines: philosophy, psychology, and education. Thus, CT is a rich concept with various approaches open to being defined from multiple perspectives (Sternberg, 1986; Lewis & Smith, 1993). The earliest attempts to explain this complex thinking began over 100 years ago based on Dewey (1910), who coined the term CT for the first time in what he called "reflective thinking" as an "active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it, and the further conclusion to which it tends" (p. 6). In his definition, he emphasizes that reflective thinking leads individuals to ask questions about what to believe by evaluating reasoning and considering the implications of one's beliefs. Therefore, CT is a powerful resource in an individual's personal and civic life and is a pervasive and self-rectifying human phenomenon

(Facione, 1990). Students as future citizens of the fast-growing and challenging world not only have to build their knowledge capacity but also need to improve their higher-order thinking skills, such as CT and problem-solving, to "facilitate the transition of students' knowledge and skills into responsible action, regardless of their particular future role in society" (Miri et al., 2007, p. 354).

In terms of the position of CT in British Columbia's (BC) education system, several scholars (e.g., Howe, 2003; Hymel et al., 2017; Fillion, 2020) have revealed that the BC education system is undergoing an extensive transformation in terms of applying CT components in the curriculum with aims to stress on problem-solving, literacy and communication, teamwork, and information technology in order to coordinate with the realities of 21st-century education.

On the other side, Iran's Islamic Revolution in the late 1970s affected significant changes in social systems, including the educational system, which has changed in numerous dimensions, including the content of school textbooks, which became based on Islamic frameworks and the rejection of non-Islamic ideologies (Salehi Abari & Nikdoosti, 2021; Hashemi et al., 2010; Shahnazari, 1992). According to Fahim and Bagheri (2012) while some of the fundamental points of promoting CT among Iranian students are to teach them to familiarize themselves with conflicting beliefs, to develop the ability to ask profound questions, and to acknowledge the fact that knowledge is always subject to change, yet "it is never possible to question the beliefs and values in the name of fostering critical thinking" (p. 1125). Therefore, in their research, Hashemi et al. (2010) discovered that in the Iranian education system, educational assessment stresses knowledge transmission and learning is generally limited to memorizing resources. In this light, Eghbali et al. (2021) revealed that despite claims from officials, instructors, and administrators within Iranian education that there is stress on developing CT among students, "there is not enough will and motivation to encourage students to think and specially to use critical thinking in practice" (p. 28).

The above evidence demonstrates that most Iranian students are not taught nor educated to become critical thinkers in their educational journey. Thus, practicing CT in western educational communities might be problematic and complicated for some Iranian students. Through the comprehensive meta-search of the current literature, no studies were found examining Iranian students' experiences of CT in Canadian higher education. This study aims to fill the gap in the related literature. Also, the study results call attention to Canadian higher education to address this lack of CT preparedness in Iranian international students through curricula.

Research Methodology

Research Method

This comparative study utilizes narrative inquiry (NI) to compare and contrast Canadian and Iranian graduate students' conceptions of CT. NI and other interpretive forms of qualitative research are frequently used to discover a detailed understanding, perception, and outlook of complex phenomena (Creswell, 2013; Maxwell, 2012). According to Creswell and Guetterman (2019), the theoretical lens in NI is a guiding viewpoint or ideology that delivers a structure for supporting groups or individuals' experiences in the written report to indicate an educational research issue. Indeed, the focus on an individual's personal and social experience draws on the philosophical thoughts of Dewey, who saw that "individuals experience was a central lens for understanding a person" (Creswell & Guetterman, 2019, p. 518). Further, several NI scholars like Connelly and Clandinin (2000) were inspired by Dewey's perspective and underlined NI as an approach to a collaborative and reflective understanding of individuals' experiences. Moreover, Jovchelovitch and Bauer (2000) highlighted through an interview in NI; investigators can gather stories from their participants about their experiences with a particular phenomenon to "externalize his or her feelings and indicate which elements of those experiences are most significant" (Elliott, 2005, p. 4). Thus, NI was chosen for the present study as Fraser (2004) pinpointed it can be an "effective method in cross-cultural work" (p. 181).

Research Site and Participants

This research took place in a public mid-sized university in the interior of BC. A combination of purposive and snowball sampling was used to recruit eight students (four Canadian and four Iranian) from different master's programs, namely education, data science, environmental science, and business administration, who were willing to share their lived experiences voluntarily. In this study, Canadian students refer to individuals who were raised in Canada and, most importantly, their familiarity with Canadian school systems regardless of their race, ethnicity, and gender. Iranian students refer to participants who were raised in Iran and had done schooling in Iran and, during the data collection, were identified as international students in the university. All students had successfully finished the first year of their programs. Canadian students consisted of two women and two men. Iranian participants included three women and one man. The paper delivers preliminary findings based on open-ended interviews conducted online and face-to-face.

Significance of the Study

Based on the idea that CT is an essential part of academic literacy acquisition for graduate students (Zhong & Cheng, 2021), a study about Canadian and Iranian international students' experiences regarding the development of CT in higher education provides several significant pieces of information. First, this research offers much-needed insights into the impact of Canadian educational experiences on postgraduate students' conceptions of CT by examining Canadian and Iranian students' opinions, challenges, demands and barriers they encountered during their master's level. Second, through understanding Canadian and Iranian international students' outlooks on CT, curriculum developers will have more knowledge to design curricula that consider developing these essential skills among local students while paying attention to Iranian international students' needs and academic backgrounds. Similarly, higher education institutions, department heads, and instructors at colleges and universities may use the study results to design, plan, and implement CT instructional strategies with consideration of culturally relevant pedagogies. Another unique perspective the study offers is adding knowledge to comparative and international higher education fields. Through a vast meta-search of the literature regarding international students' conceptions of CT in western countries, several scholars (e.g., Tiwari et al., 2003; Egege & Kutieleh, 2004; Fella & Lukianovaa, 2015; Song, 2016; Islamiyah & Sholakhuddin Al Fajri, 2020; Chaisuwan et al., 2021; Zhong & Cheng, 2021) mainly focused on Asian international students' conceptions, experiences, and challenges in terms of the concept and practice of CT in the U.S and the U.K universities. Likewise, the literature review found no research focused on Canadian and Iranian students' perceptions of CT at Canadian universities. The current emerging study aims to enrich the scholarly debate on the subject and contribute to the literature on comparative and international higher education studies. Also, it opens new doors for researchers interested in comparative and international studies to get a snapshot of Canadian and Iranian students' perceptions of CT and how Canadian educational experiences impact their CT development during higher education.

Conclusion

This investigation explores Canadian and Iranian students' experiences of developing CT during their master's studies in Canada. The preliminary findings of this research indicate that while all Canadian participants had a reasonable perception of CT, some Iranian students require more knowledge to improve their awareness of this concept. Other factors that play vital roles in influencing CT development among both groups of students include content knowledge, instructors' competence, and teaching methods. This study has meaningful implications for academic staff who teach Iranian students at Canadian and Western-tradition institutions of higher learning. Also, for the next steps, future researchers, through understanding Canadian and Iranian students' perceptions and experiences about CT, can investigate studies on how designing a curriculum with interculturally competent can support these students. It is hoped that the current research brings more awareness of the challenges and opportunities associated with developing the concept of CT among Canadian students and opens a new window to better understand Iranian students' obstacles and demands for CT

development during their studies in Canada.

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