

**FOSTERING SOCIAL CONNECTION:
AN ARTS-BASED INQUIRY WITH GRADUATE STUDENTS**

SANDRA HOULE

Thesis submitted to the University of Ottawa in partial fulfillment of the requirements for the
Doctorate in Philosophy degree in Rehabilitation Science

School of Rehabilitation Sciences

Faculty of Health Sciences

University of Ottawa

© Sandra Houle, Ottawa, Canada, 2026

Dissertation Abstract

Background: High rates of social disconnection are a growing global health concern. Graduate students experience high levels of social isolation and associated health issues that impact their academic success and well-being. International graduate students, in particular, face more barriers to positive socialization. Increasingly, there is convincing evidence that arts-based practices can improve health equity through tackling certain social determinants of health, such as social connection. Despite the promise of arts-based practices and the World Health Organization's call for cross-sector collaboration, they have remained on the periphery of research and practice on the "bold actions" required to tackle social isolation and loneliness. Furthermore, in the context of graduate students' challenges with social connection, the role of community arts has largely gone unexamined.

Objectives: The overarching aim of my thesis research is to explore the ways in which arts-based practices can help to both enhance and understand social connection in groups experiencing social isolation, such as graduate students. The specific objectives are to (a) understand the relationship between community arts engagement and health equity using social capital theories; (b) explore the experiences of graduate students who participated in an occupation-based, peer-led community art group called "Art and Play" as it relates to social connection; and (c) explore the ways in which international graduate students perceive, experience, and navigate institutional relationships in the context of a Canadian higher education setting.

Methods: To address each objective, I conducted three individual studies. In the first study, I conducted a theoretical synthesis using social capital theories to explore the relationship between community arts and health equity. In the second study, I used a qualitative and arts-based

methodology, involving individual qualitative interviews, group collage and group discussion with 15 graduate students who engaged in the Art and Play program. In the final study, I also used a qualitative, arts-based approach, employing individual collage and poetry, group discussions, and individual qualitative interviews with photo elicitation (of participant-generated artwork), with 7 international graduate students.

Results: The findings of the theoretical synthesis demonstrate that community arts can provide opportunities for accessing the benefits held in social relationships and networks (social capital), which impact health and health equity through individual (social support, social participation, information and material access) and collective pathways (collective action for change, diffusion of healthy norms, creation of healthy and caring environments). Importantly, the findings also highlight that equitable access to the resources generated by community arts is critical for advancing health equity.

In my second study, four themes were developed. The first theme, *beyond solitude*, captures the social isolation and feelings of loneliness students experience in their studies and how Art and Play provided opportunities for meaningful social engagement, especially for international graduate students. The second theme, *bridging the gap*, illuminates the development of social relationships between students with diverse backgrounds and experiences through art-making. The third theme, *belonging and connection*, captures participants' developing sense of belonging to the graduate student spaces, services, and community. The fourth theme, *cultivating a community*, illustrates the motivation participants described for building a supportive community of graduate students.

In my third study, three themes were developed. The first theme, *rulers of the realm*, captures the significant and overlapping power exerted by supervisors, professors, and the

Immigration, Refugees, and Citizenship Canada (IRCC) department in the lives of international graduate students. The second theme, *are the Gods on your side?*, illustrates the diverse and unpredictable relationships between students and their supervisors and professors in terms of support and sharing of resources and knowledge. The third and final theme, *winning the game*, captures the considerable effort and stress involved in international students' experience of navigating institutional relationships for success in graduate studies.

Conclusions: The findings from my theoretical synthesis help demonstrate the link between community arts and health equity by highlighting their potential to provide access to social connections and their benefits.

The findings of my second study support community arts as an important tool for enhancing social connection and belonging among graduate students, including international graduate students, in higher education.

The findings from my third study position higher education as a site of interconnected institutional powers that shape international graduate students' experiences. They illuminate the barriers to positive socialization experienced by international graduate students and the social and emotional labour they undertake to navigate institutional relationships for success.

Together, my studies contribute to building knowledge about the value of community arts in fostering social relationships and networks among groups experiencing isolation, including graduate students. They also make visible the particular experience of Canadian international graduate students, revealing important obstacles to socialization and the powerful role of institutional agents in shaping their experiences. Overall, my research helps demonstrate how arts-based practices can support health equity by enhancing social connection among groups

experiencing social isolation and by understanding its drivers, and has important implications for the fields of health, higher education and rehabilitation sciences.

Future research exploring diverse, non-dominant cultural meanings and practices in community arts is warranted, as is consideration of critical and non-Western perspectives on social isolation and loneliness. Further research is also needed to explore the potential of arts-based research, including group collage, to support understanding of the sociopolitical drivers of health and social inequities across different social groups. Finally, future studies may wish to focus on other subgroups of graduate students at high risk of social isolation (e.g., racialized students, students with disabilities, or students in caregiving roles) to better understand how to support social connection through creating opportunities for meaningful social and artistic engagement. Additional research is warranted on how supervisors and faculty members can best support their diverse students in successfully navigating the hidden curriculum of graduate studies and promote their inclusion in academic settings.

Acknowledgements

I would like to express my deepest gratitude to my thesis supervisor, Dr. Roanne Thomas. Your support, care, and encouragement, as well as your genuine passion for arts and well-being, allowed me to stay curious, creative, and grounded all throughout the process. Thank you for always believing in my potential, building my confidence as a researcher, and empowering me to become an independent scholar. Thank you as well for the financial support, which helped fund the development of the Art and Play program and the arts-based workshop in Studies 2 and 3. I am so grateful for your mentorship over the years.

I extend my sincere thanks to my committee members, Dr. Katrine Sauvé-Schenk and Dr. Mary Egan, for their guidance throughout the doctoral process and for their thoughtful reviews of the manuscripts and chapters. Dr. Sauvé-Schenk, thank you for your support, for sharing your experiences in higher education, and for always reminding me to maintain balance. Dr. Egan, thank you for your unwavering excitement and support for the Art and Play program, and for encouraging me to pursue my research with international graduate students.

To my internal examiner, Dr. Pier-Luc Turcotte, thank you for your mentorship, for sharing your expertise in community research, and for encouraging me to bring arts-based methods into teaching and research contexts. Your thoughtful feedback on my thesis and your vision for a socially-focused, creative, and transformative occupational therapy have been truly inspiring. To my external examiner, Dr. Andrea Charise, a sincere thank you for engaging so deeply with my work, providing valuable feedback, and opening up exciting new directions for bridging occupational therapy and community arts.

I am grateful to my graduate student colleague, Dr. Christina Charles, for jumping in to support and run the Art and Play program, and for sharing this six-year journey together. To my

cohort colleagues, Asefeh Memarian, Dr. Ramin Banimahdi, Dr. Motahareh Karimijashni and Dr. Keely Barnes, it was a pleasure learning and growing with you. Thank you all for your support throughout.

I would like to acknowledge the institutional funding received throughout the course of my thesis. Thank you to the Ontario government for three years of financial support through the Ontario Graduate Scholarship, and to the Canadian Federation of Occupational Therapy for the 2023 Graduate Student Scholarship and support.

Importantly, I extend my deepest gratitude to my family. To my husband, Scott Thomson, thank you from the bottom of my heart for your unwavering love, patience and support. Your genuine interest in my research and success has been invaluable, and your belief in me has made all the difference. I could not have imagined a more supportive partner. I love you very much.

Thank you to my parents, Daniel Houle and Vivian Byrne, for always being there to support me and for providing the foundation of love, confidence, and academic curiosity that inspired me to pursue a PhD. I am so grateful to you both. Thank you to my sister Christina Houle, brother-in-law Mathieu Glémet, niece Florence and nephew Félix, for your love and for providing the perfect joyful breaks from my studies.

Finally, I want to acknowledge those who are no longer with us but remain in my heart. Thank you to my Nana, Marcelle Byrne, who provided a safe space for me to explore the arts and first encouraged me to pursue a doctoral degree. And to our cat, Clover, thank you for sitting faithfully by my desk through the longest hours, your little paw on my leg giving me the resilience to keep going.

Table of Contents

Dissertation Abstract.....	ii
Acknowledgements.....	vi
Table of Contents.....	viii
List of Tables	xi
List of Figures.....	xii
Chapter 1: Introduction	1
1.1 Research Problem	1
1.2 Study Purpose and Objectives	3
1.3 Organization of Dissertation	4
1.4 Defining Key Concepts.....	8
1.4.1 Defining Health and Health Equity.....	10
1.4.2 Defining Health Inequities	10
1.4.3 Defining Social Connection, Social Isolation, and Loneliness.....	11
1.4.4 Defining Social Capital.....	11
1.4.5 Defining Arts and Health.....	11
1.4.6 Defining Community Arts for Health.....	12
1.4.7 Defining Arts Participation.....	13
1.4.8 Defining Arts-based Research	14
1.4.9 Defining Arts-based Practices	14
1.4.10 Defining Graduate Students and International Graduate Students	14
1.5 Literature Review.....	14
1.5.1 Social Connection, Health and Health Equity	14
1.5.2 Social Connection and Graduate Students.....	17
1.5.3 Arts-based Practices for Improving Health and Health Equity	23
1.5.4 Theoretical Lens	27
1.5.5 Methodological Considerations	31
Chapter 2: Study 1	38
2.1 Abstract.....	39
2.2 Introduction.....	40
2.3 Research Methods.....	42
2.3.1 First Hermeneutic Circle: Literature Search and Review	43
2.3.2 Second Hermeneutic Circle: Analysis and Integration.....	45
2.4 Literature Review: Key Concepts and Findings	45
2.4.1 Method Theory: Social Capital.....	46

2.4.2 Domain Theory: Community Arts	49
2.5 Results of the Theoretical Synthesis	59
2.5.1 Community Arts Can Provide Opportunities for Accessing Social Capital	59
2.5.2 Community Arts-Generated Social Capital is Mobilized Through Individual and Collective Pathways to Health and Health Equity	61
2.5.3 Equitable Access to Community Arts-Generated Social Capital is Essential for Advancing Health Equity	68
2.6 Methodological Considerations and Limitations	70
2.7 Conclusion	70
2.8 References	72
Chapter 3: Study 2	83
3.1 Abstract	84
3.2 Introduction	85
3.3 The Art and Play Program	87
3.4 Methods	88
3.4.1 Methodological Approach	88
3.4.2 Participant Recruitment	89
3.4.3 Ethics	89
3.4.4 Data Collection	89
3.4.5 Data Analysis	93
3.4.6 Trustworthiness	93
3.5 Findings	94
3.5.1 Theme 1: Beyond Solitude	97
3.5.2 Theme 2: Bridging the Gap	100
3.5.3 Theme 3: Belonging and Connection	102
3.5.4 Theme 4: Cultivating a Community	106
3.6 Discussion	109
3.7 Strengths and Limitations	110
3.8 Implications and Conclusion	111
3.9 References	113
Chapter 4: Study 3	119
4.1 Abstract	120
4.2 Background	121
4.2.1 Theoretical Framework	123
4.2.2 Arts-Based Methodology	125
4.3 Methods	125
4.3.1 Reflexive Practice and Cultural Safety with International Graduate Students	125
4.3.2 Recruitment	126

4.3.3 Ethics	126
4.3.4 Data Collection	126
4.3.5 Data Analysis	129
4.4 Findings.....	129
4.4.1 Theme 1: Rulers of the Realm (Field)	132
4.4.2 Theme 2: Are the Gods on your side?	138
4.4.3 Theme 3: Winning the Game.....	143
4.5 Discussion	148
4.6 Endnotes.....	153
4.7 References.....	154
4.8 Appendix A.....	160
4.9 Appendix B.....	165
Chapter 5: Integrated Discussion	166
5.1 Summary of Findings.....	167
5.1.1 Study 1: Theoretical Synthesis	167
5.1.2 Study 2: Arts-based and Qualitative Exploration of Art and Play.....	168
5.1.3 Study 3: Arts-based and Qualitative Exploration with International Graduate Students	169
5.2 Integrated Discussion.....	170
5.2.1 Strengthening Social Connection Through Community Arts.....	172
5.2.2 Revealing Drivers of Social Disconnection Through Arts-based Research	179
5.3 Contributions and Implications.....	187
5.3.1 Higher Education	187
5.3.2 Rehabilitation Sciences.....	191
5.4 Limitations, Strengths, and Suggestions for Future Research	195
5.5 Conclusion	197
References.....	200
Appendices.....	236
Appendix A: Study 2 Ethics Approval Certificate	237
Appendix B: Study 2 Interview Guide.....	238
Appendix C: Study 2 Arts-Based Workshop Guide	245
Appendix D: Study 3 Ethics Approval Certificate	248
Appendix E: Study 3 Arts-based Workshop Guide	249
Appendix F: Study 3 Qualitative Interview Guide	252
Appendix G: Statement of Contribution of Collaborators	258

List of Tables

Table 1.1 Organization of the Dissertation	6
Table 1.2 Key Concepts and Definitions	9
Table 1.3 Summary of Individual Studies.....	32
Table 2.1 Summary of Empirical Studies	52
Table 3.1 Example Art and Play Events	88
Table 3.2 Sample Interview Questions	91
Table 3.3 Workshop Details.....	92
Table 3.4 Sociodemographic Characteristics of Participants.....	95
Table 4.1 Sociodemographic Characteristics of Participants.....	130
Table G.1 Summary of Co-author Contributions	260

List of Figures

Figure 2.1 The hermeneutic process used to conduct the theoretical synthesis.....	43
Figure 2.2 Individual Pathways	62
Figure 2.3 Collective Pathways	65
Figure 3.1 Collage 1 “Ambiguous Beginnings”	96
Figure 3.2 Collage 2 “Middle Endeavours”	96
Figure 3.3 Collage 3 “Hopeful Endings”	97
Figure 3.4 Rania’s buttons	100
Figure 3.5 Collage Detail of the Graduate House labelled with the acronym GSAED	104
Figure 3.6 Collage Detail “The Art of Solo Travel”	106
Figure 3.7 Collage Detail “Come Together”	108
Figure 4.1 The Game of Graduate School by Nora	132
Figure 4.2 Seya’s Collage	134
Figure 4.3 Herme’s collage section depicting the IRCC as a dragon	136
Figure 4.4 Ava’s collage section representing the feeling of home provided by her supervisor	139
Figure 4.5 Ivan’s collage section depicting the significance of knowledge transfer from a professor.....	141
Figure 4.6 Jennifer’s collage section depicting the power dynamics in relationships with faculty	143
Figure 4.7 Jennifer’s collage section depicting her conscious effort to be sociable	146
Figure 4.8 Lilian’s collage section representing her hope to become the one with expertise ...	148
Figure 5.1 Visual depiction of the relationship between the main discussion syntheses as proposed paths to support the value of arts-based practices for health equity.....	172

Chapter 1: Introduction

It is through engagement in creative process that personal and collective insights emerge and human bonds are formed.

–Jackson, 2021

1.1 Research Problem

High levels of social disconnection in the global population are a growing health concern (WHO Commission on Social Connection, 2025). Social disconnection, such as social isolation and loneliness, affects groups across the lifespan and is considered a significant risk factor for the development of numerous physical and mental health diseases (Proctor et al., 2023). Importantly, patterns of social isolation are unequally distributed, with certain groups experiencing disproportionate levels of social isolation and exclusion (Kawachi & Berkman, 2001). Therefore, the World Health Organization (WHO) (2025) has called for cross-sector collaboration in research and practice settings to develop knowledge and address social disconnection as an urgent health and equity issue.

One group that is well-known for having high levels of social isolation and related mental and physical health concerns is graduate students (Evans et al., 2018). Graduate students face unique challenges that put them at high risk of social isolation (Ali & Kohun, 2006; Javadizadeh et al., 2025; Sverdlik et al., 2018). They must balance high academic and employment demands while maintaining personal and familial responsibilities, often with limited financial and departmental resources or support (K. E. Park et al., 2021; Sverdlik et al., 2018). Yet, while the mental health and well-being of students are increasingly a priority in higher education settings, most research and proposed solutions focus on undergraduate students (Okanagan Charter,

2015). Furthermore, subgroups of graduate students, such as international students, face additional barriers to positive socialization, yet their experiences are often rendered invisible in the literature (Fandino & Banerjee, 2022).

Increasingly, there is convincing evidence of the value of arts engagement for overall health and well-being across the lifespan (Fancourt et al., 2023; Fancourt & Finn, 2019; Sonke et al., 2025). Building on this momentum, some prominent researchers have called for the inclusion of the arts in a holistic approach to help tackle health inequities, for example, by amplifying the voices of marginalized individuals, positively influencing social and environmental determinants of health, and improving health outcomes of marginalized groups (Jackson, 2021; National Centre for Creative Health, 2022; Sonke et al., 2019). Nonetheless, others have argued that the potential for the arts in advancing health equity has not been clearly established, pointing to theoretical, conceptual and empirical gaps in research (Clift et al., 2021; Skov & Nadal, 2025).

One promising role for arts-based practices in improving health equity is their ability to enhance social connection, an important yet often overlooked determinant of health (Proctor et al., 2023). Specifically, engagement in community arts has been shown to lead to an increased sense of belonging and inclusion, improved social support, and gains in social capital for individuals and communities experiencing a wide range of social and health challenges, including disability, homelessness, and poverty (All Party Parliamentary Group on Arts, Health and Wellbeing, 2017; Fancourt & Finn, 2019). A social capital lens may be especially valuable for exploring the “social experience” of art and how these social practices can influence opportunities for accessing resources for better health and well-being (Warran, 2025). Yet, medical and psychological perspectives remain dominant in arts and health research.

Despite the promise of arts-based practices and the WHO's call for cross-sector collaboration, arts-based practices have remained on the periphery of health practice and policies to tackle the challenges around social isolation and loneliness (2025). Furthermore, in the context of graduate students' challenges with social connection, the role of community arts has largely gone unexamined.

1.2 Study Purpose and Objectives

Given the identified research gaps, the overall aim of my thesis research is *to explore the ways in which arts-based practices can help to both enhance and understand social connection in groups experiencing social isolation, such as graduate students.*

My three interrelated specific research objectives, which I address in three individual studies, are to:

1. Understand the relationship between community arts engagement and health equity using social capital theories (Study 1);
2. Explore the experiences of graduate students who participated in an occupation-based, peer-led community art group called “Art and Play”¹ as it relates to social connection (Study 2); and
3. Explore the ways in which international graduate students perceive, experience, and navigate institutional relationships in the context of a Canadian higher education setting (Study 3).

This interdisciplinary research, at the intersection of the arts, health, and sociology, responds to the call to build knowledge and solutions to address the high rates of social

¹ See Houle et al. (2023a, 2023b, 2023c)

disconnection that negatively impact health, and to further explore the potential of the arts to advance health equity.

By focusing on the experiences of graduate students, a group known for high levels of social isolation, my thesis also contributes to higher education efforts to address growing concerns about graduate students' health and well-being.

Finally, this thesis extends beyond the traditional boundaries of rehabilitation sciences and may serve as an example of the growing interest in “imagining rehabilitation otherwise,” through an intentional focus on sociological and creative understandings of health and on non-clinical groups experiencing social barriers to health that have long been underserved by the rehabilitation sector (Gibson et al., 2018). Specifically for the fields of occupational therapy and occupational science, research in these domains promises to provide a stronger theoretical and empirical foundation for engaging with community art practices and enabling occupational therapists to better support individuals and groups experiencing social isolation and exclusion, thereby advancing their broader goals for social transformation (Rudman, 2021).

1.3 Organization of Dissertation

In chapter one, I provide a literature review of the dissertation's main topics, including key definitions and research relevant to social connection, health and health equity, social connection and disconnection among graduate students, and the potential of arts participation in this context. Next, I provide an overview of my theoretical lens, including my chosen paradigm and the specific social capital theories and concepts I employ throughout the thesis. Finally, I discuss my methodological decisions and briefly outline the research design for each study. In chapters two, three, and four, I present the manuscripts for my three individual thesis studies. In the final chapter, chapter five, I engage in an integrated discussion of the findings from all three

studies and discuss implications for research and practice for the fields of health, arts and health, higher education and rehabilitation sciences. The organization of the dissertation is summarized in the table below (Table 1.1)

Table 1.1*Organization of the Dissertation*

Chapter	Title	Objective	Method	Affiliated Manuscript
1	Introduction	This introductory chapter aims to: 1) Outline the research problem and study objectives; 2) present key concepts, provide a literature review, and introduce theoretical considerations, and; 3) provide an overview of the thesis's methodological approach and introduce the individual studies.	N/A	N/A
2	Community Arts and Health Equity: A Theoretical Synthesis Using Social Capital Theories (Manuscript 1)	The aim of this manuscript is to explore the relationship between community arts engagement and health equity using social capital theories.	Theoretical Synthesis	The manuscript has been submitted to the International Journal of Community Well-being.
3	Creating Connections: An Arts-based and Qualitative Exploration of Graduate Students' Experiences in a Peer-led Community Art Group (Manuscript 2)	The objective of this manuscript is to explore the experiences of graduate students who participated in an occupation-based, peer-led community art group as it relates to social connections using arts-based methods.	Qualitative, arts-based study	The manuscript has been submitted to the Perspectives on Arts and Health Journal.

4	Gods, Dragons, and Games: An Arts-Based Inquiry into the Experiences of Social Relationships of International Graduate Students (Manuscript 3)	The goal of this manuscript is to explore the ways in which international graduate students perceive, experience, and navigate institutional relationships in the context of a Canadian higher education setting.	Qualitative, arts-based study	The manuscript will be submitted to the Canadian Journal of Higher Education.
5	Integrated Discussion and Overall Conclusion	This chapter aims to provide an integrated discussion, research, practice, and policy implications, and a conclusion for the overall thesis.	Descriptive Synthesis	N/A

1.4 Defining Key Concepts

In this section, I define key concepts relevant to my dissertation in Table 1.2. I then provide some background literature and rationale for these conceptual choices and define additional sub-concepts of importance.

Table 1.2*Key Concepts and Definitions*

Concept	Definition
Health	“A state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity” (World Health Organization, 1948, para. 1)
Health Equity	“The absence of unfair, avoidable and remediable differences in health status among groups of people” (World Health Organization, 2026, para. 1)
Health Inequities	“Unfair, avoidable, and remediable differences in health status [and experiences] among groups of people” (World Health Organization, 2026, para. 1)
Social Connection	The relational dynamics between people, including dimensions of structure (e.g., quantity and diversity), function (e.g., support and resources), and quality (e.g., satisfaction) of social relationships (Proctor et al., 2023; WHO Commission on Social Connection, 2025)
Social Capital	“The ability of actors to secure benefits by virtue of membership in social networks or other social structures” (Portes, 1998, para. 13)
Art and Health	A field of practices at the intersection of arts and health (Fancourt, 2017; Sonke et al., 2018; White, 2009)
Community Arts for Health	Activities occurring in the community, outside traditional healthcare settings, with the aim of providing arts participation to foster individual and/or community health and well-being (Daykin, 2019; White, 2009)
Arts Participation	A particular mode (from active to passive) and form (e.g., dance, music, visual, textile, literary arts) in which people take part in the arts (Sonke et al., 2024)
Arts-based Research/Methodology	The use of art-making as a way of knowing (at any point or across several points in the research continuum) to explore and expand the understanding of human experience (Leavy, 2025)
Arts-based practices	An umbrella term used throughout my dissertation to refer to arts participation in community arts or as a research methodology
Graduate Students	Individuals studying at the master’s or doctoral level (Canadian Association of Graduate Studies, 2012)
International Graduate Students	Individuals who have received an international study permit in Canada and are enrolled in a master’s or doctoral degree (Government of Canada, 2022; Immigration, Refugees and Citizenship Canada, n.d.)

1.4.1 Defining Health and Health Equity

To align with understandings of *health* in the fields of rehabilitation sciences and arts and health, I employ the World Health Organization's definition of health, as provided above.

My understanding of health equity is situated within a broader understanding of health as both a human right and a social phenomenon, in which health is largely determined by the social conditions of people's lives (social determinants of health) (Solar & Irwin, 2010). This understanding is also supported by the Institute of Health Equity (2026), led by pioneer health equity researcher Michael Marmot. In alignment with such perspectives, I follow the World Health Organization's (2026) definition of health equity, which is based on their broader definition of *equity* as "the absence of unfair, avoidable or remediable differences among groups of people, whether those groups are defined socially, economically, demographically, or geographically or by other dimensions of inequality (e.g. sex, gender, ethnicity, disability, or sexual orientation)" (para 1). Efforts to advance health equity aim to reduce these differences in health and increase "opportunities and conditions conducive to health for all" (Public Health Agency of Canada, 2024).

1.4.2 Defining Health Inequities

Health inequities specifically refer to unfair and avoidable differences in health status and experiences (Kawachi et al., 2002; World Health Organization, 2026). I favour this term over "health inequalities" as it emphasizes the differences in health status and experiences caused by longstanding sociopolitical structures, which are therefore unjust and avoidable (Kawachi et al., 2002).

1.4.3 Defining Social Connection, Social Isolation, and Loneliness

Social connection is an interdisciplinary concept, defined above in alignment with a recent World Health Organization report on the importance of social health (WHO Commission on Social Connection, 2025). Additional concepts of importance related to low levels of social connection (social disconnection) can be conceptualized as *social isolation*, which refers to the objective lack of meaningful social connections, or *loneliness*, which refers to the perception of feeling disconnected from others or dissatisfied with the quality and quantity of one's social ties (Holt-Lunstad & Steptoe, 2022; Proctor et al., 2023). I use the term social (dis)connection when referring to both social disconnection and social connection.

1.4.4 Defining Social Capital

Social capital has been defined and conceptualized in various ways. I consider these different conceptualizations and associated theories in depth in my first manuscript. For the purposes of the overall thesis, I have chosen the broad-reaching definition provided above, as described by Portes (1998, 2000). This definition closely matches Bourdieu's theory of social capital. It emphasizes the potential to accrue benefits from social relationships, a feature of social capital that remains consistent across the different operationalizations of social capital in my work.

1.4.5 Defining Arts and Health

There are ongoing discussions in the literature pertaining to whether *arts and health*² should be considered a field of practice, a discipline, or a movement (Daykin, 2019; Sonke et al.,

² Although I use the term "arts and health", I am aware that in the relevant literature, it is also sometimes referred to as "arts *in* health" or "arts *for* health", and that these titles are often intentionally used to distinguish different views of the relationship between the two (Fancourt, 2017; White, 2009).

2018). For my dissertation, I use the terms “field” or “field of practice” to capture the broad range of activities at the intersection of the arts and health. These include, for example, arts in healthcare environments, community arts for health, art therapies, arts in healthcare education, arts on prescription, and arts-based research in health. These practices occur in specific settings (e.g., hospitals, communities, or academia) and are facilitated by community artists, artists-in-residence, art therapists, volunteers, care workers, nurses, occupational therapists, researchers and others. The aims can range from providing individual psychotherapy through artistic mediums to supporting social groups and causes through artistic expression, to promoting leisure and cultural opportunities in everyday life (Fancourt, 2017). While the arts and health field is well established in regions such as the United Kingdom and the United States, it has largely remained on the margins of both the arts sector and the health sector in Canada. Nonetheless, there are ongoing efforts by researchers across the nation to shed light on the potential of arts and health practices in Canada (Cox et al., 2010; Radical Connections, 2021).

1.4.6 Defining Community Arts for Health

In pioneering arts and health researcher Mike White’s (2009) book *Arts Development in Community Health: A Social Tonic*, he defines *community arts for health* as “a distinct area of activity operating mainly outside acute healthcare settings, [...] characterized by the use of participatory arts to promote health” (p. 3). These activities operate from a social model of health, often focusing on specific community needs or local challenges, and on developing strong social relationships and opportunities for collective action (Daykin, 2019; White, 2009). Throughout the thesis, I use both the terms *community arts for health* and the short form *community arts* interchangeably. The use of the term community arts as a more formal practice has existed at least since the 1960’s community arts movement; however, the increasing interest

in the health-promoting aspect of community arts dates to the early 2000's (Lombardo, 2021; Macnaughton et al., 2005; White, 2009).

1.4.7 Defining Arts Participation

Definitions of art range from visual representations of reality to the expression of emotions to that which has an aesthetic quality to something that is judged as art by the “artworld” (LeMieux & Sachant, 2015). Within the arts and health literature, specific definitions of art are often absent. Nonetheless, researchers in the arts and health field have increasingly worked to develop conceptual clarity to support the development of evidence on the impacts of the arts on health (Davies & Clift, 2022; Sonke et al., 2024).

To this end, Sonke et al. (2024) conducted an exhaustive review and community consultations to develop a definition of *arts participation* for health research that is inclusive of various approaches, settings, and cultural meanings of the arts. Their definition first delineates the modes in which people engage in the arts along a spectrum from active engagement (making, creating, crafting, performing) to receptive engagement (observing, attending, consuming, learning from). Secondly, it describes the forms of art, including dance (e.g., ceremonial, ballet, hip hop), visual arts, design and craft (e.g., painting, drawing, knitting, jewellery-making, and sculpting), theatre/performance (e.g., circus art, theatre, puppetry), literary arts (e.g., creative writing, poetry), music (e.g., rap, classical, world, jazz) and media (e.g., animation, digital photography and film, and social media arts). I use this definition, given the significant conceptual work that has gone into its development, and the attention to the contextual, historical, and cultural factors that determine what is considered art participation.

1.4.8 Defining Arts-based Research

Arts-based research is defined as using art-making as a primary mode of inquiry to explore and expand the understanding of human experience (Leavy, 2025). For this definition, I draw on the pioneering works of arts-based researchers, including Suzanne Langer (1953), Shaun McNiff (2008), and Patricia Leavy (2007, 2025).

1.4.9 Defining Arts-based Practices

I use this umbrella term throughout the dissertation to refer to activities and practices involving arts participation, including those in community arts for health and arts-based research.

1.4.10 Defining Graduate Students and International Graduate Students

The definitions of graduate students and international graduate students described above reflect relevant Canadian institutions' interpretations, including the Canadian Association of Graduate Studies (2012), and the federal Immigration, Refugees and Citizenship Canada Department (n.d.).

1.5 Literature Review

In the following section, I review and present the literature informing my thesis according to three main topics. The first topic focuses on key literature on social connection, health, and health equity. The second main topic considers my specific population of interest, graduate students. The final topic concerns arts-based practices, health, and health equity. I then conclude the chapter by detailing theoretical and methodological decisions.

1.5.1 Social Connection, Health and Health Equity

A long history of interdisciplinary research exploring social relationships and their connection to health has led to diverse but overlapping concepts (e.g. social support, belonging,

social integration, social cohesion, social capital), as well as different approaches, including social network theory, social capital theory, social support and stress models (Berkman et al., 2000; Holt-Lunstad, 2015). For the purposes of health research, Proctor et al. (2023) have proposed using the concept of social connection as an umbrella term for the various facets of social relationships that impact health. They propose that different facets of social relationships important to health can be categorized in three dimensions: structural, functional, and quality. The World Health Organization (2025) has adopted this language and provides helpful definitions of each dimension. They describe the structural dimension as the “existence of and interconnections among different social relationships roles,” the functional dimension as “the extent to which support [practical, financial, informational, emotional] is received and perceived as available from relationships,” and the quality dimension, “which may range from positive ... to negative ... or ambivalent” (WHO Commission on Social Connection, 2025, p. 9).

In their 2025 report, the World Health Organization found that low levels of social connection, conceptualized as social isolation and loneliness, affect people across the lifespan, with, on average, 1 in 6 people reporting loneliness according to the most recent international analyses. With regards to health outcomes, social isolation is closely linked to serious physical health outcomes, increasing the risk of heart disease by 29% and stroke by 32% (Valtorta et al., 2016). It can also double the risk of mental and cognitive health issues, including depression (Mann et al., 2022), and dementia (Penninkilampi et al., 2018). Finally, loneliness has been shown to significantly increase mortality risk, with global estimates linking loneliness to over 871,000 deaths each year (WHO Commission on Social Connection, 2025).

In contrast, positive social connection reduces the risk of premature mortality and morbidity. For example, in terms of physical health, high levels of social support and social

engagement have been found to promote brain health, reduce inflammation, and lower the risk of cardiac disease and stroke (WHO Commission on Social Connection, 2025). For mental health, social support and stronger social networks (higher-quality, numerous ties) are associated with a lower risk of depression and better overall well-being (WHO Commission on Social Connection, 2025). Specifically, stronger social capital, or the ability to access the resources and benefits held in social relationships, is positively linked to better physical and psychological health (Kawachi & Berkman, 2001; Kim et al., 2008) and associated with increased life expectancy and self-rated health, as well as lower prevalence of psychological disorders, cardiovascular disease, cancer, and obesity (Ehsan et al., 2019; Villalonga-Olives et al., 2018).

The specific pathways through which positive social connection is thought to affect health are complex and debated (Holt-Lunstad, 2015). Nonetheless, it is generally accepted that positive social relationships help act as a stress buffer against difficult social conditions and create better access to social support and material resources (Berkman et al., 2000; Cobb, 1976; Cohen & Wills, 1985; Kawachi & Berkman, 2001; Thoits, 2010; Wilkinson, 2005).

Importantly, the World Health Organization (2025) concludes that social connection is a critical yet underappreciated determinant of health, and as Kawachi and Berkman (2001) note, “the costs and benefits of social ties are not randomly distributed in the population” (p.460). Access to positive social connection is shaped by many interrelated factors, including age, gender, ethnicity, life stage, marital status, citizenship status, socioeconomic status, community and neighbourhood environment, and social and cultural norms (Holt-Lunstad, 2018; Kawachi & Berkman, 2001). Furthermore, experiencing stressful life events and transitions, illness and disability, and discrimination or other forms of marginalization also increase the risk of social isolation and loneliness (Dahlgren & Whitehead, 2021; Holt-Lunstad, 2021). In this way,

fostering opportunities for social connection in groups experiencing social isolation and loneliness becomes a matter of health equity. In addition, there is a need to better understand and address the socio-historical and political conditions that create the systematic experiences of exclusion and isolation of certain groups (Kawachi & Berkman, 2001; WHO Commission on Social Connection, 2025).

An important but often overlooked group with high degrees of social disconnection and related mental health issues is graduate students. Therefore, I explore this group in more detail below as the population of focus for this thesis.

1.5.2 Social Connection and Graduate Students

Globally, the mental health and well-being of graduate students is a growing concern, with recent studies estimating that graduate students are at least six times more at risk of developing mental health disorders, including anxiety and depression, than the general adult population (Evans et al., 2018). Graduate students experience a wide range of stressors, including demanding academic responsibilities, financial precarity, uncertain job prospects, and personal and often familial responsibilities (Javadizadeh et al., 2025; Okoro et al., 2022). Importantly, high rates of social disconnection are thought to be an essential contributor to graduate students' psychological distress, as well as contributing to increased attrition, reduced academic success and poorer overall well-being (Ali & Kohun, 2006; Hamza et al., 2021; Ray et al., 2019; Sverdlik et al., 2018). Notably, in a study of graduate students' well-being, K. E. Park et al (2021) found that the absence of a strong sense of community (measured through feelings of belongingness, commitment, attachment and fulfillment of needs within a specific graduate program) was a significant predictor of psychological distress.

Sverdlik et al. (2018) found that doctoral students often report a significant decline in overall social interactions during their studies, due to academic and familial demands, financial constraints, and the perception that time spent on social engagement is non-essential. Furthermore, graduate students often report insufficient opportunities in their department for meeting new people and developing relationships compared to undergraduate students (Janta et al., 2014). Moreover, graduate students also report difficulties maintaining their relationships with friends and family due to time constraints and challenges in discussing their experiences with family members unfamiliar with the demands of academia (Sverdlik et al., 2018). In a study by Ray et al. (2019), the lack of social support from friends and family was identified as a key risk factor for graduate student social isolation.

Finally, departmental structure and socialization processes are critical in influencing graduate students' social connection and well-being. Despite the long-standing beliefs that stress and isolation are inherent and normal parts of graduate studies, there is increasing recognition of the system-level conditions that shape students' experiences. Bekkouche et al. (2022) argue that it is the features of overlapping social systems, including overarching socioeconomic pressures, academic culture and norms, institutional and departmental structures, and everyday social dynamics with peers and faculty, that create chronic stress and gradually diminish graduate students' mental health over time. Moreover, multiple studies support the idea that graduate students' mental health and well-being are closely tied to their relationship satisfaction with their academic supervisor, a critical agent of graduate student socialization (Evans et al., 2018; Sverdlik et al., 2018).

From a health equity perspective, it is important to consider how different groups of graduate students face greater obstacles to forming positive social relationships and experience

higher rates of social exclusion in graduate school, leading to greater social isolation and a risk of poorer health. International graduate students are more likely to experience challenges related to social, institutional, and political forces, increasing their risk of poor mental health and isolation and diminishing their well-being (Bekkouche et al., 2022; Tan et al., 2025). I consider this sub-group of graduate students in more detail below.

1.5.2.1 International Students in Canada. For over a decade, there has been high-paced growth in the number of international students studying in Canada, including graduate students (Government of Canada, 2022). Latest statistics estimate that over 997,820 international students live across Canada, with approximately 49% residing in Ontario (Canadian Bureau for International Education, 2024). The most recent statistics indicate that international graduate students comprise approximately one-third of the total graduate student population and over two-thirds of the total international student population (Government of Canada, 2022). While the Canadian Government recently introduced new immigration policies to reduce the number of international students entering the country amid concerns about a growing national housing crisis, the most recent policy developments indicate that international graduate students will be exempt from the enrollment cap in 2026 (ICEF Monitor, 2025; Immigration, Refugees and Citizenship Canada, 2024).

International graduate students experience unique challenges that put them at higher risk of poorer mental health and well-being (Tan et al., 2025). They often face significant financial challenges, difficulty acquiring appropriate housing, and homesickness, all while needing to adapt to novel educational, cultural, and social systems to succeed (Janta et al., 2014; Lorenzetti et al., 2023). Furthermore, issues with lack of access to culturally safe mental and physical health services (Varughese & Schwartz, 2022), as well as experiences of racism, discrimination and

exclusion on and off campus (Dudha, 2025), have led to growing concerns for the well-being of this significant subgroup of graduate students. With regards to social connection, social isolation and poor socialization experiences are common among international graduate students.

International graduate students often report feeling disconnected from their domestic peers, having few friendships outside their immediate circles, experiencing stressful relationships with their supervisors, lacking a satisfying social life, and feeling excluded from the academic community (Erichsen & Bolliger, 2011; Janta et al., 2014).

While there is a growing body of research exploring the experiences of graduate students' health and well-being as a whole (Javadizadeh et al., 2025), relatively few studies examine the social experiences of international graduate students, especially in Canada. Nonetheless, a handful of studies exploring the experiences of Canadian international graduate students do exist in the literature. For example, Lorenzetti et al.'s (2023) qualitatively explored how peer relationships and peer mentoring could support their academic and personal well-being. Fandino et al. (2021; 2022) provided an in-depth and critical exploration of the familial experiences of international graduate students before and during the COVID-19 pandemic. Finally, Calder et al. (2016) provide important insights into the challenges of social integration, compounded by issues of housing and financial precarity. While most of these studies' findings intersect with students' experiences with their supervisors, none focus specifically on these critical relationships and on how international graduate students navigate them for success and well-being. One exception is Gupta et al. (2022), who provided interesting insights into these relationships in a Canadian context, but from a narrower perspective on academic writing challenges for English-as-a-second-language students and their supervisors. Given the importance of supervisors and other institutional actors in promoting the mental health,

socialization, success, and well-being of international graduate students (Gao, 2019), further research on these relationships is merited.

1.5.2.2 Efforts to Support Graduate Students' Social Connection. The International Okanagan Charter was established in 2015 during a global conference to address mental health and well-being in higher education settings. The charter calls for 1) embedding health in all aspects of higher education (e.g. campus culture, administration, operations), and 2) action towards health promotion activities on individual campuses (Okanagan Charter, 2015). Currently, over 56 universities and colleges in Canada have formally adopted the charter (Canadian Health Promoting Campuses Network, n.d.). Yet, despite the progress in academic institutions' recognition and investment in student mental health and well-being, they continue to fall short in addressing this complex issue (Squires & London, 2022; Welsh & Regehr, 2024). Furthermore, to date, solutions have focused on undergraduate students' mental health and well-being, with limited consideration for graduate students' unique needs and experiences (Javadizadeh et al., 2025).

A common form of support offered in higher education settings is counselling services, which aim to help students navigate psychological distress and academic stress. While such treatment options are essential, graduate students are generally less likely to use these services than their undergraduate peers due to fear of stigma and perceptions that these services are reserved for undergraduates (K. E. Park et al., 2021). International graduate students are even less likely to use counselling services than domestic graduate students, due to different cultural perceptions of mental health and service utilization (K. Clarke, 2023). Therefore, it is clear that more comprehensive approaches are necessary to promote the well-being of all graduate students and prevent acute distress (Davidson & Locke, 2010). Indeed, the Okanagan charter calls for

cross-sector collaboration between higher education and health and social services to develop preventative solutions that go beyond individual interventions (Okanagan Charter, 2015).

Focusing on building social connections and reducing social isolation is an important yet underutilized strategy (Proctor et al., 2023). As described above, graduate students experience multiple barriers to meaningful social engagement and have high rates of social isolation and associated distress (Janta et al., 2014). Notably, a study exploring key factors influencing doctoral completion identified social networks and connections as crucial elements of student resilience (McCray & Joseph-Richard, 2020). Moreover, positive socialization, strengthening social ties, and engaging in community-building activities have been identified as key to successfully navigating a complex academic environment (Bekkouche et al., 2022; Janta et al., 2014; Sverdlik et al., 2018).

One particularly promising approach is the inclusion of community arts participation, given its potential to improve social relationships and alleviate social isolation and loneliness. While some arts and health approaches, such as art therapy (Keller-Dupree & Perryman, 2013) and arts in healthcare education (Fox, 2009; Shapiro et al., 2018) have been used with graduate students, there exist few documented examples of community arts-based practices in higher education to address social isolation and overall well-being, limiting our understanding of their potential in this context. Furthermore, the arts may provide a powerful way for high-risk subgroups, such as international students, to make meaning of and express complex social experiences, leading to a better understanding of the factors that contribute to poorer socialization experiences in higher education settings. In the following section, I explore the current literature on arts-based practices for health and health equity, focusing on how they may

be an important tool for fostering social connection, a critical determinant of physical and mental health.

1.5.3 Arts-based Practices for Improving Health and Health Equity

An extensive body of literature has demonstrated that arts participation can positively impact psychological and physical health (Fancourt et al., 2023; Fancourt & Finn, 2019; Gordon-Nesbitt & Howarth, 2020; Quinn et al., 2025). In a comprehensive review of over a dozen cohort studies in the United States and the United Kingdom, the authors demonstrate the health benefits of arts engagement across the lifespan (Fancourt et al., 2023). For example, they found that children who engaged in more frequent extracurricular arts activities during the ages of 10 and 11 had fewer behavioural issues (e.g., hyperactivity and inattention) in their adolescence, even after controlling for sociodemographic factors. The arts have also been found to be an important driver of success for youth and adolescent health promotion programs, from smoking cessation to type 2 diabetes (Sonke et al., 2025).

Among adults and older adults, Fancourt et al. (2023) found that arts participation was positively associated with better mental health and overall well-being. Specifically, arts engagement was positively associated with decreased risk of depression and anxiety, as well as reduced chronic pain, frailty, and dementia (Fancourt et al., 2023). Along the same lines, a recent systematic review and meta-analysis also found that group arts participation is effective in reducing symptoms of depression and anxiety in older adults in care and community settings (Quinn et al., 2025).

Beyond direct health benefits, a number of scholars contend that the arts can also help advance health equity (Fancourt & Finn, 2019; Gordon-Nesbitt & Howarth, 2020; Jackson, 2021; Parkinson & White, 2013; Rodriguez et al., 2024; Sonke et al., 2019, 2025). Notably, in

the World Health Organization's seminal review of the evidence on the role of the arts in improving health and well-being, the authors conclude that the arts can positively affect social determinants of health through increasing social cohesion, promoting social inclusion, fostering capacity-building and supporting health promotion efforts in equity-seeking groups (Fancourt & Finn, 2019).

Furthermore, in 2021, community and health researcher and the 13th chair of the National Endowment for the Arts in the United States, Maria Jackson, declared that the arts are a powerful but undervalued individual and community asset. She describes how the arts, especially community-based initiatives, can act as a vehicle for equity-seeking groups to “express themselves, create meaning, ask questions, make sense of the world and their circumstance on their own terms” (Jackson, 2021, p. 142). She goes on to note that the arts as a resource for self-determination and control over one's story are critical to dismantling upstream social inequities that create health inequities.

Such claims are supported by multiple studies that have demonstrated that community arts initiatives can promote social inclusion, peer support, opportunities to engage in meaningful activities, and increased social capital with groups ranging from isolated men with and without disabilities (Hansji et al., 2015), isolated older adults (MacLeod et al., 2016), youth from equity-seeking groups (Spiegel et al., 2015; Spiegel & Parent, 2018), and homeless adults living with severe mental health issues (Dam et al., 2008; Travis et al., 2019). Additionally, in a systematic review of the role of the arts in noncommunicable disease prevention and promotion, Sonke et al. (2025) found that arts programming can be particularly helpful for illuminating “systemic, structural, and social drivers of health” by amplifying the voices of marginalized populations (p. 3911). They also found that arts programming can be designed to address specific social

inequities that impact health, for example, by challenging stigma and stereotypes related to certain conditions and by supporting community improvement and collective action through enhancing social bonds.

The evidence described above has led to growing advocacy efforts by researchers for better integration of the arts in global and national health and health equity initiatives (Dow et al., 2023; National Centre for Creative Health, 2022). It has also prompted proposals for health entities to collaborate more closely with the arts and community development sectors, recognizing the arts as a valuable resource for upstream action to reduce health disparities (Sonke et al., 2019). However, some researchers have argued that significant gaps in knowledge about the potential of the arts to advance health equity must be addressed before health policymakers can fully embrace the arts (Clift et al., 2021, 2023). I consider the gaps below.

A prevailing concern is the type of evidence required to demonstrate that the arts improve health. The dominance of medical and psychological language and approaches in the arts and health field has led to critiques that the current body of evidence does not meet the standards of evidence-based health practices and policies. Specifically, some researchers note issues with consistency in definitions, lack of quantifiability and generalizability of effects, absence of clear descriptions of dosage/frequency of the arts, and a lack of focus on underlying mechanisms of action (Clift et al., 2021; Clift & Grebosz-Haring, 2025; Skov & Nadal, 2025). Others have noted that this approach risks instrumentalizing and medicalizing the arts (Parkinson, 2018), imposing biomedical standards on a complex human experience that is best captured through qualitative research and social science approaches (Karkou et al., 2025; Raw et al., 2012). Furthermore, critics of the evidence linking the arts to health and health equity have generally treated arts and

health as a single category of activities, rendering the work of specific arts-based practices such as community arts invisible (Jensen et al., 2025; Karkou et al., 2025).

Disentangling the overall disagreements over the type of evidence needed and what counts as rigorous is beyond the scope of this thesis; however, given the potential of the arts for health equity, exploring paths forward to better demonstrate the impacts of specific arts-based practices is merited. Furthermore, other gaps that merit further consideration include a closer look at the social pathways through which art can advance health equity, arts as a health resource, a better understanding of factors related to access to the arts, and more detailed, rich descriptions and evaluations of arts-based programs for specific groups (Fancourt et al., 2023; Jensen et al., 2025; Warran, 2025).

One important proposition has been to integrate sociological concepts and theories to better understand the social experience and processes linking the arts to health and health equity (Warran, 2025; White, 2009). To date, few studies have used sociological perspectives to explore the potential impact of the arts on health and health equity. In addition, another promising avenue is to delve more deeply into the social relationships and networks that can be built through arts participation, given that social connection is a significant yet underappreciated determinant of health (Holt-Lunstad & Steptoe, 2022; WHO Commission on Social Connection, 2025).

Given the importance of social relationships to health, the potential of arts participation to enhance and explore social connection, and the disproportionate experiences of social isolation among graduate students in general and international graduate students in particular, research examining the role of arts-based practices within socially isolated groups is timely.

The literature review above informs my dissertation's overall aim and specific objectives. In addition, social capital theories provide a framework for my research and are therefore described below.

1.5.4 Theoretical Lens

In this section, I begin by describing my chosen research paradigm and then introduce specific social capital theories and literature relevant to my dissertation.

1.5.4.1 Research Paradigm. Through personal reflections, readings, and artistic journaling in my doctoral courses, I have explored and reflected on my ontological position and epistemological perspectives. These perspectives shaped my decisions throughout the doctoral process, ultimately informing my choice and approach to exploring the ways in which arts-based practices can both enhance and help understand social connections among graduate students experiencing social isolation in my thesis.

My ontological and epistemological perspectives align with an interpretivist-constructivist paradigm that rejects the positivist assumption of a value-free, objective social reality and instead views the social world as relational, pluralistic, and socially constructed. The interpretivist-constructivist paradigm evolved from the phenomenological and hermeneutic traditions (Mackenzie & Knipe, 2016). While there are nuances between interpretivism and constructivism, I situate my work within these overlapping paradigms, as is common in qualitative and arts-based research. I further discuss ontological and epistemological considerations as they relate to my chosen paradigms and arts-based research in my methodological section.

In line with this paradigm, I rely on how people subjectively understand, experience, perceive, feel, and interpret their world, building and co-constructing meaning through shared

stories, texts, images, poems, and collage, to explore my research objective (Mason, 2018). Furthermore, I consider the influence of the historical and social context in which these experiences occur (Fodouop Kouam, 2024) and recognize my role in shaping and co-constructing interpretations of meaning when conducting research. I have taken the time to reflect on my personal positionality and how this influences my ways of knowing and doing throughout the doctoral process. I share some key insights below.

My worldview and approach to research are shaped by my intersecting identities and experiences as a white cisgender woman, a Canadian-born graduate student, an educator, an occupational therapist, and an artist-of-some-kind.³ These experiences have shaped my interest in adopting a creative, relational approach to understanding various aspects of health and the arts. Furthermore, I have conducted this research in the context of a global pandemic, an epidemic of social isolation and loneliness, and growing health and social inequities.

Building on the literature review provided above and the selected paradigm, I now turn to the specific theories of social capital that have served as a lens throughout my research.

1.5.4.2 Social Capital Theories. While social relationships can be explored through many lenses, I have chosen to use social capital theories given their potential to help understand the relationships between social connection, health, and health equity, and, in turn, the potential of the arts for socially isolated groups such as graduate students. In this section, I briefly introduce the social capital theories and concepts that informed my thesis. I provide a more in-depth discussion of these theories in my first thesis study.

³ I use this term to reflect my ongoing exploration of what it means to be an artist and where I see myself fitting within this category. It also refers to a note that I found in my grandmother's things when she passed, that said "Sandra, she is an artist of some kind". My grandmother was the one who encouraged my participation in different art forms.

As explained earlier in my key definitions, I understand social capital as the potential for individuals and groups to access resources and benefits through their social relationships (Bourdieu, 1986; Portes, 1998). This understanding is consistent with key sociological definitions and theories of social capital (Moore & Kawachi, 2017); however, it aligns most closely to Pierre Bourdieu's sociological definition and theoretical arguments.

Bourdieu posits that social relationships and networks provide potential access to resources and benefits. However, he notes that individuals must have and invest other forms of capital to access them (Bourdieu, 1986, 1988). These include economic (e.g., money and assets) and cultural capital (e.g., knowledge of norms and cultures). His theory of capital is embedded within a broader social theory that examines the interaction among capital, habitus, and field.⁴ Bourdieu also suggests that the possibilities (or lack thereof) for access and exchange of capital are the basis for the reproduction of societal inequities (Bourdieu, 1986; Bourdieu & Wacquant, 1992).

Bourdieu's work is often considered one of the most robust theories of social capital (Portes, 2000) and is highly relevant to understanding issues of health and social equity. His theory provides a useful lens for examining how social relationships interact with and are influenced by social circumstances, which may, in turn, benefit or limit individuals' health and participation (Baum, 2000; Magasi et al., 2015; E. P. Uphoff et al., 2013). This is often referred to as a network approach to social capital and health, emphasizing individual access to resources which can take the form of information, material, or social support (Moore & Kawachi, 2017; Portes, 2000). Lin (2000) emphasizes how structural and social constraints lead to inequality in the acquisition of these resources, contributing to inequities in health and quality of life.

⁴ I describe this broader theory in more depth in my third manuscript.

Another influential social capital theorist is political scientist Robert Putnam. He defines social capital as the “features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit” (Putnam, 1995, p. 67). Whereas Bourdieu sees social capital as potentially benefiting individuals or small groups, Putnam adopts a communitarian perspective, positioning it as a collective good (Portes, 2000). Indeed, Putnam’s definition closely relates to the sociological concept of social cohesion or the “quality of social cooperation and togetherness of a collective” (Dragolov et al., 2016, as cited in Moustakas, 2023, p. 1030). Putnam’s theory of social capital has been criticized for circular reasoning and for failing to consider the conditions that lead to cohesive societies (Portes, 2000). Nonetheless, his definition of social capital is prevalent in health research, referred to as the cohesion approach, with some researchers arguing that a communitarian approach is more relevant to matters of health equity (Szreter & Woolcock, 2004). Importantly, Putnam’s work has led to the development of other important social capital concepts, such as bonding, bridging, and linking social capital, which are relevant to both individual and communitarian approaches to social capital (Ehsan et al., 2019), and from which I draw in my research studies.

The distinction between bonding, bridging, and linking capital introduced by Putnam and further developed by Woolcock and Szreter (2004) can help dissect the dimensions of social connection described earlier. Bonding social capital stems from relationships between people with similar social identities and backgrounds and is generally characterized by strong, close ties (e.g., ties among close friends and family). Bridging social capital arises from weaker ties between people with diverse social identities (e.g., ties among community members). Finally, linking social capital occurs in vertical relationships across social hierarchies and power structures (e.g. ties between community members and city council members) (Putnam, 2000;

Szreter & Woolcock, 2004). Empirical studies have found that each form of social capital can be beneficial (and potentially harmful) to one's health and well-being (Moore & Kawachi, 2017; Poortinga, 2012).

While some researchers contend that these two approaches to social capital provide different views of social capital, many point to the relative nuances between them and advocate for a multifaceted approach in health research (Ehsan et al., 2019; Moore & Kawachi, 2017). I use a multifaceted approach, while emphasizing Bourdieu's more critical lens, aligning with a broader critical rehabilitation perspective that emphasizes the importance of structural and social context and its impact on an individual's health and well-being (Gerlach et al., 2017; Gibson, 2016)

Building on the gaps previously identified in my literature review and informed by social capital theories, I now turn to describing my methodological approach and research design for each individual thesis study.

1.5.5 Methodological Considerations

The relevant literature, identified research gaps, and my selected paradigm have informed the methodological approaches I have used to address my overall research objective, which is *to explore the ways in which arts-based practices can help to both enhance and understand social connection in groups experiencing social isolation, such as graduate students*. To meet this objective, I conducted three individual studies, which are summarized in Table 1.3. Each study and its methods are described in detail in their respective chapters. However, as they are prepared according to the target journal's guidelines, there is insufficient space for a thorough discussion of the methodology. With this in mind, I outline the methodology I selected for each study and the rationale for these decisions below.

Table 1.3*Summary of Individual Studies*

	Study 1	Study 2	Study 3
Objectives	To understand the relationship between community arts engagement and health equity.	To explore the experiences of graduate students who participated in an occupation-based, peer-led community art group called “Art and Play” as it relates to social connection.	To explore the ways in which international graduate students perceive, experience, and navigate institutional relationships in the context of a Canadian higher education setting.
Methodology	Theoretical synthesis	Arts-based, qualitative research methodology	Arts-based, qualitative research methodology
Methods	Narrative literature review using a hermeneutic approach.	• Individual qualitative interviews • Group collage activity and group discussion	• Individual collage and poetry activity, and group discussions • Individual qualitative interviews
Participants	NA	15 graduate students from the University of Ottawa	7 international graduate students from the University of Ottawa
Data Collection	NA	15 Individual, virtual, semi-structured interviews (audio-recorded and transcribed) From 15 participants, 8 participants also completed a half-day art workshop, including a group collage activity (photographed), followed by a group discussion (audio-recorded and transcribed).⁵	Participants engaged in a full-day art workshop, including individual collage and poetry activities to reflect on social connections (photographed), with integrated group discussions (audio-recorded, transcribed) throughout. Following the workshop, each participant engaged in an individual, virtual, semi-

⁵ See Appendices A, B, and C for relevant data collection documents for study 2.

Study 1		Study 2	Study 3
			structured interview (recorded and transcribed). ⁶
Data Analysis	Review and integration of community arts literature using a social capital lens.	Reflective thematic analysis (Braun & Clarke, 2022) of the interviews and workshop transcripts with photographs integrated within the transcript.	Textual-Visual Thematic Analysis (Braun & Clarke, 2022; Trombeta & Cox, 2022) of the interviews and workshop transcripts with photographs integrated within the transcript.
Selected Findings	1. Community arts can provide opportunities for accessing social capital. 2. Community arts-generated social capital is mobilized through individual and collective pathways to health and health equity. 3. Equitable access to community arts-generated social capital is essential for advancing health equity.	1. Beyond solitude 2. Bridging the gap 3. Belonging and connection 4. Cultivating a community	1. Rulers of the realm 2. Are the Gods on your side? 3. Winning the game

⁶ See Appendices D, E and F for relevant data collection documents for study 3.

1.5.5.1 Study 1: Community Arts and Health Equity: A Theoretical Synthesis Using Social Capital Theories. Given persistent gaps in knowledge about the role of the arts in advancing health equity and the potential of community arts to promote social connection, my first study explored the relationship between community arts engagement and health equity through a social capital lens. I conducted a theoretical synthesis (Jaakkola, 2020). A theoretical synthesis aims to develop new understandings of a phenomenon of interest (the domain theory) by analyzing it through a specific theoretical lens (the method theory). The method and domain theories often stem from different bodies of knowledge, allowing for the development of novel perspectives (Jaakkola, 2020).

To conduct a theoretical synthesis, you first review the relevant concepts, theories, and literature pertaining to the domain and method theories. To do so, I chose to undertake a narrative review of the literature, using a hermeneutic approach (Boell & Cecez-Kecmanovic, 2014). This hermeneutic approach allowed for an iterative process of discovering the key concepts, theories, and literature of both the domain and method theories (Boell & Cecez-Kecmanovic, 2014; Jaakkola, 2020). For this kind of exploratory theoretical work, an iterative approach is preferable to a linear literature search strategy often used in dominant literature review methods (Finfgeld-Connett & Johnson, 2013). It is also in line with my paradigmatic perspectives, underscoring the interpretive and ever-evolving nature of knowledge rather than seeking a single, true understanding of the literature (Boell & Cecez-Kecmanovic, 2014). I provide an in-depth overview of my hermeneutic process in my first manuscript, along with the next steps in the theoretical synthesis, including the analysis and integration of domain and method theories.

Conducting a theoretical synthesis to address my first study objective was particularly valuable for providing a robust conceptual and theoretical foundation for the remainder of my thesis.

1.5.5.2 Study 2: Creating Connections: An Arts-based and Qualitative Exploration of Graduate Students' Experiences in a Peer-led Community Art Group. The aim of my second thesis study is to explore the experiences of graduate students who participated in an occupation-based, peer-led community art group called “Art and Play”⁷ as it relates to social connection.

To explore the experiences of graduate students in the Art and Play program, I employed a qualitative, arts-based methodology, drawing on the work of Leavy (2007, 2025), McNiff (2008), and Langer (1953). Arts-based methodology uses art-making as a primary mode of inquiry to explore and expand the understanding of human experience (Langer, 1953; Leavy, 2007, 2025; McNiff, 2008). Arts-based methodology may employ one or a combination of art forms across the research process (i.e., data collection, analysis, and representation) (Burge et al., 2016; Leavy, 2009). Perspectives differ on whether arts-based research should be considered an extension of qualitative methodologies or its own methodology (Leavy, 2009). It builds on interpretivist and constructivist paradigms, viewing human experiences as multi-faceted and socially constructed, while also emphasizing the experiential, improvisational, and creative aspects of being human (Rolling, 2010). When using an arts-based methodology, the researcher “bridges [...] the artist-self with the researcher-self” (Leavy, 2007, p. 2) in the process of developing knowledge, emphasizing reflection, description, creativity, and intuition.

⁷ See Houle et al. (2023a, 2023b, 2023c)

I specifically chose a qualitative, arts-based methodology for its compatibility with researching the human experience of interpersonal relationships, which are multifaceted, non-linear, and contextually situated. It is especially well aligned with my understanding of participation in community programs as a social experience (Simons & McCormack, 2007). While the use of arts-based research has increasingly been adopted in traditional program evaluation (Simons & McCormack, 2007), only a few examples exist of arts-based methodologies used to holistically explore participation in arts-based programs (e.g., MacLeod et al., 2016; van der Meulen & Omstead, 2021). Gerber et al (2020) argue that integrating arts-based research into health and social research can be understood as a form of epistemic activism, highlighting key aspects of health that are often underemphasized, such as social dynamics and relationships.

1.5.5.3 Study 3: Gods, Dragons, and Games: An Arts-Based Inquiry into the Experiences of Social Relationships of International Graduate Students. The original goal of study 3 was to explore international graduate students' experiences with social relationships through arts-based methods. Given the gaps in the literature and the emphasis participants placed on their experiences with their supervisors, the goal of study 3 was further refined to *explore the ways in which international graduate students perceive, experience, and navigate institutional relationships in a Canadian higher education setting.*

This study is also informed by a qualitative, arts-based methodology (Langer, 1953; Leavy, 2007, 2025; McNiff, 2008). Using an arts-based methodology helps to “capture the dynamic, sensory-embodied unconscious, or tacit dimensions of the collective human condition” (Gerber et al., 2020, p. 2). Through arts-based methods, participants can share their experiences in a creative and meaningful way, which can foster reflection and “reveal insights that they

cannot articulate in words” (Simons & McCormack, 2007, p. 296). This is especially valuable for giving voice to participants, such as international students who may have difficulty expressing their experiences through traditional methods (e.g., due to language or other cultural differences). This approach was also selected to provide an avenue to explore how international students envision meaningful social connection during graduate school. Indeed, the “re-visioning” of social problems in a creative way is a key value of arts-based research (McNiff, 2008, p. 5).

Importantly, an arts-based methodology is compatible with critical social theories, such as Bourdieu’s, which inform my third study. Arts-based research can help “depict aspects of how social life really is for people differentially located in the social order, or how life can be imagined” (Leavy, 2009, p. 219). It is also useful to note that Bourdieu wrote extensively about art, which he referred to as “creative or cultural production,” and saw it as an important vehicle for making sense of the world, including social exchanges (Bourdieu & Wacquant, 1992; Webb, 2002).

In Chapter 1, I have provided an overview of the key concepts, definitions, and literature relevant to my dissertation, which explores the role of the arts in understanding and engaging with arts-based practices among graduate students experiencing social isolation. In addition, I have outlined the social capital lens informing my study and highlighted the key methodological decisions for each study. In the following chapter, I share the manuscript for my first thesis study.

Chapter 2: Study 1

My first thesis study is provided in this second chapter. It has been formatted in accordance with the International Journal of Community Well-Being's submission guidelines.

Community Arts and Health Equity: A Theoretical Synthesis Using Social Capital Theories

2.1 Abstract

Introduction: Arts and health initiatives can promote long-term psychological and physical health. However, questions remain regarding whether and how they may advance health equity. The role of community arts in strengthening social connections and networks may be an important yet underappreciated theoretical link between the arts and health equity. A social capital lens can help illuminate how social relationships in community arts impact health equity.

Objective: This study explores the relationship between community arts and health equity through social capital theories. **Methods:** Using a hermeneutic approach, we conducted a theoretical synthesis using social capital concepts and theories to explore and understand the implications of community arts for health equity. **Results:** Three interrelated premises were articulated during the analysis: (a) community arts can provide opportunities for accessing social capital, (b) community arts-generated social capital is mobilized through individual and collective pathways to health and health equity, and (c) equitable access to community arts-generated social capital is essential for advancing health equity. **Conclusion:** To ensure community arts programs fulfill their potential to promote health equity, considerations such as resource access and distribution, as well as the influence of each group's unique social relationships and structure, should be emphasized. Social capital theories offer a unique lens on the potential of the arts to advance resource equity among groups experiencing social marginalization from both individual and collective perspectives.

Keywords: arts and health, community arts, social capital, health equity

2.2 Introduction

Over two decades of research have demonstrated the benefits of the arts for individual health. A landmark scoping review by the World Health Organization detailed the direct health benefits of the arts for physical and psychological health, including decreased pain, anxiety and depression, reduced stress and blood pressure, and improved cognition and overall function (Fancourt & Finn, 2019). The review also proposed that the arts can help address health inequities, defined as systemic, socially produced and unfair differences in health across social groups, through acting on certain social determinants of health (Fancourt & Finn, 2019).

Globally, there have been multiple efforts to integrate the arts in broader health policy and action to address growing social and health inequities. For example, in the United Kingdom, the National Centre for Creative Health (2022) proposed a new clause to embed the arts in health and social care systems, with support from the well-known health equity researcher Sir Michael Marmot. Furthermore, The Jameel Arts and Health Lab, in collaboration with the World Health Organization, are currently leading an ongoing Lancet Global Series to examine the arts as a “global health resource” to better support their integration into health policies and practices (Sajnani & Fietje, 2023). Nevertheless, some researchers have questioned whether the arts can meaningfully contribute to advancing health equity and have critiqued the attempts at policy action as premature (Clift et al., 2021, 2023).

The category of activities at the intersection of arts and health encompasses a wide range of approaches and practices (e.g., arts on prescription, art therapies, community arts). Importantly, in the literature discussing the potential of the arts for advancing health equity, researchers often point to examples of participatory arts¹ activities occurring within community

¹ *Participatory arts* refers to the “aim to get people taking part” in a shared artistic process (Fancourt, 2017, p. 76).

settings that aim to foster individual and community health and well-being (National Centre for Creative Health, 2022; Sonke et al., 2019), or what Mike White (2009) described as *community arts for health*² initiatives. Empirical studies have demonstrated their potential to strengthen social relationships, promote a sense of belonging, and increase social cohesion (Fancourt & Finn, 2019). Given recent studies emphasizing social relationships and networks as significant yet underappreciated determinants of health (Holt-Lunstad & Steptoe, 2022; WHO Commission on Social Connection, 2025), community arts may be especially relevant for promoting health equity, warranting further exploration.

To date, much of the literature exploring the potential of the arts for health equity has employed medical and psychological approaches. These lenses are likely insufficient to fully grasp “the social experience” of participating in arts and health activities more broadly, and the complex social processes potentially linking community arts to health equity more specifically (Warran, 2025, p. 132). For this purpose, a sociological approach is necessary. While social relationships and networks can be examined in a variety of sociological ways, we specifically draw from social capital theories (Bourdieu, 1986; Putnam, 1995) to examine community arts and health equity.

Social capital can be defined as “the ability of actors to secure benefits by virtue of membership in social networks or other social structures” (Portes, 1998, para. 13). Social capital theories help illustrate the role of social relationships and networks for health as it relates to access to resources. Social capital theories remain underutilized in the general arts and health literature (see Daykin, 2021; White, 2009 for exceptions), especially for exploring the role of community arts in advancing health equity.

² The terms *community arts for health* and *community arts* are used interchangeably in this manuscript.

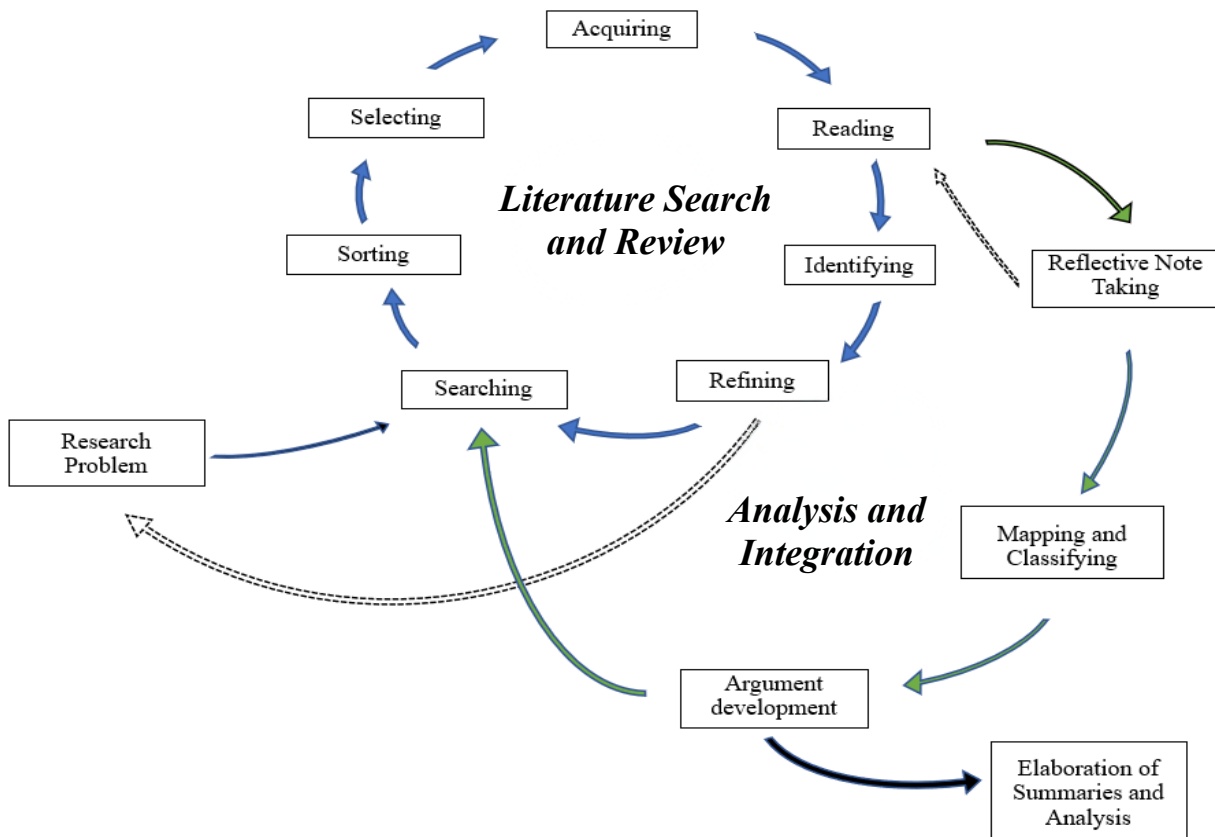
Despite the promise of the arts to contribute to a comprehensive approach to advancing health equity, their potential role remains unclear. Community arts are particularly of interest, given evidence demonstrating their capacity to foster a significant determinant of health, positive social relationships. Social capital theories may help clarify the ways in which community arts can act on social relationships for better health equity. Therefore, this study aims to explore the relationship between community arts and health equity using social capital theories.

2.3 Research Methods

We conducted a theoretical synthesis (Jaakkola, 2020) to deepen our understanding of the relationship between community arts engagement, social relationships, and health equity. A theoretical synthesis uses a *method theory*, or a “meta-level conceptual system” to analyze a phenomenon of interest, called the *domain theory* (Jaakkola, 2020, p. 20; Lukka & Vinnari, 2014). For this study, the method theory is social capital concepts and theories, and the domain theory is knowledge related to community arts. A theoretical synthesis is achieved by 1) summarizing the key concepts and reviewing the literature pertaining to the domain and method theories, and 2) analyzing the domain theory using the method theory (Jaakkola, 2020). To inform these two steps of the theory synthesis, we employed a hermeneutic approach. A hermeneutic approach (see Figure 2.1) was chosen to conduct a narrative review of the literature (Sukhera, 2022) as it emphasizes a “dialogical interaction between the literature and the researcher [...] seeking originality rather than replicability” (Boell & Cecez-Kecmanovic, 2014, p. 258). This was compatible with the aim of a theoretical synthesis to develop a new integrated theoretical understanding of a phenomenon beyond “a summary of existing concepts” (Jaakkola, 2020, p. 23).

Figure 2.1

The hermeneutic process used to conduct the theoretical synthesis



Note. This figure is adapted from Boell & Cecez-Kecmanovic (2014). Solid lines denote the major hermeneutic circles. Blue arrows represent the literature search, while the green arrows represent the analysis integration process. The dashed arrows indicate the other connections between research activities.

2.3.1 First Hermeneutic Circle: Literature Search and Review

For the method theory, we searched for literature on social capital concepts, dominant theories in sociology and health literature, and conceptual and empirical literature on social

capital and health equity. Consistent with a hermeneutic approach, we began with sources known to the authors and built on this by hand-searching introductory and foundational books, chapters and topic glossaries in the areas of social capital (Bourdieu, 1986; Putnam, 1995, 2000; Putnam & Feldstein, 2004), social capital and health (Eriksson, 2011; Moore & Kawachi, 2017), and health equity (Carpiano et al., 2008; J. N. Clarke, 2020; Wilkinson, 1997, 2005). We also searched the literature in CINAHL and SCOPUS to find theoretical and empirical studies.

For the domain theory, we used a similar approach to the one above (starting with foundational sources known to the author and hand searching) (Clift & Camic, 2015; Daykin, 2019; Fancourt, 2017; White, 2009). Next, we hand-searched two large-scale syntheses on arts and health (Fancourt & Finn, 2019; Gordon-Nesbitt & Howarth, 2020) using backward citation tracking (Boell & Cecez-Kecmanovic, 2014). This initial literature review helped us narrow down our focus from broader arts and health practices to community arts practices, given their focus on addressing social inequities in health. With this in mind, we conducted searches in CINAHL and SCOPUS to identify theoretical and empirical studies. Specifically, we included studies that discussed community arts and their impact on the social determinants of health, health inequities, or social capital. Rather than conducting an exhaustive search of the community arts literature, we sought to compile a collection of community arts examples to analyze using our method theory.

As we reviewed the literature described above, we took extensive notes on key concepts, prominent theories and theorists, and empirical findings to build a rich understanding of the method and domain theories. Finally, we used qualitative data analysis software (NVivo 14) to document and organize our data. We terminated the iterative literature search and coding when

the main concepts, theories, authors, and citations became repetitive and familiar in both the method and domain theories (Boell & Cecez-Kecmanovic, 2014; Sukhera, 2022)

2.3.2 Second Hermeneutic Circle: Analysis and Integration

Building on the process described above, we identified potential links between the social capital and community arts literature by mapping, colour-coding, and adding memos to our notes. This comparative theoretical work underpins the theoretical and integration process described by Jaakkola (2020), and follows similar methods used in similar studies (Becker & Jaakkola, 2020). Finally, we organized this analysis into potential compatible elements, refining our interpretations into three interrelated theoretical premises linking community arts and health equity through social capital:

1. Community arts can provide opportunities for accessing social capital.
2. Community arts-generated social capital is mobilized through individual and collective pathways to health and health equity.
3. Equitable access to community arts-generated social capital is essential to promote health equity.

Our premises reveal “big picture” patterns for understanding the effects of community arts on health equity, rather than identifying specific causal mechanisms (Delbridge & Fiss, 2013, as cited in in Jaakkola, 2020, p. 21).

2.4 Literature Review: Key Concepts and Findings

In this section, we briefly summarize the key concepts, theories and empirical findings of both the method theory and domain theory. We purposefully begin with providing an overview of the method theory (social capital theories), given its role as a “meta-level” lens, followed by our summary of the domain theory (community arts).

2.4.1 Method Theory: Social Capital

Dominant sociological theories of social capital include those of Pierre Bourdieu (1986; Bourdieu & Wacquant, 1992) and James Coleman (1988). Bourdieu (1986) defines social capital as “the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition” (p. 248). His definition places social capital within community networks that individuals can purposefully access and accumulate for their benefit, albeit not equally (Bourdieu, 1986).

Bourdieu also situates social capital alongside two additional forms: economic capital (e.g., directly convertible into money) and cultural capital (e.g., education, qualifications, knowledge of cultural values and norms). Both social and cultural capital can be converted into economic benefits under specific conditions. Bourdieu highlights the exclusionary potential of social capital, where social position and power are maintained through one’s ability (or not) to access resource-rich networks. Like Bourdieu, Coleman conceptualizes social capital as an individual resource. However, Coleman (1988) defines social capital as a system of exchange where “certain aspects of social structures,” including high degrees of trust and societal norms, “facilitate certain actions of actors” through the creation of obligations and expectations and the exchange of information (p. S98).

In health research, it is generally accepted that social capital is associated with better health and greater health equity (Ehsan & De Silva, 2015). However, two primary schools of thought explain this link: social cohesion and social network. The social cohesion approach is based on the work of political scientist Robert Putnam (1995), who defines social capital as the “features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit” (p. 67). Putnam’s work builds on Coleman’s

theories of social capital; however, one notable difference is his view of social capital as a collective rather than an individual resource (Portes, 1998, 2000). The relationship between collective social capital and health remains unclear, and recent systematic reviews have shown mixed empirical support (Shiell et al., 2020). Proposed mechanisms include promoting collective action, diffusing health education and knowledge, and creating health-enabling communities through increased collective efficacy and social norms and control (Kawachi et al., 2008; Putland et al., 2013).

The second school of thought is a social network approach. This second approach closely aligns with Bourdieu's views, emphasizing the size of one's network, the resources held by its members, and one's ability to access them. Portes (2000) notes that more robust theoretical work has been done to develop this interpretation of social capital. He also contends that Bourdieu's approach allows for the helpful distinction between the sources of social capital and its effects. He defines the sources of social capital as the characteristics of the individual's networks (e.g., structure, norms of reciprocity) and the effects as the resources (e.g., material, support, and information) that they provide (Portes, 1998, 2000). There is growing empirical support for strong associations between individual social capital and health (Ehsan & De Silva, 2015; Islam et al., 2006; Kawachi et al., 2008; Shiell et al., 2020; E. P. Uphoff et al., 2013). Commonly proposed mechanisms underlying this link include social support, social participation and engagement, and access to materials and information (Berkman et al., 2000; Kawachi & Berkman, 2001; Thoits, 2011; E. P. Uphoff et al., 2013).

Further theoretical distinctions for describing social capital include bonding, bridging, and linking social capital. Bonding social capital refers to networks of strong "horizontal" relationships where members share a similar identity and social position. On the other hand,

bridging social capital refers to weaker “vertical” relations between individuals with different social identities and positions. Linking social capital is defined as “norms of respect and networks of trusting relationships between people who are interacting across explicit, formal or institutionalized power or authority gradients in society” (Szreter & Woolcock, 2004, p. 655). Studies have demonstrated that all three forms can positively and negatively impact health (Moore & Kawachi, 2017; Poortinga, 2012).

Other overlapping approaches to distinguishing among the facets of social capital include categorizing cognitive and structural capital (Grootaert & Van Bastelar, 2013; N. T. Uphoff, 2000). Cognitive social capital refers to abstract or intangible aspects of social capital (e.g., shared values, norms, and group trust). Structural capital refers to the “presence or absence of formal opportunity structures or activities in which individual actors might develop social ties and build social networks” (Moore & Kawachi, 2017, p. 515). Structural capital is often measured by the presence or absence of community spaces and by the characteristics of those networks, such as the size and variety of relationships, including the bonding, bridging, and linking relations described above (Grootaert & Van Bastelar, 2013).

Despite the widespread use of social capital in health research, there are also significant criticisms and disagreements within the literature. Notably, the broad application of Putnam’s definition has been criticized for circular reasoning, for ignoring the adverse effects of social capital, and for placing the onus back on communities (to be more “cohesive”) rather than holding political and economic systems responsible for structural and material deprivation (Muntaner & Lynch, 2002; Portes, 1998, 2000). Nonetheless, other researchers (Szreter & Woolcock, 2004) have argued that a thoughtful, critical use of a social capital lens allows one to consider both the psychosocial and material facets of health inequities and their effects.

Overall, the social network approach benefits from robust theoretical foundations and substantial empirical support, making it especially useful for examining community arts and health equity. Nonetheless, social cohesion approaches feature more prominently in health and equity literature. Therefore, in our subsequent analysis, we considered both perspectives, following the multidimensional approach in much of the recent literature (Ehsan & De Silva, 2015; Lagaert et al., 2021; Shiell et al., 2020). We now turn to summarizing our domain theory, community arts.

2.4.2 Domain Theory: Community Arts

In this section, we provide an overview of key concepts in arts and health and community arts. We then briefly describe the empirical studies included in our study before exploring them in more depth in the following section, using social capital theories.

While the arts are central to the human experience, defining them remains challenging. Within the arts sector, definitions of art range from visual representations of reality to expressions of emotion to works with aesthetic quality (LeMieux & Sachant, 2015). Within the arts and health literature, specific definitions of art are often absent. Instead, the focus is generally on defining the different art forms used and the type of participant engagement. Different art forms include performance arts (e.g., music making, dancing, singing, and performing theatre), visual arts, design and craft (e.g., painting, drawing, knitting, jewellery-making, and sculpting), cultural activities (e.g., visiting museums and attending cultural festivals), literary arts (e.g., creative writing), and online and digital electronic arts (e.g., animation, digital photography and film, and social media arts) (Davies & Clift, 2022; Fancourt & Finn, 2019). Active arts engagement involves making, creating, or performing art. Whereas

receptive arts engagement refers to the “taking-in” of art through attending, listening, and viewing art (Davies & Clift, 2022).

The World Health Organization’s (WHO) 1948 definition of health as “a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity” (World Health Organization, 1948) is embedded in much of the arts and health literature, given the WHO’s close collaboration in many of its seminal reviews and series (Fancourt & Finn, 2019; National Centre for Creative Health, 2022; Sajnani & Fietje, 2023). Nonetheless, the arts and health category is vast and encompasses many approaches and settings (e.g., art therapies, arts-on-prescription, arts in health education, community arts), thereby aligning with different, and sometimes overlapping, models of health. For example, art therapies often occur within healthcare systems and use art as a tool for the assessment and treatment of various psychological disorders (Fancourt, 2017). Given our focus on health equity, we chose to specifically explore community arts, grounded in a social model of health that emphasizes the conditions of people’s lives that shape their experiences of health and well-being.

White (2009) proposes that a central assumption of community arts is that social relationships are a key determinant of health; therefore, programs often aim to address issues of social exclusion and isolation. A community development approach is often prioritized, with a focus on building relationships among participants and between participants and relevant sectors (health services, education, local government) (Daykin, 2019). An international, broad-reaching scoping review by the WHO (Fancourt & Finn, 2019) comprised over 900 studies, including many examples of community art initiatives. The authors conclude that engaging in collective art-making can enhance health by addressing social determinants and inequities and mitigating their psychosocial effects. Numerous studies show that community arts programs foster personal

well-being, encourage positive social relationships and a sense of belonging, and help regenerate local areas. Table 2.1 summarizes this evidence. In the following section, we further explore this literature using a social capital lens.

Table 2.1*Summary of Empirical Studies*

Author(s) (year)	Title	Geographical Region	Methodology	Study objectives	Reported findings as related to health and health equity
Anderson et al. (2017)	Translating knowledge: Promoting health through intergenerational community arts programming	Canada	Participatory research	To explore the impact of engaging in ensemble-created plays on older adults and university students' health and well-being.	The authors found that ageist views were reduced and intergenerational relationships fostered. They found that participants demonstrated increased skills (openness, flexibility, adaptation) that were applied beyond the project.
Argyle & Winship (2018)	Creative practice with clay: A mutual route to recovery?	United Kingdom	Mixed methods approach	To explore the experiences of adults with mental health issues, carers and health professionals in creative practice with clay program.	The authors found that engagement in the creative clay fostered well-being, mutual recovery, and social capital.
Coggan et al., (2008)	Art and safe communities: The role of Big hART in the regeneration of an inner-city housing estate	Australia	Case study	To examine the impact of a participatory arts program, Big hART.	Participants reported feelings of increased value, safety, and comfort. Authors found improved social cohesion, local environment and decreased crime.
Cunningham et al. (2022)	Enacting social transformation through occupation: A narrative literature review	United Kingdom	Narrative literature review	To explore how occupations (focus on arts) have been used for social change.	The authors found that art can provide a means to express a need for change. The authors found that arts-based occupations generally yielded personal or small-scale change rather than large-scale social transformation.

Author(s) (year)	Title	Geographical Region	Methodology	Study objectives	Reported findings as related to health and health equity
Dam et al. (2008)	Understanding the experience and impact of a community art studio initiative for adults with serious mental illness through narrative explorations	Canada	Qualitative study	To examine the experiences of adults with mental illness within a community art studio initiative.	Participants valued having a free, community-based arts environment. Participants reported that the arts allowed for self-expression and self-discovery, increased sense of belonging, improved well-being, increased participation in other spheres of their lives, and increased level of social capital.
Daykin et al. (2020)	The role of social capital in participatory arts for wellbeing: Findings from a qualitative systematic review	International	Qualitative systematic literature review	To systematically map the concept of social capital in arts, health, and well-being research.	The authors found that most studies reported increases in bonding social capital. Increases in bridging and linking capital were viewed less frequently.
Diamond & Gordon (2017)	Community crafts: A sustainable resource contributing to health, well-being, and community cohesion	United Kingdom	Interpretive qualitative study	To explore the impact of two community craft groups on the well-being of its members.	The authors found that the participants valued their group membership highly and experienced positive changes to their well-being through increased social interaction, social support, and achieving new skills.
Fancourt & Finn (2019)	What is the evidence on the role of the arts in improving health and well-being? A scoping review	International	Scoping review	To map the evidence on arts and health from 2000-2019.	The authors found evidence from over 900 studies using diverse methodologies. The authors found that arts engagement can enhance health prevention and promotion by acting on social determinants of health and inequities through increasing social cohesion and mitigating the psychosocial effects of social inequalities. The primary health and community effects discussed are reduced anxiety and depression, increased confidence and skills, reduced exposure to violence, and regenerating inner-city communities with various populations, including those experiencing poverty, substandard housing, and social isolation.

Author(s) (year)	Title	Geographical Region	Methodology	Study objectives	Reported findings as related to health and health equity
Fancourt et al. (2023)	The impact of arts and cultural engagement on population health findings from major cohort studies in the UK and USA 2017 – 2022	United Kingdom and United States	Multiple Cohort Studies	To summarise findings from multiple longitudinal cohort studies between 2017 and 2022, explore the relationship between arts and cultural engagement and health outcomes.	The authors found direct health benefits of the arts across the lifespan. With regards to health equity, they found that people from poorer socio-economic backgrounds have less opportunities to access the arts.
Fanian et al. (2015)	Evaluation of the Kòts'iihtla ("We Light the Fire") Project: Building resiliency and connections through strengths-based creative arts programming for Indigenous youth	Canada	Program evaluation	To evaluate the impact of a community arts workshop for Thecho youth.	Participants reported increased confidence and new skills in both artistic and personal domains. They also noted how the workshops were culturally relevant and that they were interested in continuing to participate in the arts in their community.
Gordon-Nesbitt & Howarth (2020) Based on All Party Parliamentary Group (2017)	Creative health: The arts for health and wellbeing	United Kingdom	Realist Analysis	To perform a realist analysis of the effects of participatory art engagement and health and well-being while paying particular attention to their connection to social determinants of health.	The authors found evidence for the arts supporting health through Marmot's six routes for overcoming health inequities: (a) give every child the best start in life, (b) enable all children, young people, and adults to maximise their capabilities and have control over their lives, (c) create fair employment and good work for all, (d) ensure a healthy standard of living for all, (e) create and develop healthy and sustainable places and communities, and (f) strengthen the role and impact of ill health prevention.

Author(s) (year)	Title	Geographical Region	Methodology	Study objectives	Reported findings as related to health and health equity
Groot et al. (2021)	The value of active arts engagement on health and well-being of older adults: A nation-wide participatory study	The Netherlands	Participatory design with narrative- and arts-based inquiry	To explore the experiences of older adults engaged in a variety of community participatory art programs as they relate to their health and well-being.	Participants reported experiences related to positive feelings, personal and artistic growth, and increased meaningful social interactions.
Hansji et al. (2015)	Men's Sheds: enabling environments for Australian men living with and without long-term disabilities	Australia	Ethnography	To explore the experiences of men with and without disabilities in a community craft program.	The authors found that the Men's Shed program acted as a community social hub. Participants reported that the space felt safe, supportive, and equal and allowed for engaging in meaningful "male activities."
Kay (2000)	Art and community development: The role the arts have in regenerating communities	United Kingdom	Case Study	To examine the impact of four community arts projects on regenerating disadvantaged communities.	Authors found increased personal development, improved image of the area, increased social cohesion, active citizenship, cultural identity, and quality of life.
Lee (2013)	How the arts generate social capital to foster intergroup social cohesion	United States	Case study	To explore the impact of a multicultural participatory community arts project on generating social capital to promote intergroup social cohesion.	The author found evidence for the positive impact of the participatory art group on fostering social cohesion in a multicultural community.

Author(s) (year)	Title	Geographical Region	Methodology	Study objectives	Reported findings as related to health and health equity
MacLeod et al. (2016)	Connecting socially isolated older rural adults with older volunteers through expressive arts	Canada	Participatory research	To explore the impact of a participatory arts program to address social isolation among older people.	The authors found that the program positively influenced well-being in personal development, social relationships, and meaning creation. They found the benefits to extend beyond the end of the program.
Maidment et al. (2014)	Crafting social connectedness: A community development model	Australia	Qualitative study	To explore the impact of participation in Country Women's Association craft groups on health and wellbeing.	The authors found evidence for three key community development outcomes: increased social capital, capacity building, and social inclusion.
McConnell (2016)	Music and health communication in The Gambia: A social capital approach	The Gambia	Ethnography	To explore how kanyeleng musical performances facilitate health communication using a social capital lens.	The authors found that the kanyeleng performances provided an example of a community and culture-centred approach to health communication, facilitating trust between health professionals and communities and disseminating information.
Smart et al. (2018)	Creating an inclusive leisure space: Strategies used to engage children with and without disabilities in the arts-mediated program Spiral Garden	Canada	Interpretive interactionism	To explore the service delivery methods of an arts-mediated day program for youth with and without disabilities.	The authors found that strategies aimed at fostering collective practices, peer interactions and child-directed experiences were perceived as essential to ensuring an inclusive environment.

Author(s) (year)	Title	Geographical Region	Methodology	Study objectives	Reported findings as related to health and health equity
Smigelsky et al. (2016)	Performing the peace: Using playback theatre in the strengthening of police-community relations.	United States	Feasibility and acceptability study	To assess the feasibility and acceptability of a community arts program to foster relationships between the police and their community.	The authors found the program to be feasible and acceptable. Participants reported increased ability for meaning-making and positive attitudes between groups.
Spiegel & Parent (2018)	Re-approaching community development through the arts: A 'critical mixed methods' study of social circus in Quebec	Canada	Critical mixed methods	To explore how participants experienced a social circus group targeted at youth with marginalized lifestyles.	The author found evidence for three broad themes: personal transformation, creating community, and building a future. They note tensions between the goals of increased participant coping vs. enabling transformation of inequities.
Spiegel et al. (2015)	Social circus and health equity: Exploring the national social circus program in Ecuador	Ecuador	Program evaluation	To describe an arts-for-social-change program as it relates health equity.	The authors describe tensions between program goals related to artistic vs. social/health aims and the program impact at micro and meso levels of determinants of health.
Stickley (2010)	The arts, identity and belonging: A longitudinal study	United Kingdom	Narrative, longitudinal study	To examine the experiences of participants involved in community arts programs promoting mental health.	Participants reported finding new opportunities at personal, social, and occupational levels. Authors found that community arts involvement may promote identity and social belonging.

Author(s) (year)	Title	Geographical Region	Methodology	Study objectives	Reported findings as related to health and health equity
Travis et al. (2019)	Hip Hop, empowerment, and clinical practice for homeless adults with severe mental illness	United States	Case study	To evaluate the use of MUZUZE Hip Hop and an empowerment framework with adult men experiencing severe mental health illness and homelessness.	The authors found that engaging in the Hip Hop group helped foster well-being through empowerment, therapeutic and social-emotional gains.

2.5 Results of the Theoretical Synthesis

By integrating concepts, theories, and evidence from the method theory (social capital) and the domain theory (community arts), we developed a novel perspective on the relationship between community arts and health equity. This led to the articulation of three theoretical premises. These are (a) community arts can provide opportunities for accessing social capital; (b) community arts-generated social capital is mobilized through individual and collective pathways to health and health equity; and (c) equitable access to community arts-generated social capital is essential for advancing health equity.

2.5.1 Community Arts Can Provide Opportunities for Accessing Social Capital

Community arts programs can serve as structural capital in local settings. Nonetheless, a particular network's characteristics (size, quality of relationships) influence the nature and extent of the resources accessible through its membership. Community arts programs are often characterized by small, local initiatives, focused on bringing opportunities to engage in the art within a particular community (White, 2009).

While larger networks are generally associated with a higher likelihood of generating instrumental or emotional support, some social capital researchers have argued that network size is less important than other factors, such as the perceived quality of the relationships (Finsveen & Van Oorschot, 2008; Kawachi et al., 2008). Community arts programs often encourage generous, trusting and reciprocal relationships among group members. For example, Groot et al. (2021) explored the experiences of older adults engaged in a variety of community arts programs and found that participants reported deep emotional bonds forming among group members through a shared artistic experience. They described the depth of their bonds as more important to their well-being than the number of relationships they developed. In another example, MacLeod et al.

(2016) found that relationships between isolated older adult participants and volunteer art facilitators (older adults with backgrounds in nursing, art, and teaching) were characterized by high levels of trust and reciprocity. In both studies, participants attributed the development of these bonds to witnessing each other's meaning-making processes in mutual aesthetic creation. These relationships can be understood as a form of bonding social capital, or close relationships between people of similar backgrounds and identities.

In multiple systematic reviews and a meta-review, perceptions of trust and reciprocity, and bonding social capital were positively associated with better mental and physical health (Ehsan et al., 2019; Ehsan & De Silva, 2015; E. P. Uphoff et al., 2013). Through a buffering effect, close relationships can help mitigate the consequences of inequity by providing social, emotional, and material support. Therefore, providing opportunities to build strong ties through art-making among communities that experience economic and social marginalization can help mitigate the consequences of health disparities (E. P. Uphoff et al., 2013).

In a review of arts and health practices more broadly, Daykin et al. (2020) found that bonding relationships were more frequently reported than bridging and linking relationships. Nevertheless, community arts programs often focus on strengthening relationships across different social groups and hierarchies. For example, community art programs have facilitated mutual learning between individuals with and without disabilities (Hansji et al., 2015; Smart et al., 2018). At the group level, group art creation has been found to encourage the development of trusting relationships among members from different ethnic and cultural groups (Lee, 2013), across generations (Anderson et al., 2017) and between marginalized groups and their broader communities (Travis et al., 2019). Furthermore, in a study of a Memphis theatre program designed to bridge law enforcement officers and previously incarcerated individuals, the authors

found that the program was feasible and acceptable, and that it led to increased positive attitudes and trust among participants (Smigelsky et al., 2016). In another example, a community art project in Australia successfully engaged residents, local businesses, and government agencies in collaborative art-making, leading to ongoing consultations for community development five years after the initial project ended (Coggan et al., 2008).

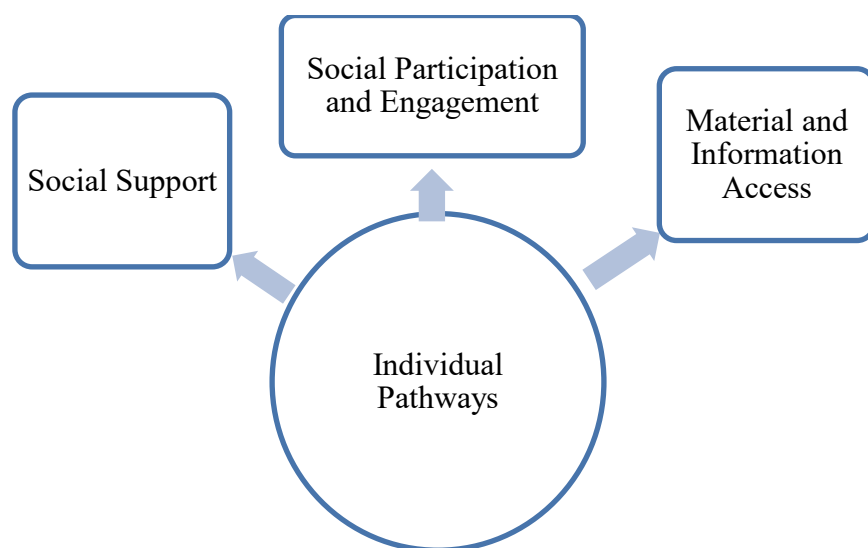
This first premise helps situate community arts as examples of structural capital, creating opportunities for community members to engage in meaningful creative activity that often builds reciprocal, supportive, and trusting relationships among members and between members and broader community actors holding diverse positions of power. In the following section, we build on this premise to explore how social relationships formed within community arts programs are mobilized to improve health and health equity.

2.5.2 Community Arts-Generated Social Capital is Mobilized Through Individual and Collective Pathways to Health and Health Equity

Social capital accessed within community arts settings can impact health from both individual (social network) and collective (social cohesion) perspectives. In this section, we explore the empirically supported pathways connecting social capital to health outcomes, as they relate to community arts, health and health equity.³

2.5.2.1 Individual Pathways. From a social network perspective, some of the ways individual social capital can impact health are through social support, social participation and engagement, and access to material and information (Berkman et al., 2000; Eriksson, 2011; Kawachi & Berkman, 2001; E. P. Uphoff et al., 2013) (see Figure 2.2).

³ While there are various pathways explored in the literature, we build on the main empirical pathways linking social capital to health as described and organized by Eriksson (2011).

Figure 2.2*Individual Pathways*

Note. Figure adapted from Eriksson, 2011.

Social Support. Social support is well known to impact health by acting as a “buffer” against stress (Cohen & Wills, 1985). Importantly, studies have shown that individuals with lower socio-economic status are less likely to have access to supportive relationships (WHO Commission on Social Connection, 2025). Enhanced social support is often cited as a benefit of community arts in the context of marginalized groups (Argyle & Winship, 2018; Diamond & Gordon, 2017; Hansji et al., 2015; MacLeod et al., 2016). For example, Argyle & Winship (2018) report that participants in their study, including mental health service users, artists, and practitioners, describe how the bonds they formed during clay workshops provided mutual support within the workshops and in other facets of their lives. Nevertheless, MacLeod et al. (2016) noted that participants in their studies expressed disappointment when ongoing programs ended and supportive relationships disappeared. Given the poor funding climate for such initiatives, the potential loss of social support that community members build and access through community programs is a critical concern (Daykin, 2019).

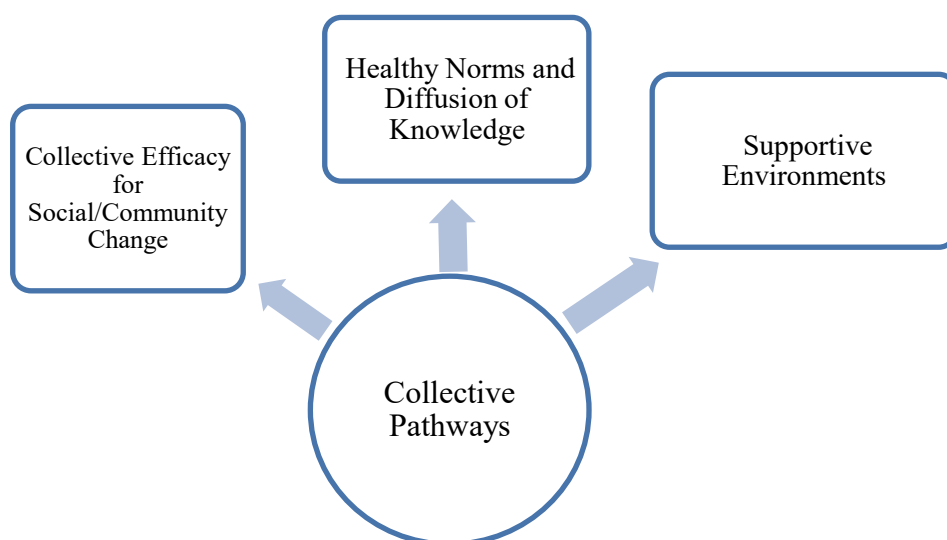
Social Participation and Engagement. Social participation affects health by reinforcing valued roles, enhancing skills, and promoting a sense of belonging (Berkman et al., 2000). In the literature, the benefits of social participation through community arts are often highlighted (Fancourt & Finn, 2019; Gordon-Nesbitt & Parkinson, 2015). In a study focusing on the experiences of unhoused adults living with mental illness, engagement in a Hip Hop group helped participants identify and affirm their strengths and sense of efficacy, as well as foster new social and emotional skills (Travis et al., 2019). In another example, participants with severe mental health conditions who participated in a community art studio initiative reported a strong sense of belonging to the group and the value of such a social space outside the hospital environment (Dam et al., 2008). A final example is Spiegel & Parent (2018) study with street-involved, socially excluded youth, who participated in a social circus initiative, and shared an increased willingness and intent to continue participating in further social circus activities and other activities such as volunteering. Although increased social participation is generally seen as positive for health and well-being, Spiegel and Parent (2018) provide a measured view of the success of their community art program, noting that encouraging marginalized communities to participate in society may “distract from fundamental inequities and even serve to homogenize diverse communities” (p. 601). This speaks to the need to carefully navigate the role of the arts in facilitating participation by better equipping individuals to cope with societal demands while still challenging problematic structures.

Material and Informational Access. One key way social capital theories and concepts help illuminate how social relationships benefit health is through access to resources. In a study exploring the impact of a community knitting group for women in an inner-city setting in the UK, participants were observed exchanging information about the art-making process and other

topics, such as child-rearing and advice on starting a business (Diamond & Gordon, 2017). In a second example, women living in rural areas of Victoria, Australia, who belonged to a community craft group, described how they exchanged health-related education, offering suggestions of medical practitioners to consult or solutions that had helped them and their families (Maidment et al., 2014). In a final example, participants in Argyle & Winship's study of the clay program describe how they leveraged the network they built to find opportunities for continued artistic work. From a Bourdieusian perspective, the above examples clearly represent the exchange and accumulation of social, cultural, and potentially economic capital. Indeed, in the same knitting group described above (Diamond & Gordon, 2017), the flow of economic capital was evident as participants pooled their assets to reduce financial barriers to membership and increase community participation (Maidment et al., 2014).

The examples above provide evidence that community arts programs impact the health of individuals experiencing different forms of social and economic marginalization. While the benefits of social relationships within these groups are described as predominantly positive, some negative effects are also noted. In the next section, we expand on this individual perspective and explore examples of community arts in the context of collective pathways to health.

2.5.2.2 Collective Pathways. This perspective focuses on how collective social capital impacts health through greater collective efficacy for social and community change, the encouragement of healthy norms and the diffusion of health-promoting knowledge, and the creation of supportive environments (Eriksson, 2011; Kawachi & Berkman, 2001) (see Figure 2.3).

Figure 2.3*Collective Pathways*

Note. Figure adapted from Eriksson, 2011

Collective Efficacy for Social and Community Change. By developing relationships characterized by trust and solidarity, groups can become empowered to create social change and engage in community development. For example, Coggan et al. (2008) describes how the Big *hART* program nurtured a sense of togetherness in the community residence of Northcott, Australia. The authors describe how, through participation in a peer-based community art program, tenants began to develop trusting and cooperative relationships and communal agency to address community needs and priorities related to safety and housing. They partnered with local government bodies, including the department of housing, creating sustained and successful community development projects.

Another important example of such activities is the long-standing tradition of Augusto Boal's Theatre of the Oppressed. Picher (2007) described how such activities can become tools for community organization, adapted to different social and political contexts. Given the grassroots and community context of many of these organizations, it is difficult to find peer-

reviewed examples of such programs. Nonetheless, community arts have long been used to promote active citizenship through community development projects, empowering members to drive change in their community (Kay, 2000), and multiple long-standing examples of theatre for community and collective action can be found on an international scale (e.g., TONYC, 2024).

Healthy Norms and Diffusion of Knowledge. The use of the arts for encouraging healthy norms and the diffusion of health education is widespread in health promotion activities (Fancourt & Finn, 2019). In an ethnographic study that took place in The Gambia, a community kanyeleng performance group partnered with local health authorities and used music, dance, and songs related to Ebola prevention to engage audience members and impart health education (McConnell, 2016). The author argues that the success of this program was not due to the specific content but rather the “kanyeleng [women] negotiate[d] the complex and unequal power relations of public health, giving messages meaning by embedding them in local systems of social interaction and value” (p. 5). In another example, Spiegel and Parent (2018) observed how facilitators of the circus program for marginalized youth described earlier shared pro-social values with participants, leading the youth participants to build skills for future community involvement and societal contributions. However, the authors highlighted the program’s focus on enhancing the ability of the youth to cope within current socio-political systems rather than challenging inequitable social conditions leading to their marginalization (Spiegel & Parent, 2018). This is an important downside of social capital, in which social control within groups can restrict personal freedoms and encourage conformity (Portes, 1998).

Creating Supportive Environments. The authors of the 2010 Marmot Review note how communities’ social and physical spaces can be health-enhancing or degrading, and the ways in which their impact contributes to social inequities in health (Institute of Health Equity, 2010).

Community art programs are often described as fostering safe, accessible spaces where community members can meet, exchange ideas, and offer each other support. Notably, in Dam et al. (2008), the community art studio was described by participants with severe mental health challenges as a place where they felt accepted, respected, and valued. Importantly, they appreciated that the studio was outside hospital networks and in the community, helping foster social connections by providing a place to go and be with others. In another example, Hansji et al. (2015) explored the impact of the Men's Sheds program, and the core theme they identified focuses on how the program enabled a safe, equalizing, and supportive community space for participants living with and without long-term disabilities. Creating safe places for gathering is especially critical for marginalized communities, who experience high rates of social exclusion and stigma, which can further deteriorate health and well-being. Overall, the potential of community arts to create supportive and engaged places speaks to what some researchers have long noted: the crucial yet underappreciated importance of caring, inclusive communities as a significant determinant of health (Lomas, 1998).

The examples above provide evidence of the influence of community arts through collective pathways between social capital and health. While it is generally thought that collective pathways have greater potential to advance health equity (i.e., rather than small-scale individual changes), measuring their outcomes is more difficult and requires new ways to demonstrate their potential impact on health inequities (Szreter & Woolcock, 2004).

In summary, it is through overlapping individual and collective pathways that the social relationships forged in community arts engagement may impact health and health equity. This reinforces the value of considering network and social cohesion perspectives on social capital in

this context and underscores the importance of collaboration between community development and health promotion approaches to optimize efforts to promote health equity.

Having examined community arts as a source of social capital and considered their potential influence on health equity through individual and collective pathways, we now turn to equal access to community arts-generated social capital in the final section.

2.5.3 Equitable Access to Community Arts-Generated Social Capital is Essential for Advancing Health Equity

The potential for community arts initiatives to generate social capital may make them attractive as “social capital interventions”. However, the evidence supporting social capital interventions is mixed (Ehsan et al., 2019; Shiell et al., 2020). Shiell et al. (2020) conducted a meta-review of the effectiveness of social capital interventions and found that the highly contextual nature of social capital may affect their success. Furthermore, experiences and meanings of social capital can vary significantly for individuals and groups based on their gender, ethnicity, and socioeconomic status (Eriksson, 2011). These complexities underscore the importance of attending to broader social structures at play when considering social capital and community arts as tools for advancing health equity (Putland et al., 2013).

Importantly, a recent report, including cohort studies from the UK and USA, highlights that opportunities for community arts engagement are unevenly distributed, with groups experiencing low socioeconomic status facing more barriers to the arts (Fancourt et al., 2023). Bourdieu posits that the possibilities (or lack thereof) for access and exchange of capital related to gender, ethnicity and social class are the basis for reproducing societal inequities (Bourdieu, 1986; Bourdieu & Wacquant, 1992). To access the benefits of social capital, one must already possess and be willing and able to invest a certain degree of economic and cultural capital

(Bourdieu, 1986). This highlights the barriers that might prevent certain groups from accessing community arts to mobilize social capital. For example, a lack of economic capital may limit access to transportation or leisure time. This also speaks to the issue of using social capital to promote health equity without adequately considering other forms of capital (i.e., cultural and economic) (Bourdieu, 1986). In a study examining how community groups can successfully foster social capital for health equity, the authors recommend focusing on community development principles. These include engaging with and building on the community's needs and strengths, commitment to sustainable or long-term programs, and coordination and collaboration with larger institutional organizations (Putland et al., 2013). Given that community arts are often grounded in a community development perspective, these elements are often integrated to a certain degree. Nonetheless, differences in the quality and commitment of such programs in practice have been recognized as an issue within the field (White, 2009).

A social capital lens can provide a helpful framework for community art programs to reflect on and articulate the ways in which members are able (or not) to access the benefits of the social relationships that are developed through their initiatives. Specifically, Shiell et al. (2020) suggest bearing in mind the potential resources that will accrue, how they will be distributed, and, finally, which social roles will be enhanced and which will be diminished. To strengthen the potential to advance health equity through community arts, we also suggest considering:

1. Who can (or cannot) access and exchange the resources accrued?
2. How are economic, cultural, and social forms of capital interacting?
3. How are different members experiencing and giving meaning to the social capital mobilized?

2.6 Methodological Considerations and Limitations

This theoretical study has its limitations. Regarding the methodology, we acknowledge the potential drawback of using a hermeneutic rather than a systematic approach to the literature search. Importantly, the literature on community arts we reviewed varied in scope, and the methodological approaches and the level of rigour of each study were not formally evaluated. That said, the study's theoretical and exploratory nature required flexibility in the search strategy, and the iterative approach enabled us to develop a rich understanding of key concepts and theories related to social capital and to identify multiple illustrative examples of community arts initiatives.

2.7 Conclusion

Community arts initiatives have emerged as meaningful opportunities to advance health equity. Using a theoretical synthesis approach, we drew on social capital concepts and theories to explore the implications of community arts initiatives for health equity. The analysis identified three interrelated theoretical premises. First, community arts are established as valuable sites for accessing the benefits of social relationships (bonding, bridging, and linking), which can foster resource equity and help individuals meet their needs. Secondly, we found examples of community arts at both individual and community pathways linking social relationships to health and health equity. Further exploring these pathways using mixed-methods and arts-based approaches may help clarify how community arts interact with social capital to influence health and health equity, especially at a community-level. Lastly, our study underscores the importance of equitable access to community arts, shaped by the macro context in which these programs operate. Given the importance of this last finding for promoting health equity, future studies may want to qualitatively explore access to and mobilization of social capital in specific community

arts contexts. Specifically, considering who has access to such resources, how resources are accumulated and distributed, and how the social relationships unique to specific groups influence health equity would be valuable. Finally, this study reinforces the value of sociological theories for illuminating the role of the arts, especially community initiatives, in promoting health and addressing health inequities by fostering social relationships through the provision of meaningful and creative opportunities.

2.8 References

- All Party Parliamentary Group on Arts, Health and Wellbeing. (2017). *Creative health: The arts for health and wellbeing* (Second Edition).
https://ncch.org.uk/uploads/Creative_Health_Inquiry_Report_2017_-_Second_Edition.pdf
- Anderson, S., Fast, J., Keating, N., Eales, J., Chivers, S., & Barnet, D. (2017). Translating knowledge: Promoting health through intergenerational community arts programming. *Health Promotion Practice*, 18(1), 15–25. <https://doi.org/10.1177/1524839915625037>
- Argyle, E., & Winship, G. (2018). Creative practice with clay: A mutual route to recovery? *Journal of Applied Arts & Health*, 9(3), 385–397. https://doi.org/10.1386/jaah.9.3.385_1
- Becker, L., & Jaakkola, E. (2020). Customer experience: Fundamental premises and implications for research. *Journal of the Academy of Marketing Science*, 48(4), 630–648.
<https://doi.org/10.1007/s11747-019-00718-x>
- Berkman, L. F., Glass, T., Brissette, I., & Seeman, T. E. (2000). From social integration to health: Durkheim in the new millennium. *Social Science & Medicine*, 51, 843–857.
[https://doi.org/10.1016/s0277-9536\(00\)00065-4](https://doi.org/10.1016/s0277-9536(00)00065-4)
- Boell, S. K., & Cecez-Kecmanovic, D. (2014). A hermeneutic approach for conducting literature reviews and literature searches. *Communications of the Association for Information Systems*, 34(1), 257–286. <https://doi.org/10.17705/1cais.03412>
- Bourdieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). Greenwood Press.
- Bourdieu, P., & Wacquant, L. J. D. (1992). *An invitation to reflexive sociology*. The University of Chicago Press.

- Carpiano, R. M., Link, B. G., Phelan, J. C., Editor, B., Lareau, A., & Conley, D. (2008). Social inequality and health: Future directions for the fundamental cause explanation. In A. Lareau & D. Conley (Eds.), *Social class: How does it work?* (pp. 232–263). Russell Sage Foundation.
- Clarke, J. N. (2020). *Health, illness, and medicine in Canada*. Oxford University Press.
- Clift, S., & Camic, P. (2015). *Oxford textbook of creative arts, health, and wellbeing: International perspectives on practice, policy and research*. Oxford University Press.
<https://doi.org/10.1093/MED/9780199688074.001.0001>
- Clift, S., McCrary, M., Kreutz, G., Musgrave, G., Danso, A. A., Silverstein-Bamford, Pelowski, M., Davies, C., Shurig, E., Koehler, F., Bungay, H., Holt, N., Jensen, A., Kahlol, R., Philips, K., Pickard, A., Thun-Hohenstein, L., Comeau, G., Martin, T., & Grebosz-Haring, K. (2023). *Arts, cultural engagement and health inequalities. Critical reflections on the UK Creative Health Review*. https://doi.org/10.31235/osf.io/p6ywg_v1
- Clift, S., Phillips, K., & Pritchard, S. (2021). The need for robust critique of research on social and health impacts of the arts. *Cultural Trends*, 30(5), 442–459.
<https://doi.org/10.1080/09548963.2021.1910492>
- Coggan, C., Saunders, C., & Grenot, D. (2008). Art and safe communities: The role of Big hART in the regeneration of an inner city housing estate. *Health Promotion Journal of Australia*, 19(1), 4–9. <https://doi.org/10.1071/he08004>
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98(2), 310–357. <https://doi.org/10.1037/0033-2909.98.2.310>
- Coleman, J. S. (1988). Social capital in the creation of human capital. *The American Journal of Sociology*, 94(1), S95–S120. <https://doi.org/10.1086/228943>

- Cunningham, M., Warren, A., Pollard, N., & Abey, S. (2022). Enacting social transformation through occupation: A narrative literature review. *Scandinavian Journal of Occupational Therapy*, 29(8), 611–630. <https://doi.org/10.1080/11038128.2020.1841287>
- Dam, A., Fryszberg, I., & Kirsh, B. (2008). Understanding the experience and impact of a community art studio initiative for adults with serious mental illness through narrative explorations. *The International Journal of the Arts in Society*, 3(2), 53–63. <https://doi.org/10.18848/1833-1866/CGP/v03i02/35462>
- Davies, C., & Clift, S. (2022). Arts and health glossary—A summary of definitions for use in research, policy and practice. *Frontiers in Psychology*, 13, 949685. <https://doi.org/10.3389/fpsyg.2022.949685>
- Daykin, N. (2019). *Arts, health and well-being: A critical perspective on research, policy and practice*. Routledge. <https://doi.org/10.4324/9780429356049>
- Daykin, N. (2021). Creativity, health and wellbeing: Challenges of research and evidence. *Musiikki*, 55(4). <https://doi.org/10.51816/musiikki.113249>
- Daykin, N., Mansfield, L., Meads, C., Gray, K., Golding, A., Tomlinson, A., & Victor, C. (2020). The role of social capital in participatory arts for wellbeing: Findings from a qualitative systematic review. *Arts & Health*, 13(2), 134–157. <https://doi.org/10.1080/17533015.2020.1802605>
- Diamond, J., & Gordon, I. (2017). Community crafts: A sustainable resource contributing to health, well-being, and community cohesion. In D. Sakellariou & N. Pollard (Eds.), *Occupational therapies without borders* (2nd ed., pp. 468–475). Elsevier Canada.

- Ehsan, A. M., & De Silva, M. J. (2015). Social capital and common mental disorder: A systematic review. *Journal of Epidemiology and Community Health*, 69(10), 1021–1028. <https://doi.org/10.1136/jech-2015-205868>
- Ehsan, A. M., Klaas, H. S., Bastianen, A., & Spini, D. (2019). Social capital and health: A systematic review of systematic reviews. *SSM - Population Health*, 8, 100425. <https://doi.org/10.1016/j.ssmph.2019.100425>
- Eriksson, M. (2011). Social capital and health – implications for health promotion. *Global Health Action*, 4(1), 5611–5611. <https://doi.org/10.3402/GHA.V4I0.5611>
- Fancourt, D. (2017). *Arts in health: Designing and researching interventions* (Vol. 1). Oxford University Press. <https://doi.org/10.1093/oso/9780198792079.001.0001>
- Fancourt, D., Bone, J., Bu, F., Mak, H., & Bradbury, A. (2023). *The impact of arts and cultural engagement on population health findings from major cohort studies in the UK and USA 2017 – 2022*. University College London. <https://sbbresearch.org/wp-content/uploads/2023/03/Arts-and-population-health-FINAL-March-2023.pdf>
- Fancourt, D., & Finn, S. (with World Health Organization & Health Evidence Network). (2019). *What is the evidence on the role of the arts in improving health and well-being? A scoping review* (67). WHO Regional Office for Europe. <https://apps.who.int/iris/bitstream/handle/10665/329834/9789289054553-eng.pdf>
- Fanian, S., Young, S. K., Mantla, M., Daniels, A., & Chatwood, S. (2015). Evaluation of the Kts'ihltla (“We Light the Fire”) Project: Building resiliency and connections through strengths-based creative arts programming for Indigenous youth. *International Journal of Circumpolar Health*, 74(1), 27672. <https://doi.org/10.3402/ijch.v74.27672>

- Finsveen, E., & Van Oorschot, W. (2008). Access to resources in networks: A theoretical and empirical critique of networks as a proxy for social capital. *Acta Sociologica*, 51(4), 293–307. <https://doi.org/10.1177/0001699308097375>
- Gordon-Nesbitt, R., & Howarth, A. (2020). The arts and the social determinants of health: Findings from an inquiry conducted by the United Kingdom All-Party Parliamentary Group on Arts, Health and Wellbeing. *Arts & Health*, 12(1), 1–22. <https://doi.org/10.1080/17533015.2019.1567563>
- Gordon-Nesbitt, R., & Parkinson, C. (2015). *Exploring the longitudinal relationship between arts engagement and health*. <https://www.artsforhealth.org/research/artsengagementandhealth/ArtsEngagementandHealth.pdf>
- Groot, B., De Kock, L., Liu, Y., Dedding, C., Schrijver, J., Teunissen, T., Van Hartingsveldt, M., Menderink, J., Lengams, Y., Lindenberg, J., & Abma, T. (2021). The value of active arts engagement on health and well-being of older adults: A nation-wide participatory study. *International Journal of Environmental Research and Public Health*, 18(15), 8222. <https://doi.org/10.3390/ijerph18158222>
- Grootaert, C., & Van Bastelar, T. (2013). *Understanding and measuring social capital: A multidisciplinary tool for practitioners*. World Bank. <https://doi.org/10.1596/0-8213-5068-4>
- Hansji, N. L., Wilson, N. J., & Cordier, R. (2015). Men's Sheds: Enabling environments for Australian men living with and without long-term disabilities. *Health & Social Care in the Community*, 23(3), 272–281. <https://doi.org/10.1111/HSC.12140>

- Holt-Lunstad, J., & Steptoe, A. (2022). Social isolation: An underappreciated determinant of physical health. *Current Opinion in Psychology*, 43, 232–237.
<https://doi.org/10.1016/j.copsyc.2021.07.012>
- Institute of Health Equity. (2010). *Fair Society, Healthy Lives The Marmot Review*.
<https://www.instituteofhealthequity.org/resources-reports/fair-society-healthy-lives-the-marmot-review/fair-society-healthy-lives-full-report-pdf.pdf>
- Islam, M. K., Merlo, J., Kawachi, I., Lindström, M., & Gerdtham, U. G. (2006). Social capital and health: Does egalitarianism matter? A literature review. *International Journal for Equity in Health*, 5(1). <https://doi.org/10.1186/1475-9276-5-3>
- Jaakkola, E. (2020). Designing conceptual articles: Four approaches. *AMS Review*, 10(1–2), 18–26. <https://doi.org/10.1007/s13162-020-00161-0>
- Kawachi, I., & Berkman, L. F. (2001). Social ties and mental health. *Journal of Urban Health*, 78(3), 458–467. <https://doi.org/10.1093/jurban/78.3.458>
- Kawachi, I., Subramanian, S. V., & Daniel, K. (2008). *Social capital and health*. Springer New York. <https://doi.org/10.1007/978-0-387-71311-3>
- Kay, A. (2000). Art and community development: The role the arts have in regenerating communities. *Community Development Journal*, 35(4), 414–424.
<https://doi.org/10.1093/cdj/35.4.414>
- Lagaert, S., Snaphaan, T., Vyncke, V., Hardyns, W., Pauwels, L. J. R., & Willems, S. (2021). A multilevel perspective on the health effect of social capital: Evidence for the relative importance of individual social capital over neighborhood social capital. *International Journal of Environmental Research and Public Health Article*.
<https://doi.org/10.3390/ijerph18041526>

- Lee, D. (2013). How the arts generate social capital to foster intergroup social cohesion. *The Journal of Arts Management*, 43(1), 4–17.
<https://doi.org/10.1080/10632921.2012.761167>
- LeMieux, J., & Sachant, P. (2015). What is art. In P. Sachant, P. Blood, J. LeMieux, & R. Tekippe (Eds.), *Introduction to art design, context, and meaning* (pp. 1–30). University of North Georgia Press.
- Lomas, J. (1998). Social capital and health: Implications for public health and epidemiology. *Social Sciences and Medecine*, 47(9), 1181–1188. [https://doi.org/10.1016/s0277-9536\(98\)00190-7](https://doi.org/10.1016/s0277-9536(98)00190-7)
- Lukka, K., & Vinnari, E. (2014). Domain theory and method theory in management accounting research. *Accounting, Auditing & Accountability Journal*, 27(8).
<https://doi.org/10.1108/AAAJ-03-2013-1265>
- MacLeod, A., Skinner, M. W., Wilkinson, F., & Reid, H. (2016). Connecting socially isolated older rural adults with older volunteers through expressive arts. *Canadian Journal on Aging*, 35(1), 14–27. <https://doi.org/10.1017/S071498081500063X>
- Maidment, J., Bay, U., & Courtney, M. (2014). Crafting social connectedness: A community development model. In L. Beddoe & J. Maidment (Eds.), *Social work practice for promoting health and wellbeing: Critical issues* (pp. 230–241). Routledge.
<https://doi.org/10.4324/9780203112816>
- McConnell, B. B. (2016). Music and health communication in The Gambia: A social capital approach. *Social Science & Medicine*, 169, 132–140.
<https://doi.org/10.1016/J.SOCSCIMED.2016.09.028>

Moore, S., & Kawachi, I. (2017). Twenty years of social capital and health research: A glossary.

Journal of Epidemiology and Community Health, 71(5), 513–517.

<https://doi.org/10.1136/jech-2016-208313>

Muntaner, C., & Lynch, J. (2002). Social capital, class gender and race conflict, and population health: An essay review of bowling alone's implications for social epidemiology.

International Journal of Epidemiology, 31(1), 261–267.

<https://doi.org/10.1093/IJE/31.1.261>

National Centre for Creative Health. (2022). *National centre for creative health briefing –*

February 2022. [https://www.culturehealthandwellbeing.org.uk/sites/default/files/2022-03/NCCH%20Briefing%20-](https://www.culturehealthandwellbeing.org.uk/sites/default/files/2022-03/NCCH%20Briefing%20-%20Health%20and%20Care%20Bill%20%28Creative%20Health%29.pdf)

[%20Health%20and%20Care%20Bill%20%28Creative%20Health%29.pdf](https://www.culturehealthandwellbeing.org.uk/sites/default/files/2022-03/NCCH%20Briefing%20-%20Health%20and%20Care%20Bill%20%28Creative%20Health%29.pdf)

Picher, M. (2007). Democratic process and the Theater of the Oppressed. *New Directions for*

Adult and Continuing Education, 2007(116), 79–88. <https://doi.org/10.1002/ace.278>

Poortinga, W. (2012). Community resilience and health: The role of bonding, bridging, and linking aspects of social capital. *Health & Place*, 18, 286–295.

<https://doi.org/10.1016/j.healthplace.2011.09.017>

Portes, A. (1998). Social capital: Its origins and applications in modern sociology. *Annual Review*

of Sociology, 24(1), 1–24. <https://doi.org/10.1146/annurev.soc.24.1.1>

Portes, A. (2000). The two meanings of social capital. *Sociological Forum*, 15(1), 1–12.

<https://doi.org/10.1023/A:1007537902813>

Putland, C., Baum, F., Ziersch, A., Arthurson, K., & Pomagalska, D. (2013). Enabling pathways to health equity: Developing a framework for implementing social capital in practice.

BMC Public Health, 13(1), 1–12. <https://doi.org/10.1186/1471-2458-13-517>

- Putnam, R. D. (1995). Bowling alone: America's declining social capital. *Journal of Democracy*, 6(1), 65–78. <https://doi.org/10.1353/jod.1995.0002>
- Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. Touchstone Books/Simon & Schuster. <https://doi.org/10.1145/358916.361990>
- Putnam, R. D., & Feldstein, L. (2004). *Better together: Restoring the American community*. Simon & Schuster.
- Sajnani, N., & Fietje, N. (2023). The Jameel Arts & Health Lab in collaboration with the WHO–Lancet global series on the health benefits of the arts. *The Lancet*, 402(10414), 1732–1734. [https://doi.org/10.1016/S0140-6736\(23\)01959-1](https://doi.org/10.1016/S0140-6736(23)01959-1)
- Shiell, A., Hawe, P., & Kavanagh, S. (2020). Evidence suggests a need to rethink social capital and social capital interventions. *Social Science & Medicine*, 257. <https://doi.org/10.1016/j.socscimed.2018.09.006>
- Smart, E., Edwards, B., Kingsnorth, S., Sheffe, S., Curran, C. J., Pinto, M., Crossman, S., & King, G. (2018). Creating an inclusive leisure space: Strategies used to engage children with and without disabilities in the arts-mediated program Spiral Garden. *Disability and Rehabilitation*, 40(2), 199–207. <https://doi.org/10.1080/09638288.2016.1250122>
- Smigelsky, M. A., Neimeyer, R. A., Murphy, V., Brown, D., Brown, V., Berryhill, A., & Knowlton, J. (2016). Performing the peace: Using playback theatre in the strengthening of police–community relations. *Progress in Community Health Partnerships: Research, Education, and Action*, 10(4), 533–539. <https://doi.org/10.1353/cpr.2016.0061>
- Sonke, J., Golden, T., Francois, S., Hand, J., Chandra, A., Clemmons, L., Fakunle, D., Jackson, M. R., Magsamen, S., Rubin, V., Sams, K., & Springs, S. (2019). *Creating healthy communities through cross-sector collaboration* [White paper].

- https://creativeplacemakingresearch.org/wp-content/uploads/2020/12/2019-09_ArtPlace-Field-Scan_Public-Health_UF-CHC-Whitepaper.pdf
- Spiegel, J. B., Breilh, M. C., Campaña, A., Marcuse, J., & Yassi, A. (2015). Social circus and health equity: Exploring the national social circus program in Ecuador. *Arts and Health*, 7(1), 65–74. <https://doi.org/10.1080/17533015.2014.932292>
- Spiegel, J. B., & Parent, S. N. (2018). Re-approaching community development through the arts: A “critical mixed methods” study of social circus in Quebec. *Community Development Journal*, 53(4), 600–617. <https://doi.org/10.1093/cdj/bsx015>
- Stickley, T. (2010). The arts, identity and belonging: A longitudinal study. *Arts & Health*, 2(1), 23–32. <https://doi.org/10.1080/17533010903031614>
- Sukhera, J. (2022). Narrative reviews: Flexible, rigorous, and practical. *Journal of Graduate Medical Education*, 14(4), 414–417. <https://doi.org/10.4300/JGME-D-22-00480.1>
- Szreter, S., & Woolcock, M. (2004). Health by association? Social capital, social theory, and the political economy of public health. *International Journal of Epidemiology*, 33(4), 650–667. <https://doi.org/10.1093/IJE/DYH013>
- Thoits, P. A. (2011). Mechanisms linking social ties and support to physical and mental health. *Journal of Health and Social Behavior, Source: Journal of Health and Social Behavior*, 52(2), 145–161. <https://doi.org/10.1177/0022146510395592>
- TONYC. (2024). *Theatre of the Oppressed NYC*. Theatre of the Oppressed NYC. <https://www.tonyc.nyc/>
- Travis, R., Rodwin, A. H., & Allcorn, A. (2019). Hip Hop, empowerment, and clinical practice for homeless adults with severe mental illness. *Social Work with Groups*, 42(2), 83–100. <https://doi.org/10.1080/01609513.2018.1486776>

- Uphoff, E. P., Pickett, K. E., Cabieses, B., Small, N., & Wright, J. (2013). A systematic review of the relationships between social capital and socioeconomic inequalities in health: A contribution to understanding the psychosocial pathway of health inequalities. *International Journal for Equity in Health*, 12(1), 1–12. <https://doi.org/10.1186/1475-9276-12-54>
- Uphoff, N. T. (2000). Understanding social capital: Learning from the analysis and experience of participation. In *Social capital: A multifaceted perspective* (pp. 215–249). World Bank. <https://www.ircwash.org/sites/default/files/Uphoff-2000-Understanding.pdf>
- Warran, K. (2025). Towards a sociology of arts and health: How can sociology reveal ‘that which is hidden’? *Perspectives in Public Health*, 145(3), 132–134. <https://doi.org/10.1177/17579139241290391>
- White, M. (2009). *Arts development in community health: A social tonic* (1st ed.). CRC Press. <https://doi.org/10.1201/9781003576518>
- WHO Commission on Social Connection. (2025). *From loneliness to social connection charting a path to healthier societies: Report of the WHO commission on social connection*. World Health Organization. <https://www.who.int/publications/i/item/978240112360>
- Wilkinson, R. G. (1997). *Unhealthy societies: The afflictions of inequality*. Routledge. <https://doi.org/10.4324/9780203421680>
- Wilkinson, R. G. (2005). *The impact of inequality: How to make sick societies healthier*. Routledge. <https://doi.org/10.4324/9781003060505>
- World Health Organization. (1948). *Constitution of the World Health Organization*. <https://www.who.int/about/governance/constitution>

Chapter 3: Study 2

Chapter 3 comprises the manuscript for my second thesis study. The manuscript has been prepared in accordance with the Perspectives on Arts in Health journal's guidelines.

Creating Connections: An Arts-based and Qualitative Exploration of Graduate Students' Experiences in a Peer-led Community Art Group

3.1 Abstract

Graduate students are at high risk of social isolation, which can lead to significant mental health challenges. A promising yet underutilized mental health promotion strategy in higher education is supporting the development of positive social relationships and a sense of belonging.

Meaningful engagement in activities with others can foster social connections. This is especially important for graduate students, who are less likely than undergraduates to use traditional mental health services. To this end, we aimed to explore the experiences of graduate students who participated in a peer-led community art group called “Art and Play”. We used a qualitative and arts-based methodology. Fifteen graduate students who attended Art and Play events participated. We conducted individual interviews and hosted an arts-based workshop, which included a group collage activity and discussions. Using a reflexive thematic analysis approach, we analyzed the data, including the interview transcripts, the workshop transcript, and the photographs of the group collages. We identified four interconnected themes: (a) beyond solitude, (b) bridging the gap, (c) belonging and connection, and (d) cultivating a community. Our findings support the potential of community art programs to help students alleviate the burden of social isolation, foster new social connections, and cultivate an active and supportive graduate student community.

Keywords: arts-based research; social relationships; community arts; graduate students; mental health

3.2 Introduction

Globally, there are serious concerns regarding the high prevalence of mental health issues among graduate students¹ (Evans et al., 2018). In Canada, the 2019 National College Health Assessment surveyed students across 58 post-secondary institutions and found that almost 68.9% reported “overwhelming anxiety,” and 51.6% reported “feeling so depressed that it was difficult to function” (American College Health Association, 2019). A key contributing factor is pervasive social isolation (Ali & Kohun, 2006; Ray et al., 2019; Sverdlik et al., 2018). Graduate students often report few social relationships due to demanding academic, employment and personal responsibilities. Furthermore, graduate programs often consist primarily of individual coursework and research, with few opportunities for meaningful social interactions (Okoro et al., 2022; Ray et al., 2019). Finally, graduate students are a diverse group, with varying social circumstances (income, housing, access to healthcare) and identities (sexual orientation, gender and roles, and race/ethnicity) that can compound their risk of social isolation (Miller & Orsillo, 2020; H. J. Park et al., 2023).

Fostering positive social relationships is essential to ease social isolation and promote better mental health (Holt-Lunstad, 2024; Proctor et al., 2023). Being socially connected can foster resilience and well-being, and improve one’s ability to navigate the challenges of the academic environment through better access to resources and social support (Hwang et al., 2017; McCray & Joseph-Richard, 2020; Sverdlik et al., 2018). Social capital perspectives developed by theorists, including Robert Putnam (1995) and Pierre Bourdieu (1986), explain the ways in which social relationships act as a determinant of mental health in individuals and communities. Putnam’s (1995) work centers on how strong “bonding” social capital between individuals with

¹ Defined as individuals enrolled in a master’s or doctoral-level university program.

similar identities (e.g., age, socioeconomic position, culture) and “bridging social capital” between individuals with different social identities can foster cohesive and reciprocal relationships, benefiting its members through supportive communities and collective action. Bourdieu (1986) highlights how the benefits of social capital (e.g. information, support) are influenced by an individual’s ability to access and gain membership in a group. Both perspectives offer important insights into the potential value of social relationships in the context of mental health promotion (Houle et al., 2025; Shiell et al., 2020).

In 2015, the International Okanagan Charter was established to support and inform efforts in higher education to promote well-being. The Okanagan Charter (2015) calls for adopting a health promotion approach beyond individualized services to “enable [students] to increase control over their health and its determinants” (p. 5) as well as investing in cross-sector partnerships between sectors (such as health and social services) that may benefit student mental health. This is especially important for graduate students, as they are less likely to use traditional mental health services for various reasons, including fear of stigma, feelings of shame, lack of access, and a perception that such services are reserved for undergraduate students (Kotera et al., 2022; Ray et al., 2019). Further, compared to undergraduate students, they report limited opportunities and multiple barriers to meaningful social engagement (Janta et al., 2014). Nonetheless, few studies have explored the potential benefits of fostering social connection among graduate students by facilitating opportunities for meaningful social engagement.

3.3 The Art and Play Program

The Art and Play program (APP) consists of bi-monthly visual arts-based social events co-facilitated by SH², a PhD candidate and occupational therapist, and a fellow graduate student (See Table 3.1 for a description of selected events). In the Fall of 2021, SH started the APP in response to conversations with other graduate students who shared stories of social isolation. While the program is not clinical in nature, it is shaped by SH's knowledge in occupational therapy and interest in community arts. This program is informed by key participatory arts principles, including an emphasis on the artistic process over the final product's aesthetic, and a philosophy of respect and encouragement for others' creative experience (White, 2009). We chose a community arts approach based on evidence that such initiatives can promote social inclusion, peer support, relationship building, and belonging (Fancourt & Finn, 2019; Gordon-Nesbitt & Howarth, 2020).

To the best of our knowledge, few, if any, arts-based programs for graduate students have been documented in the literature. To address this gap, we explored the experiences of graduate students who participated in Art and Play, a peer-led community art group.

² Identifying author information was removed prior to submission for peer review and has been retained in this version for clarity and readability purposes only.

Table 3.1*Example Art and Play Events*

Time	Theme and Activity	Description	Example Artwork
June 2022	Botanical Art	Creating greeting cards with dried florals.	
December 2023	“Traditions and Tapestry”: CD Weaving Activity	Creating a tapestry of upcycled CDs.	
September 2024	“Here are a few of my favourite things”: Zine Making Workshop	Creating a small handmade art book filled with images, text and drawings that bring joy.	

3.4 Methods**3.4.1 Methodological Approach**

We adopted a qualitative and arts-based research (ABR) methodology for this study.

ABR expands on qualitative methodologies by incorporating art-making as a mode of inquiry to

explore human experience (Leavy, 2025). Arts-based research can help us to “see” how people experience everyday activities, and is well aligned with our view that participation in community programs is a multidimensional, relational experience (Hartman et al., 2011; Simons & McCormack, 2007). The use of ABR to explore participant experiences in arts-based programs is relatively novel, but some examples can be found in the literature (e.g., van der Meulen & Omstead, 2021).

3.4.2 Participant Recruitment

In line with ABR and qualitative guidelines, we aimed to recruit a total of 15 participants (Leavy, 2017). We used purposeful sampling to recruit graduate students from the University of Ottawa who had participated in at least one of the events hosted by the APP between 2021 and 2024. Participants were recruited through presentations at APP events, posters displayed at the University’s graduate house, and online posters shared through the Graduate Students’ Association’s social media accounts. Snowball sampling was also used.

3.4.3 Ethics

This study was approved by the University of Ottawa’s ethics board (H-04-23-8607).

3.4.4 Data Collection

Our data collection methods were individual qualitative interviews and a group collage activity with discussions during an arts-based workshop.

3.4.4.1 Individual Qualitative Interviews. We conducted individual, virtual, semi-structured interviews with past APP participants. Each interview was audio-recorded, transcribed using built-in Teams features, and reviewed alongside the original audio to ensure accuracy. After several interviews, the guide was refined, and the remaining interviews were completed.

The interview guide was informed by key literature regarding social connections as a critical factor for mental health (Holt-Lunstad, 2024), and social capital theories and concepts (Bourdieu, 1986; Putnam, 1995). We included questions about socio-demographic characteristics, experiences of social relationships within the APP, and overall experience with social connection in the context of graduate studies (See Table 3.2 for sample questions). During the interview, participants were also invited to show some of their artwork created during the APP events. Following a photo-elicitation approach (Van Leeuwen & Jewitt, 2004), we discussed the experience of creating their artwork to help prompt specific memories of the APP, deepening participants' insights.

Table 3.2*Sample Interview Questions*

Section	Questions
1. Engagement in “Art and Play”	1. Can you describe your overall experience participating in this/these events? 2. Can you describe any helpful resources you learned about directly from the coordinators or other students? 3. Can you tell me about any factors that facilitated your participation in the event (e.g., time and location, free event)? 4. Can you tell me about any barriers to accessing the event (e.g., time restraint, finances, transportation, lack of information)?
2. Social Connection and “Art and Play”	1. How did participating in “Art and Play” impact your feeling of being socially connected to others? 2. How could we improve the program to support student connection and relationships better? 3. How would you describe a positive and supportive graduate student community?
3. Discussion of Artwork	1. Can you describe your artwork and your experience of the event you attended?

3.4.4.2 Group Collage Activity and Discussion: Arts-based Workshop. Following the interviews, participants were invited to take part in a four-hour arts-based workshop. The workshop aimed to provide a more in-depth exploration of experiences with the APP through collaborative collage making and group discussion. Specifically, the workshop consisted of an introductory activity, a group collage-making session, and a semi-structured group discussion where participants shared their reflections and interpretations of the collages (See Table 3.3 for workshop details). We chose group collage for the workshop for multiple reasons, including our expertise in the art form, the accessibility of materials, and its ability as a data collection method to foster exploration and representation of multiple realities, highlighting everyday experiences

that often go unnoticed (Butler-Kisber, 2014). SH and a volunteer assistant with knowledge and experience in the arts facilitated the workshop. The workshop was audio-recorded and transcribed, and the collages were photographed.

Table 3.3

Workshop Details

Activity	Description and Instructions
Introductory activity	Participants selected a card from a deck depicting well-known artists and related quotes. Participants were invited to introduce themselves to another participant using the card as inspiration for discussion. Then, each pair introduced the other to the group.
Group Collage	Materials: ● Poster boards (20" x 30") ● Magazines ● Scissors ● Markers ● Paint and brushes ● Glue ● Patterned paper Participants were invited to reflect on the following prompts and look through the magazines to find various images and words they feel represent their thoughts and experiences with Art and Play. Example prompts: ● What has been my overall experience with the Art and Play program? ● What kind of relationships have I made during Art and Play events? ● When I make art alongside other students... I feel? ● I hope the following Art and Play sessions will...?
Group Discussion	The participants gathered around the collages they had created and discussed their work with the following prompts to guide them. ● Can you describe your contribution to the collage? ● Was there a reason for the specific placement of the images alongside other participants' work? ● Can you share your impressions and interpretations of the collective collage? How do you feel the final collages represent the Art and Play program?

3.4.5 Data Analysis

Using a reflexive thematic analysis (TA) approach (Braun & Clarke, 2022), SH and RT analyzed the interview transcripts as well as the arts-based workshop transcript with the collage photographs pasted within it. A reflexive TA approach is suitable for identifying patterns across both textual and participant-created visual data (Braun & Clarke, 2022). Using the NVivo 14 (Lumivero) software, we engaged in six phases of analysis (Braun & Clarke, 2022). In phase one, we familiarized ourselves with the data by reading and re-reading the interview and workshop transcripts and writing our initial observations using annotations. We used memos to summarize emerging thoughts for each interview and the workshop discussions to enhance reflexivity. In the second phase, we generated codes and coded the dataset. Additionally, we created a visual map of the codes to document their relationships. In the third phase, we began generating potential themes and, once again, used visual mapping to collate data by these initial themes. We then proceeded to phase four, where we developed and reviewed our themes, and phase five, where we further refined and defined each theme. A summary of key themes, including their title, definition and selected participants' quotes, was shared with all authors for their feedback prior to finalizing the themes. Finally, we engaged in phase six, the written presentation of the themes.

3.4.6 Trustworthiness

Leavy (2025) suggests several criteria for evaluating arts-based research. Such criteria include, for example, considering the alignment between the research goals and research practices. In our case, we intentionally sought the addition of a group collage as a data collection method to create synergy between the research question related to graduate student experiences with art and social connection to complement our qualitative interviews. Since we were seeking

the experiences of participants to inform the value of the APP, the authenticity of the participants' voices was of crucial importance (Hurlbut & Brousselle, 2025; Simons & McCormack, 2007). Therefore, during our analysis and presentation of the findings, we focused primarily on participants' verbal accounts of their experiences with the APP and their interpretation of the collages they created, rather than imposing our interpretation of the visual data (collages). We also used member checking by reaching out to participants and sharing a draft of our findings. We asked participants to review the findings, confirm whether they accurately depicted their experiences, and review and clarify any direct quotations. Based on the feedback provided, we made minor revisions, thereby enhancing the validity of our findings (McKim, 2023).

3.5 Findings

A total of 15 participants were recruited. See Table 3.4 for participant characteristics. All 15 participated in the individual interviews, and seven also participated in the arts-based workshop. Participants chose pseudonyms.

During the workshop, we let participants take the lead on how they wished to create their group collage. They depicted a journey through graduate school from their first collage, "Ambiguous Beginnings" representing the start of graduate studies, through their second collage, "Middle Endeavours" representing the present moment of active engagement in their studies, and finally their third collage, "Hopeful Endings" as their visualization of their future (See Figures 3.1–3.3). Their experiences with Art and Play were described as occurring within and throughout their broader graduate student journey. While we developed multiple themes from the data, herein we focus on the participants' representations and interpretations of the APP as described in the group discussion of their collages and the individual interviews.

We identified four overarching and interrelated themes: (a) beyond solitude, (b) bridging the gap, (c) belonging and connection, and (d) cultivating community. The first theme includes two sub-themes: (a) breaking isolation, and (b) building bonds.

Table 3.4

Sociodemographic Characteristics of Participants

Characteristics	Number of Participants (N=15)
	<i>n</i>
Gender (Self-identified)	
Female	11
Male	4
Age	
20-25	1
21-30	7
31-35	4
36-40	3
Program Level	
Masters	8
PhD	7
Program	
Engineering	8
Education	1
Arts	3
Health Sciences	3
Student Status	
Domestic	5
International	10

isolation shared by many in the group (Workshop). Some international students spoke of especially intense feelings of isolation when they first arrived in Canada, which motivated them to join the APP. For example, Sylia shared: “I joined your workshop because, as an international student, I was alone” (Interview). Other participants noted the consistently high turnout of international students at the events. Jennifer said, “I think most students who attend [Art and Play] are international students” (Interview).

Both domestic and international students highlighted the program’s qualities that facilitated their participation, including the fact that attending required minimal effort on their part, that there was no financial cost, and that the timing and location were generally convenient despite their busy schedules and commitments. Adel explained: “I just found it really nice to join because there is not much work required for me. You provide everything” (Interview). In another example, Sylia said:

One key factor that facilitated my participation was the timing of the events, which were held in the evenings, making it convenient for me to attend after work. The fact that the events were free also encouraged me to join without worrying about the cost. (Interview)

Multiple participants also described art activities as being fundamentally social, compared to other activities often available on campus. Stephanie shared this sentiment while describing her motivation to come to the APP: “It was something I knew would be more laid back and social. There are events like trivia, and I feel like that’s a bit harder, [talking] with people, I’m more motivated for the art ones” (Interview).

3.5.1.2 Building Bonds. The second sub-theme touches on the ways in which the APP fostered new relationships between students and enhanced their long-standing relationships with friends and family. Some participants described how participating in the APP enabled them to

build friendships with other students in their fields of study: “I met some students from my program. Until now, I haven’t made acquaintances [with] all those classmates. I met some in Art and Play and we [discovered] we are from the same program” (Louisa, Interview).

Most international students in the study shared how they developed friendships with other international students. Sophie explained: “I met two other Iranian students...I never saw them before, but it was nice knowing them and introducing myself to them and making art. During the event and after the art gallery event, we became friends” (Interview).

In another example, Eric described: “I met some [other] Chinese students at Art and Play. So, we exchanged contacts. It’s good to make friends. We talk about our programs, our progress. It’s always good to talk” (Interview).

Participants described various ways the art activities allowed them to develop these bonds. For instance, Yasmin shared, “It was really fun for me... collaborating with each other, creating our own pieces of art, I loved it” (Interview). In another example, Aria noted, “When you’re doing something together, you’re building something in common together. It kind of [helps] to strengthen the friendship” (Interview).

Beyond building new friendships, many participants also highlighted how the APP allowed them to spend time with existing friends. Andre explained, “I went with one of my best friends [who is] also an international student, it made us feel really good” (Interview).

Numerous participants shared how the APP fostered interactions with their family members outside the group setting. Participants explained how they shared their art with family members (Louisa, Adel, Aria) or gave it as gifts to their spouse (Lily), parents (Keven), and grandparents (Rania). Rania described how she gifted her handmade buttons (Figure 3.4) to her grandparents:

I saw [my grandparents] after the [button-making] event. My grandpa picked one right away. He was like, ‘can I have this?...’ it’s so cool because, I did not do this intentionally. It’s just a symbol that I really like, which is a star and a moon, but he has a tattoo of it on his arm. And then my grandma took one of the other ones that I made, the strawberries. (Interview)

Figure 3.4

Rania’s buttons



This first theme highlights the bonds students developed with other students from similar backgrounds (e.g., cultural), academic programs and the strengthening of close friendships and familial relationships through the APP. In contrast, the following theme describes the program’s value in fostering connections between students of different backgrounds and experiences.

3.5.2 Theme 2: Bridging the Gap

Art was perceived as bringing out the multifaceted nature of individual students and, in turn, bringing forth their similarities and bridging their differences. In the research workshop,

participants were asked to draw a card depicting a well-known artist and introduce themselves using the card as an inspiration. Louisa described her experience:

I picked this card because she says, ‘don’t be yourself, be yourselves.’ Last semester, I took a course in communication, and the course was media diversity and identity, and one of my favorite concepts in that class [was] fluidity. It means that you are not fixed. Maybe at one time you are like this, and at another time you are like another; for me, my work is like data engineering; it’s more on the technical side, but I’m also very interested in social sciences and dance.... It’s plural. (Workshop)

During the same introductory activity, Rania explained:

We’re kind of comparing each other, and we’re noticing the differences between you, who’s in the sciences [talking about another participant], and I’m in psychology. But then we have this in common.... You find the computer to be fascinating, and you want [to] control such an incredible human invention. I thought that was really, really cool because, the brain is like a computer too... You’re using yours to study the computer, and then [we are] trying to understand humans. It’s like...we could bridge that gap together. (Workshop)

The interviews also reflected the potential of art, and more specifically, the APP, to increase awareness and bridge the gap between students, especially between different academic programs (Leah, Andre, Louisa, Eric, Aria). Other examples reported include relationships between students from different cultures (Louisa), Ottawa-based universities (Dana, Aria), genders (Louisa), junior and senior students (Leah), and domestic and international students (Adel).

Some students noted their observations of discrimination and exclusion based on gender (Leah) and race/culture (Yasmin) within the context of their graduate studies. Yasmin and Rania spoke about how the APP could further its commitment to enhancing social connections by incorporating themes and activities focused on cultural empathy, compassion and equality. Along these lines, two participants discussed how the APP helped familiarize students with different human experiences and identities. In the first example, Sophie explained:

With different political [situations in] other countries, it's [Art and Play] helpful. People can chat and exchange knowledge and build up their information on those events.

Because we don't have a lot of opportunities to do that as students, there are so many things happening in the world, but you just kind of go to class and you're just doing your thing, and it'd be nice if there were opportunities to talk about those things a bit.

(Interview)

In a second example, Sylia said, "Besides the art, besides the play, they [the events] increased our knowledge. For example, LGBTQ is so famous here in Canada, but we are not so familiar with this word in our home country" (Interview).

Thus, this second theme describes the potential of art to illuminate multifaceted identities and foster individual relationships with students of diverse backgrounds and experiences. In the third theme, we turn from individual relationships between students to a personal sense of belonging described by participants.

3.5.3 Theme 3: Belonging and Connection

Through the APP, participants reported an increased sense of belonging through stronger connections to the graduate student spaces, services, and community. Stephanie shared, "Going

to these events and trying to meet people who are in the graduate community, it's giving me a bit more of a feeling that I'm a part of something" (Interview).

Keven described the positive sense of connection to other students he experienced while engaging in the APP:

Sometimes you see similar faces at the art and play, and you either talk with them, or, ... even if you're not talking with them. They [are] still around. You hear them talk, talking to each other. So, it's just, it's a nice feeling. (Interview)

For most participants, the APP introduced them to the University's Grad House space. This was a welcome discovery as participants described how they spent most of their time working on their studies from home (Louisa, Dana, Sylia), at satellite campuses (Lily), or in isolated labs (Sophie, Aria, Leah) and had limited interaction with the campus' communal spaces. A dedicated place to gather was helpful in enhancing their sense of identity and belonging as a graduate student. Dana noted: "Having dedicated spaces for grad students is incredibly valuable. Grad school can be intense, and it's important to have a space where we can connect with others who understand the unique challenges we face" (Interview).

Keven represented this sentiment during the workshop by collaging found materials to illustrate students walking towards the Grad House for the APP events (Figure 3.5).

Figure 3.5

Collage Detail of the Graduate House labelled with the acronym GSAED



Note. Some of the illustrations here are copyright Katherine Dunn (2010) from the book *Creative Illustration workshop* [Quarry Press]. <http://www.katherinedunn.us>

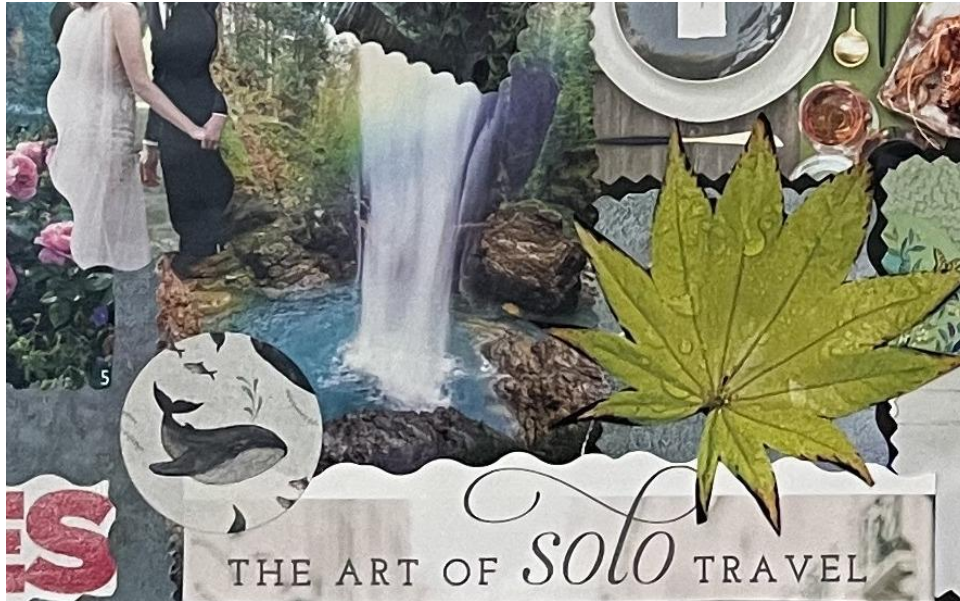
For some, APP was a unique opportunity to connect with the Graduate Student's Association. For example, Jennifer shared:

Honestly, before Art and Play, I didn't quite feel like I belonged to [the] Graduate Student Association. After being able to attend more activities like Art and Play or other

activities, I get to meet graduate students from all over the world, and it feels great.

(Interview)

In another example, Leah shared how she saw the facilitators of APP as a link to the Graduate Students Association (GSAED) to lead to improvements for graduate student experiences: “[Attending Art and Play], let me complain to you [Art and Play facilitators] about the [GSAED] website, and you actually did things about it” (Interview). Nonetheless, the APP events were often described as the only opportunity to visit the Grad House. Some participants described their sense of belonging as still evolving in the context of feelings of social isolation. Dana shared, “I felt a little more connected to other students during the APP event, but overall, I don’t often experience that sense of connection in my PhD journey” (Interview). In the workshop, Sophie suggested that a sense of belonging could be built through the shared experiences of isolation in graduate school: “I also put... ‘the art of solo travel’ (Figure 3.6). Even though we feel solitude, we [are] all feeling solitude, so it makes us connected” (Workshop).

Figure 3.6*Collage Detail “The Art of Solo Travel”*

This theme captures how participants experienced an evolving sense of personal belonging to the spaces and services dedicated to graduate students. This sense of belonging provided a foundation for participants to cultivate a vibrant community for themselves and other graduate students, as described in the final theme.

3.5.4 Theme 4: Cultivating a Community

Throughout the interviews and workshop, participants reported how, since participating in the APP, they felt motivated to cultivate a vibrant community for graduate students. When asked about the qualities they desired for a positive graduate student community, participants noted the importance of being welcoming and supportive, open to sharing resources and experiences, and having an active and meaningful presence on the University campus. Participants demonstrated many aspects of this community building within the APP. For

example, Dana described the welcoming and non-judgmental atmosphere that students provide each other during the art activities:

Everyone there was friendly, you know, and [trying] to encourage each other and give positive feedback to everything everyone created that was so.... I think [that is] one of the best aspects of these sessions for me, no judgment. (Interview)

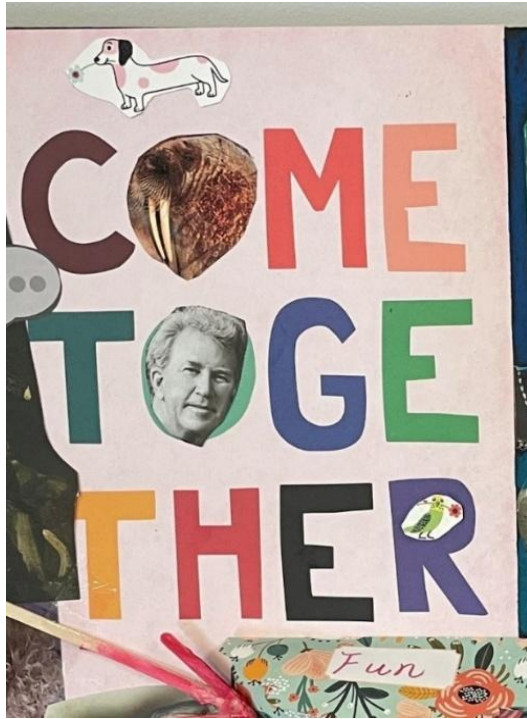
In a different example, Sylia described how students were sharing knowledge during the APP events:

Through conversations at the events, I learned about several valuable resources on campus, such as health services that can be covered by our insurance, that I wasn't previously aware of. Students also shared insights about workshops, like writing and research skill sessions. (Interview)

Many participants also described the need to “get the word out” and inform other graduate students about a budding community. For instance, Aria explains how a group of students from the APP started a WhatsApp group to keep other students informed of upcoming events and social gatherings.

We started with a small group of friends that met at Art and Play. And it grew, so when we meet with someone at Art and Play, they join the group. You post if you're going to the university to work, or if we plan to do something, we [let them know so] people can join or not. (Interview)

This desire to bring people together was illustrated by Jennifer during the workshop, who chose to collage the phrase “come together” to represent her perspective of the APP. (Figure 3.7).

Figure 3.7*Collage Detail “Come Together”*

Some students offered recommendations to help expand the program. Sylia noted, “More advertisements through platforms like Instagram, along with short clips or photos from previous activities, could help attract more students to join” (Interview).

Louisa took it one step further and highlighted the importance of the program’s sustainability for future students. She said, “I love this program. One day, we will all graduate, but there will always be new graduate students who need community, who need communication with others, and who need such a platform” (Interview).

Overall, the themes describe the value of the APP program to ease social isolation by offering an accessible and meaningful opportunity for graduate students to bond with other students with shared backgrounds and experiences, strengthen their existing relationships with friends and family, and build awareness and familiarity across students with varying

backgrounds and knowledge. The themes also highlight how the program helped foster a sense of belonging through engagement in shared spaces and facilities, and encouraged a dynamic process of cultivating a community around sustaining the APP group for other students on campus.

3.6 Discussion

This study highlights the value of the APP in reducing isolation, fostering positive social connections, and creating an emerging sense of belonging and community. Domestic and international students highlighted the program's unique characteristics that enabled them to participate, including the fact that it was a welcoming and non-judgmental space, that there was no cost to participation, and that events were held on the main campus and in the evening.

Prior to participating, international students in our study were especially impacted by social isolation, echoing literature that highlights multiple challenges, including language and cultural barriers, financial precarity and experiences of discrimination (Ray et al., 2019; Zheng et al., 2023). Theoretical perspectives (e.g., Bourdieu, 1986), highlight how social circumstances may limit one's access to social capital and its benefits. It is therefore promising that many participants noted the presence of international students at the APP events.

Through the APP, participants built positive social relationships with other students. They also fostered bonds with friends and family by inviting friends to join the program or gifting their art after the events. Finally, many described an emerging sense of belonging and community around the APP. The program was valued for enhancing social capital between group members, which is consistent with Daykin et al. (2020), who found bonding social capital is a notable feature of community art activities. It is also a key factor for mental health promotion through social support, sense of shared identity and belonging (Holt-Lunstad, 2022, 2024).

Participants in the study consistently shared a strong desire to cultivate and grow the Art and Play community. They actively engaged in collective actions to “get the word out” and share the program’s benefits with other graduate students by creating new communication channels to advertise upcoming events and connect outside of Art and Play.

Art itself was described as a powerful social activity that brings out the diverse facets of the self, raising one’s awareness and appreciation of diverse human identities and experiences. While past studies have demonstrated that community arts can help bridge people across different social backgrounds (e.g., Anderson et al., 2017; Daykin et al., 2020; Lee, 2013), our findings illuminate a novel way that this might occur. While a deep examination of identity theory is beyond the scope of our study, our findings can be understood through the emerging concept of “multiplicity of belonging”.³ This view suggests that reflection on one’s own social identities can foster positive social relationships between diverse individuals (Gaither, 2018).

It should be noted that participants primarily described the program’s influence on bridging students between different programs, rather than other social identities such as race and gender. Given that gender and race-based discrimination are a pervasive problem on campuses and a significant cause of mental distress for students of minority backgrounds, this is an important area of potential future development for the APP (Bravo et al., 2023). To this end, some participants suggested specific activities focused on group collaboration, cultural empathy and compassion moving forward.

3.7 Strengths and Limitations

Given the scope of the study, we focused on exploring the experiences of the APP and social connections. Therefore, we do not discuss other potentially beneficial aspects of the

³ See Gaither (2018) for a detailed discussion of the concept of multiplicity of belonging.

program, including the potential of art to relieve stress and for self-reflection and expression. Furthermore, during the arts-based workshop, it became clear that participants wished to tell a broader story about their graduate student experience. Following an ABR approach that embraces flexibility, we did not limit discussions to the APP. This led to an emphasis on the interview data herein. Nevertheless, the collages provided rich complementary data and point to the need for graduate students to make sense of their journey. Regarding our recruitment strategy, the participation demands of this study (one 60–90-minute interview + one 4-hour arts-based workshop) may have limited the diversity of the participants, including those with caregiving responsibilities or full-time work. While our approach provided deep insights into the experiences of the participants, a less time-consuming approach may have enabled the participation of students with more challenging schedules.

3.8 Implications and Conclusion

There are serious concerns surrounding the mental health of graduate students related to pervasive experiences of social isolation. Recent international initiatives have emphasized the need for a health promotion approach that extends beyond individual treatment and provides students with opportunities to access resources known to benefit their mental health, including positive social relationships and networks. Our findings support the potential of community art programs in addressing social isolation. Such programs may also foster new and existing social relationships between students of similar and different social identities and experiences. The potential for art to transcend academic programs was especially evident in our research. Participants shared a growing sense of belonging and commitment to developing an active and supportive community of graduate students. Given the strong evidence linking social activities to better mental health, enabling opportunities for activity-based groups, such as Art and Play, is a

worthy health promotion priority for higher education institutions. Cross-sector collaboration between higher education institutions and experts in activity engagement, such as occupational therapists and community program leaders, could support the development of activity-based programs for graduate students that are accessible, meaningful and sustainable within the local context. Future research may wish to look at sub-groups of graduate students at high risk of social isolation (e.g. international students, students experiencing disabilities, or students in caregiving roles), to better understand the ways in which they can lessen the experience of social isolation in graduate school through accessing opportunities for meaningful social and artistic engagement.

3.9 References

- Ali, A., & Kohun, F. (2006). Dealing with isolation feelings in IS doctoral programs. *International Journal of Doctoral Studies*, 1, 21–33. <https://doi.org/10.28945/58>
- American College Health Association. (2019). *American College Health Association-National College Health Assessment II: Canadian Consortium executive summary spring 2019*. https://www.acha.org/wp-content/uploads/2024/07/NCHA-II_SPRING_2019_CANADIAN_REFERENCE_GROUP_EXECUTIVE_SUMMARY.pdf
- Anderson, S., Fast, J., Keating, N., Eales, J., Chivers, S., & Barnet, D. (2017). Translating knowledge: Promoting health through intergenerational community arts programming. *Health Promotion Practice*, 18(1), 15–25. <https://doi.org/10.1177/1524839915625037>
- Bourdieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). Greenwood Press.
- Braun, V., & Clarke, V. (2022). *Thematic analysis: A practical guide*. SAGE.
- Bravo, A. J., Wedell, E., Villarosa-Hurlocker, M. C., Looby, A., Dickter, C. L., & Schepis, T. S. (2023). Perceived racial/ethnic discrimination among young adult college students: Prevalence rates and associations with mental health. *Journal of American College Health*, 71(7), 2062–2073. <https://doi.org/10.1080/07448481.2021.1954012>
- Butler-Kisber, L. (2014). Collage as inquiry. In J. Knowles & A. Cole (Eds.), *Handbook of the arts in qualitative research: Perspectives, methodologies, examples, and issues*. SAGE Publications, Inc. <https://doi.org/10.4135/9781452226545>
- Daykin, N., Mansfield, L., Meads, C., Gray, K., Golding, A., Tomlinson, A., & Victor, C. (2020). The role of social capital in participatory arts for wellbeing: Findings from a qualitative

- systematic review. *Arts & Health*, 13(2), 134–157.
<https://doi.org/10.1080/17533015.2020.1802605>
- Dunn, K. (2010). *Creative illustration workshop for mixed-media artists: Seeing, sketching, storytelling, and using found materials*. Quarry Books. <http://www.katherinedunn.us/>
- Evans, T. M., Bira, L., Gastelum, J. B., Weiss, L. T., & Vanderford, N. L. (2018). Evidence for a mental health crisis in graduate education. *Nature Biotechnology*, 36(3), 282–284.
<https://doi.org/10.1038/nbt.4089>
- Fancourt, D., & Finn, S. (with World Health Organization & Health Evidence Network). (2019). *What is the evidence on the role of the arts in improving health and well-being? A scoping review* (67). WHO Regional Office for Europe.
<https://apps.who.int/iris/bitstream/handle/10665/329834/9789289054553-eng.pdf>
- Gaither, S. E. (2018). The multiplicity of belonging: Pushing identity research beyond binary thinking. *Self and Identity*, 17(4), 443–454.
<https://doi.org/10.1080/15298868.2017.1412343>
- Gordon-Nesbitt, R., & Howarth, A. (2020). The arts and the social determinants of health: Findings from an inquiry conducted by the United Kingdom All-Party Parliamentary Group on Arts, Health and Wellbeing. *Arts & Health*, 12(1), 1–22.
<https://doi.org/10.1080/17533015.2019.1567563>
- Hartman, L. R., Mandich, A., Magalhães, L., & Orchard, T. (2011). How do we ‘see’ occupations? An examination of visual research methodologies in the study of human occupation. *Journal of Occupational Science*, 18(4), 292–305.
<https://doi.org/10.1080/14427591.2011.610776>

- Holt-Lunstad, J. (2022). Social connection as a public health issue: The evidence and a systemic framework for prioritizing the “social” in social determinants of health. *Annual Review of Public Health*, 43(1), 193–213. <https://doi.org/10.1146/annurev-publhealth-052020-110732>
- Holt-Lunstad, J. (2024). Social connection as a critical factor for mental and physical health: Evidence, trends, challenges, and future implications. *World Psychiatry*, 23(3), 312–332. <https://doi.org/10.1002/wps.21224>
- Houle, S., Thomas, R., Egan, M., & Sauvé-Schenck, K. (2025). *Community Arts and Health Equity: A Theoretical Synthesis using Social Capital Theories* [Unpublished manuscript]. Faculty of Health Sciences, University of Ottawa.
- Hurlbut, K., & Brousselle, A. (2025). Arts-based evaluation of the Communities ChooseWell program. *Evaluation and Program Planning*, 108, 102496. <https://doi.org/10.1016/j.evalprogplan.2024.102496>
- Hwang, I. C., Park, K. H., Kim, J. J., Yim, J., Ko, K. P., Bae, S. M., & Kyung, S. Y. (2017). Perceived social support as a determinant of quality of life among medical students: 6-month follow-up study. *Academic Psychiatry*, 41(2), 180–184. <https://doi.org/10.1007/s40596-016-0503-5>
- Janta, H., Lugosi, P., & Brown, L. (2014). Coping with loneliness: A netnographic study of doctoral students. *Journal of Further and Higher Education*, 38(4), 553–571. <https://doi.org/10.1080/0309877X.2012.726972>
- Kotera, Y., Tsuda-McCaie, F., Edwards, A.-M., Bhandari, D., Williams, D., & Neary, S. (2022). Mental health shame, caregiver identity, and self-compassion in UK education students. *Healthcare*, 10(3), 584. <https://doi.org/10.3390/healthcare10030584>

- Leavy, P. (2017). *Research design: Quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches*. The Guilford Press.
- Leavy, P. (2025). *Handbook of Arts-Based Research* (2nd ed). Guilford Publications.
- Lee, D. (2013). How the arts generate social capital to foster intergroup social cohesion. *The Journal of Arts Management*, 43(1), 4–17.
<https://doi.org/10.1080/10632921.2012.761167>
- McCray, J., & Joseph-Richard, P. (2020). Towards a model of resilience protection: Factors influencing doctoral completion. *Higher Education*, 80(4), 679–699.
<https://doi.org/10.1007/s10734-020-00507-4>
- McKim, C. (2023). Meaningful member-checking: A structured approach to member- checking. *American Journal of Qualitative Research*, 7(2), 41–52.
- Miller, A. N., & Orsillo, S. M. (2020). Values, acceptance, and belongingness in graduate school: Perspectives from underrepresented minority students. *Journal of Contextual Behavioral Science*, 15, 197–206. <https://doi.org/10.1016/j.jcbs.2020.01.002>
- Okanagan Charter. (2015). *An international charter for health promoting universities & colleges* (Version 1). University of British Columbia. <https://doi.org/10.14288/1.0132754>
- Okoro, C., Owojori, O. M., & Umeokafor, N. (2022). The developmental trajectory of a decade of research on mental health and well-being amongst graduate students: A bibliometric analysis. *International Journal of Environmental Research and Public Health*, 19(9), 4929. <https://doi.org/10.3390/ijerph19094929>
- Park, H. J., Ruberton, P. M., Smyth, J. M., Cohen, G. L., Purdie-Greenaway, V., & Cook, J. E. (2023). Lower SES PhD students experience interpersonal disconnection from others

- both inside and outside of academia. *Journal of Social Issues*, 79(1), 79–107.
<https://doi.org/10.1111/josi.12556>
- Proctor, A. S., Barth, A., & Holt-Lunstad, J. (2023). A healthy lifestyle is a social lifestyle: The vital link between social connection and health outcomes. *Lifestyle Medicine*, 4(4).
<https://doi.org/10.1002/lim2.91>
- Putnam, R. D. (1995). Bowling alone: America's declining social capital. *Journal of Democracy*, 6(1), 65–78. <https://doi.org/10.1353/jod.1995.0002>
- Ray, M. E., Coon, J. M., Al-Jumaili, A. A., & Fullerton, M. (2019). Quantitative and qualitative factors associated with social isolation among graduate and professional health science students. *American Journal of Pharmaceutical Education*, 83(7), 1558–1569.
<https://doi.org/10.5688/AJPE6983>
- Shiell, A., Hawe, P., & Kavanagh, S. (2020). Evidence suggests a need to rethink social capital and social capital interventions. *Social Science & Medicine*, 257.
<https://doi.org/10.1016/j.socscimed.2018.09.006>
- Simons, H., & McCormack, B. (2007). Integrating arts-based inquiry in evaluation methodology: Opportunities and challenges. *Qualitative Inquiry*, 13(2), 292–311.
<https://doi.org/10.1177/1077800406295622>
- Sverdlik, A., Hall, N. C., McAlpine, L., & Hubbard, K. (2018). The PhD experience: A review of the factors influencing doctoral students' completion, achievement, and well-being. *International Journal of Doctoral Studies*, 13, 361–388. <https://doi.org/10.28945/4113>
- van der Meulen, E., & Omstead, J. (2021). *The limits of rehabilitation and recidivism reduction: Rethinking the evaluation of arts programming in prisons*. 101(1), 102–122.
<https://doi.org/10.1177/0032885520978477>

Van Leeuwen, T., & Jewitt, C. (2004). *The handbook of visual analysis*. SAGE Publications Ltd.

<https://doi.org/10.4135/9780857020062>

White, M. (2009). *Arts development in community health: A social tonic* (1st ed.). CRC Press.

<https://doi.org/10.1201/9781003576518>

Zheng, K., Johnson, S., Jarvis, R., Victor, C., Barreto, M., Qualter, P., & Pitman, A. (2023). The experience of loneliness among international students participating in the BBC

Loneliness Experiment: Thematic analysis of qualitative survey data. *Current Research in Behavioral Sciences*, 4, 100113. <https://doi.org/10.1016/j.crbeha.2023.100113>

Chapter 4: Study 3

The chapter includes my third thesis study manuscript prepared for the Canadian Journal of Higher Education.

Gods, Dragons, and Games: An Arts-Based Inquiry into the Experiences of Social Relationships of International Graduate Students

4.1 Abstract

International graduate students face significant social obstacles that lead to poorer socialization experiences and can negatively impact their academic success and well-being. Our study aimed to explore the ways in which international graduate students perceive, experience, and navigate institutional relationships in the context of a Canadian higher education setting. We used participant-generated art (collage and poetry), group discussions, and individual qualitative interviews with seven international graduate students. The data was analyzed using a textual-visual thematic analysis approach. Building on the metaphor of “graduate studies as a game,” we developed three interrelated themes: 1) rulers of the realm, 2) are the Gods on your side?, and 3) winning the game. Our findings draw attention to universities as sites of overlapping fields of power (higher education institutions and the federal immigration system) that significantly influence the lives of international graduate students. They highlight the various ways supervisors share knowledge and resources with students, shaping these relational experiences and their overall experiences of graduate studies. Finally, our findings highlight barriers to positive socialization and the social and emotional labour international graduate students undertake to navigate institutional relationships for success.

Keywords: international graduate students, social relationships, arts-based, Bourdieu, higher education

4.2 Background

Defined as individuals who have received an international study permit in Canada and are enrolled in a master's or doctoral degree, international graduate students represent a significant subgroup of the graduate student population in this country. They comprise approximately one-third of the total graduate student population and over two-thirds of the total international student population (Statistics Canada, 2024). While the number of international students overall may be temporarily reduced by recent policy changes, graduate international students are exempt from enrollment caps (ICEF Monitor, 2025) and will therefore continue to be a significant percentage of graduate students in Canada.

Importantly, international graduate students often face significant social barriers. They must navigate the norms and expectations of graduate school while experiencing language and cultural barriers, potentially limiting academic and career progress, and leading to acculturation stress, social isolation and social exclusion (K. Clarke, 2023; Forbes-Mewett & Sawyer, 2016; Ogunsanya et al., 2018; Ray et al., 2019; Soufi Amlashi et al., 2024). They are also more likely to experience financial insecurity than domestic peers due to limited eligibility for funding and scholarships, compounded by higher tuition rates and policies restricting their work hours (Tan et al., 2025) and they experience higher degrees of stress around unpredictable career and immigration prospects (K. Clarke, 2023; Fandino & Banerjee, 2022; Tan et al., 2025; Varughese & Schwartz, 2022). Such challenges increase their risk of poor mental health and diminish their potential for academic and career success (Bekkouche et al., 2022; Tan et al., 2025). Despite these significant barriers, international graduate students are often left out of broader conversations and efforts to improve the health and well-being of graduate students (Javadizadeh et al., 2025). Fandino and Banerjee (2022) describe how the experiences of Canadian

international graduate students are “made invisible” by their liminal status as temporary residents.

Higher education is often understood through a socialization lens, in which learning the norms, skills, knowledge, and values of a particular social group is closely related to graduate students’ ability to succeed in their academic journey. Graduate-level studies are especially embedded in a strict set of explicit and implicit norms, or a “hidden curriculum,” that students learn to navigate through their interactions with peers, supervisors, and other faculty members (Gardner, 2008; Orón Semper & Blasco, 2018).

Positive socialization experiences can help mediate anxiety in graduate school (Yang & Xiangming, 2025). However, studies have demonstrated inequities in socialization experienced by international graduate students. For example, while domestic students often enjoy numerous and varied relationships with peers and faculty (e.g., across different settings, varied topics including personal, career, academic), international students often have fewer relationships and interact only with faculty through formal academic interactions (e.g., class, fieldwork, formal meeting) (Jeong et al., 2019). These students often feel excluded from social and scholarly opportunities where knowledge and support are shared due to language and cultural barriers, as well as experiences of discrimination and “othering” (Laufer & Gorup, 2019). Finally, international graduate students frequently experience unsatisfactory relationships and challenges with academic supervisors (Guo & Guo, 2017; Winchester-Seeto et al., 2014; Xing et al., 2023). This is especially significant as the quality of the academic supervisor-student relationship is closely linked to students’ success and mental well-being (Evans et al., 2018).

Few studies have explored the quality of relationships between international graduate students and their thesis supervisors or other institutional agents who hold significant authority to

shape their higher education experiences, especially in a Canadian context (Fandino & Banerjee, 2022; Gupta et al., 2022). Furthermore, few studies have explored how international students' experiences with institutional agents are embedded in a broader system with specific institutional norms, values, and practices that can impact experiences of socialization (Bekkouche et al., 2022).

Therefore, our study aimed to explore the ways in which international graduate students perceive, experience, and navigate institutional relationships in the context of higher education. We draw on Bourdieu's sociological theory of practice to help situate social relationships as embedded in enduring structural practices and relations that can (re)produce barriers for certain groups through everyday social exchanges.

4.2.1 Theoretical Framework

Noted French sociologist Pierre Bourdieu wrote extensively about the dynamics of social practices in higher education (Bourdieu, 1988). He viewed higher education as a site of production and reproduction of social inequities, which he explained through the interaction of his concepts of field, habitus, and capital. His foundational concept of field refers to "a set of objective, historical relationships between positions anchored in certain forms of power" (Bourdieu & Wacquant, 1992, p. 16). Bourdieu likens the field to the structure of a game, with its own set of rules, in which social agents play through exchanges of different types of capital to either maintain their position (for those in dominant positions) or transform their circumstances (for those in less dominant positions) (Webb, 2002). However, the capital held by individuals is unevenly distributed and often enduring, leading to unequal chances of 'winning the game' (Webb, 2002).

Within his broader work, Bourdieu differentiates between three types of capital: social (i.e., resources held in durable relationships and networks), economic (i.e., that which can be directly converted into money), and cultural (i.e., education, qualifications, and knowledge of cultural values and norms) (Bourdieu, 1986). Finally, Bourdieu provides the concept of habitus or the durable and embodied schemas one develops that “allow us to respond to cultural rules and contexts” (Bourdieu & Wacquant, 1992, p. 36). It takes time and effort to accumulate forms of capital and to incorporate new perceptions and ways of being into habitus (Bourdieu & Wacquant, 1992; Webb, 2002).

Applying Bourdieu’s key concepts, Gopaul (2011) explored how doctoral students’ interactions between habitus and capital shape different experiences of socialization. Briefly, he demonstrates how certain students’ habitus “may mediate their ability to cultivate important faculty and peer relationships as well as to understand the broader practices and processes of doctoral education” (p.14). Moreover, a student’s capital (or lack of) may prevent them from engaging in important socialization practices that help them get ahead.

Given the usefulness of Bourdieu’s theory of practice in higher education, we draw on his concepts to inform our explorations of international graduate students’ experiences. Therefore, in the context of our study, the cultural field of interest revolved around international graduate students, including research- and course-related work, scholarly and career-advancement activities, and navigating immigration-related rules and policies. To shed light on interactions among field, habitus, and capital that can lead to unequal experiences of socialization, we used arts-based research, given its potential to reveal embodied, tacit and relational experiences and support the articulation of complex human interactions.

4.2.2 Arts-Based Methodology

Our study was conducted following qualitative and arts-based research (ABR) methodologies. ABR builds on qualitative methodologies by exploring and seeking to understand the human experience through a creative, participatory, and embodied lens (Leavy, 2025). It is participatory, as participants are invited to create knowledge through their engagement in an art practice. It is especially valuable in its use of visual and textual metaphors that can help support reflection and illustration of complex social experiences which may “reveal insights that cannot [be] articulate[d] in words” (Simons & McCormack, 2007, p. 296). This may give voice to participants who may face obstacles to expressing themselves verbally in English-speaking studies (e.g., due to language barriers). Moreover, arts-based research can become a tool for equity by helping participants make sense of the world, question the way things are, and lead to the potential to resist and envision things differently (Jackson, 2021).

Despite its potential, to our knowledge, arts-based research has not been used to understand international graduate students’ experiences. Nonetheless, we also recognize that artistic practice occurs within its own set of social and cultural norms and rules that may facilitate or create obstacles to participation (hooks, 1998). Considering this, we describe the actions we took to provide culturally-safer and meaningful experiences with arts-based methods (including collage and poetry) for participants in the section below.

4.3 Methods

4.3.1 Reflexive Practice and Cultural Safety with International Graduate Students

Through an ongoing process of reflexivity, SH considered her positionality as a domestic, bilingual (French-English) doctoral student in Canada with a white settler heritage and how her lived experiences overlapped with and differed from those of international students in the study.

Some of the cultural safety practices (Lenette, 2022) we engaged with include: 1) taking the time to understand the socio-cultural origins of our chosen methods, 2) sharing data collection materials (e.g., workshop activity instructions and agenda) with participants prior to the workshop, with an invitation to provide their feedback, and 3) remaining open and flexible to adapting the chosen methods based on participant preference and feedback during the workshop and interview.

4.3.2 Recruitment

Following qualitative and ABR guidelines (Leavy, 2007), we recruited 7 participants, using purposeful sampling to recruit international graduate students from the University of Ottawa.ⁱ We collaborated with the Graduate Student Association on posters, social media, and presentations during social events. We also approached the university's student cultural clubs (over 50 student-led clubs representing various cultural identities) and invited them to share the virtual poster. Finally, we also employed snowball sampling.

4.3.3 Ethics

This study was approved by the University of Ottawa's ethics board (H-08-24-10673).

4.3.4 Data Collection

Our data collection methods included a collage and poetry activity followed by group discussions during an arts-based workshop, as well as follow-up individual qualitative interviews.

ⁱ Identifying author information will be removed prior to submission for peer review and has been retained in this version for clarity and readability purposes only.

4.3.4.1 Collage and Poetry Activity: Arts-based Workshop. The workshop (December 2024) focused on the broad theme of social connections within international graduate studies. Facilitated by the first author (SH) and a volunteer with experience in the arts, the workshop began with an introductory activity inspired by the Whole Person Process Facilitation's (Williams, n.d.) "transfer-in" technique, which aims to provide meaningful introductions that foster comfort and creativity. Specifically, we invited participants to each choose a nature-related object from a bowl (e.g., a stone, a pinecone, moss), pair up, and use the object to help introduce themselves to each other and to share their own definition of social connection. Each participant then introduced their partner to the group and shared key elements of their discussion.

Following the introductory activity, the facilitators shared the workshop agenda as well as verbal and written guidelines for the art-making activity (Appendix A). The art-making activity combined collage and poetry, allowing participants to use both words and images to represent their experiences. Through the selection and arrangement of chosen materials, collage can facilitate self-exploration and reflection, as well as help represent complex and multifaceted human social experiences (Butler-Kisber, 2014). Using poetry as an arts-based research tool allows the "capturing [of] heightened moments of social reality as if under a magnifying glass" (Leavy, 2007, p. 63). Prior to the workshop, we asked each participant about their home country and preferred languages. With this knowledge, we were able to seek out materials (e.g., magazines, books, digital images and text) representing these cultures and languages. We consulted with colleagues with similar cultural and language backgrounds to review the material, ensuring it was relevant and meaningful. During these consultations, we also discussed the potential for the linguistic rules of poetry to become a barrier to expression. To address this, participants were invited to use free-verse poetry (a flexible form of poetry with no specific

rules) and create in the language of their choice.¹ Furthermore, to alleviate any undue pressure, participants could select found poems and passages that resonated with their experiences rather than writing their own.

Following introductions, participants were then asked to represent their connections with individuals linked to institutional agents in higher education. Through discussion, the group decided that “institutional relationships” could refer to either relationships with specific individuals or relationships to a broader entity or system, including those that go beyond higher education (i.e. the Canadian immigration system). After creating their piece, participants shared and described their artwork with the group. The workshop was audio-recorded and transcribed, and the individual artwork was photographed.

4.3.4.2 Individual Qualitative Interviews. SH conducted individual, virtual, semi-structured interviews with each participant following the workshop. Given that participant-generated artwork can hold a multitude of meanings, the follow-up interviews aimed to provide participants with an opportunity to further discuss the significance and intention behind their artwork. The interview guide included a brief socio-demographic questionnaire, as well as questions about their thoughts, processes, and interpretations of their art piece in relation to their social relationships (based on literature on social networks and relationships), and their overall experience with the artistic methods and workshop (see Appendix B for sample questions). During the interviews, we shared the participant’s own artwork on the screen, using a photo-elicitation approach (Van Leeuwen & Jewitt, 2004) to help deepen participants’ insights. Each interview was audio-recorded, transcribed using built-in Teams features, and reviewed alongside the original audio to ensure accuracy.

4.3.5 Data Analysis

Our data analysis approach was informed by textual-visual thematic analysis (Trombeta & Cox, 2022). This approach builds on Braun and Clarke's (2022) six steps of reflective thematic analysis by adding a seventh step where the visual data is actively compared to the textual data. This approach strengthens the connections between data sources, enabling the development of more in-depth insights. Our data included the transcripts of the interviews and workshop (textual data) and the photographs of the participant-generated artwork (visual data). We used NVivo 14 (Lumivero) to organize and conduct our analysis. Specifically, SH read all transcripts to familiarize herself with the data and prepared summaries of each interview and the workshop. SH then began coding inductively (guided by the data itself) and deductively (inspired by Bourdieu's concepts) the entire textual dataset. SH met with RT and ME on separate occasions to share and discuss the coding process and developing patterns. Using handwritten visual mapping, SH then began generating potential themes and collating the data for each theme. Next, SH compared the photographs of the artwork with the interview data, following the textual-visual comparison questions² recommended by Trombeta and Cox (2022). Key notes were taken during this step using the image annotation feature and reviewed alongside initial themes. Finally, the themes were defined, discussed with all authors, and further refined. The trustworthiness of our findings is supported by the triangulation of researchers and data sources, as well as member checking of the final themes and citations.

4.4 Findings

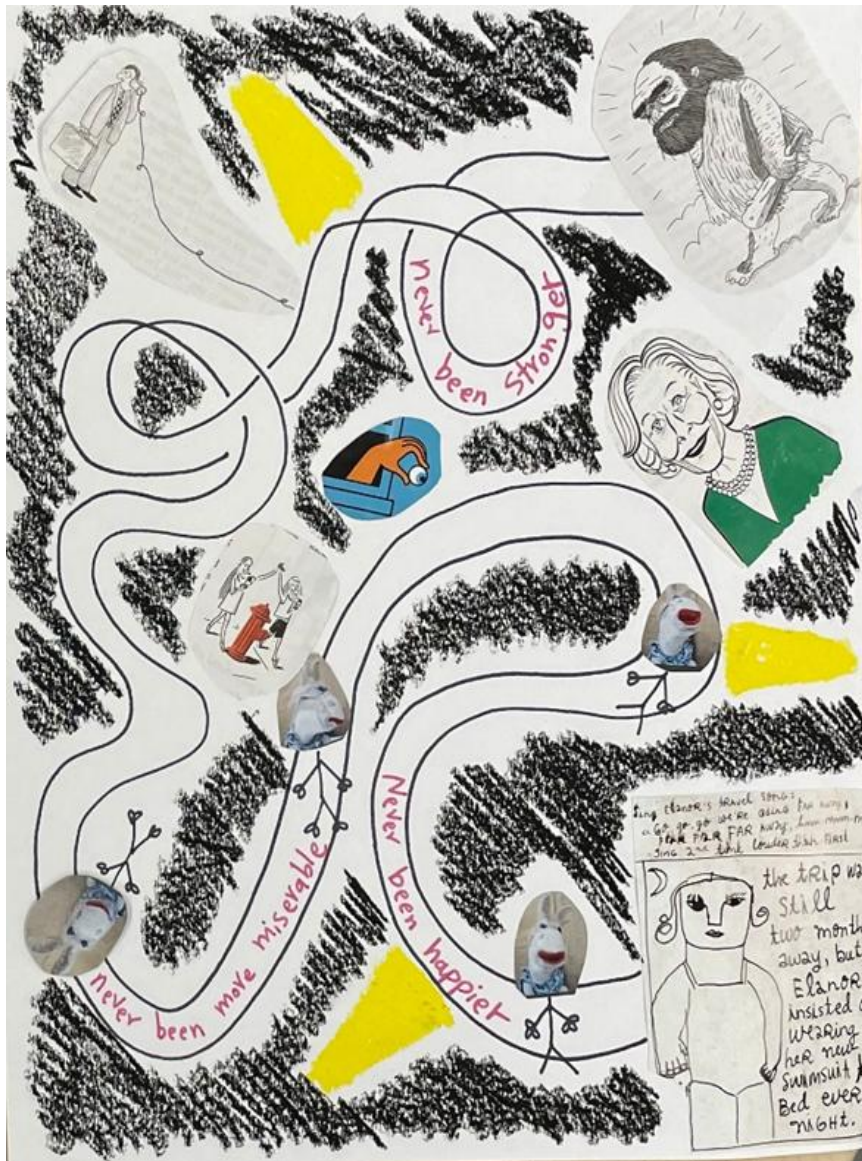
A total of seven participants were recruited. See Table 4.1 for participants' characteristics. Each participant chose a pseudonym.³

Table 4.1ⁱⁱ*Sociodemographic Characteristics of Participants*

Characteristics	Number of Participants (N=7) <i>n</i>
Gender (Self-identified)	
Female	6
Male	1
Age	
20-25	1
21-30	2
31-35	3
36-40	1
Home Country	
Iran	4
China	3
First Language	
Persian/Farsi	4
Cantonese	1
Mandarin	2
Program Level	
Masters	3
PhD	4
Program	
Health Sciences	3
Arts	1
Engineering	3
Marital Status	
Single	4
Married	3
Children at home	
Yes	0
No	7
Working during studies	
Yes	5

ⁱⁱ Tables and Figures will be placed in Appendices prior to submission for peer review. They were retained within the text in this thesis for readability purposes only.

While sharing their experiences with institutional relationships, participants predominantly spoke of the role of thesis supervisors and professors in shaping their experiences. They also discussed the important influence of Immigration, Refugees and Citizenship Canada (IRCC) on their lives. Inspired by Nora's art piece, which participants pointed out looked like a board game (Figure 4.1), and by Bourdieu's "game of society," we developed three main themes to describe how international graduate students perceive, experience, and negotiate their relationships with institutional powers. The three themes are: a) rulers of the realm, b) are the Gods on your side?, and c) winning the game. The first theme captures the important positions of power held by supervisors, professors and the IRCC. The second theme highlights the varied experiences with resource sharing and support from their supervisors and faculty, shaping their relational experience. The final theme captures the way in which participants describe their attempts to navigate social relationships to succeed in graduate studies.

Figure 4.1*The Game of Graduate School by Nora*

4.4.1 Theme 1: Rulers of the Realm (Field)

This theme captures the participants' view of the university as a site of interconnected institutional powers with significant influence over their lives. Jennifer stated during her interview: "When we talk about institution, I think of power immediately." Participants described two main sources of power in their lives: supervisors (for those in thesis-based

programs) or professors (for those with course-based degrees), and the Government of Canada's IRCC department. Inspired by the imagery and participant discussion surrounding these two powers, we (the authors) refer to them as the Gods (supervisors and professors) and the Dragon (IRCC) ruling over the realm or field of international higher education.

4.4.1.1 The Gods. For participants in thesis-based programs, the power held by their supervisors was established even before the formal admission process began. Many participants described the importance of their supervisors accepting them as prospective doctoral students, a foundational component of the formal admission process, and key to accessing Canadian graduate-level education. Jennifer shared in the workshop: "Supervisors are so important, my supervisor is the one who brought me to Canada." Nora agreed: "Yeah. It's almost the same for all of us." Seya's description of this process, depicted in Figure 4.2, is especially revealing of the high stakes that acceptance by a supervisor can have for a student's life. She describes her supervisor as "like a kind of God," attributing her willingness to supervise her, despite their slightly different research interests, to her ability to move to a university closer to where her husband was located. Seya also included a poem that reads: "There is literally no other way to get around the new life than by her blessing," demonstrating how her life as a Canadian graduate student is actively shaped by her supervisor's approval. She continues by saying that the black and light blue background symbolize how her supervisor has "the ability and the power to make my life bright or dark." She explains:

[When] she [her supervisor] was happy with my work and my results, [when] she gave me compliments, I was so happy and [felt] good, but when she was not satisfied [...] I [felt I] was falling behind the test and I was stuck.

Figure 4.2*Seya's Collage*

In response to hearing Seya's description of her supervisor, Hermes⁴ reinforced the analogy of God-like supervisors by stating, "That's definitely a typical Zeus, changing people's lives." He also shared his own story of how his daily mood is influenced by his supervisor's actions, and how he perceives them as evidence of her assessment of his work. He said:

Sometimes, even if they [his supervisor] don't reply back [to my] email, it's stressful. [I think to myself is] she thinking that I'm not doing a good job. [If I see she's not replying back [to] her [other emails that I am] loop[ed] in... I say [to myself] 'Ok, no, she's busy'

But that being said, it shows how important their roles are in our daily life. I mean, they could drastically change your mood for the day.

The above examples demonstrate the significant power and influence supervisors hold over many participants' lives, especially in thesis-based programs.

For students in non-thesis programs, power is experienced in the classroom or the “workplace of the faculty,” as Ivan interestingly put it. In this context, professors hold dominant positions through their conscious or unconscious gatekeeping of knowledge and their ability to decide how knowledge is transmitted, ultimately influencing students' potential to learn and succeed in their studies. Ivan described a recent situation with a professor:

In the classroom, we [students] face lots of different kind[s] of power that are not very equal [...] between the professor, the TA [teaching assistant], and the student. In a recent class [...], some students asked [the professor] some questions, and he just said, “Ask the TA.” The TA, they didn't know what the professor [was] talking about. We don't know who we should talk to.

While supervisors and professors were perceived as the highest power within the university, many participants expressed that their experience of international studies was shaped by broader institutional forces, notably the government of Canada's IRCC department.

4.4.1.2 The Dragon. The Canadian immigration department was described as the ultimate authority regarding participants' residency in Canada, which was closely intertwined with their graduate studies experience and well-being. The IRCC's influence and control were felt through rules and regulations that dictate whether they could come to Canada, sustain a life in Canada, and, for some, plan for future Canadian residency. In Figure 4.3, Hermes presents a

striking depiction of the department's power and control, represented by a dragon closely watching a ship carrying a family as they travel to Canada.

Figure 4.3

Herme's collage section depicting the IRCC as a dragon



Nora's description helps further situate the different levels of power described by the participants: "[It's like] a multilayer system, you're at the centre, surrounded by [your] supervisor, then the institution [University], [...] and the last layer is the IRCC [Immigration, Refugees, Citizenship Canada]. That's the last thing that controls everything."

Furthermore, Ava describes how the IRCC's procedures and policies directly impacted her ability to secure employment in her first semester in Canada:

When I was moving to Canada, usually, all the student[s] start in September, but I didn't get my visa in time, so I moved here in October. [...] I couldn't get a [teaching

assistantship] because I was not here at the start of the semester, so it was quite challenging. [...] I was not sure. “Can I get my visa? Am I going to get approved? Can I start my program on time?” It was [a] very, very stressful situation.

For most participants, changes in recent Canadian immigration policies were the source of high levels of stress and anxiety in their daily lives as students. Nora describes how changing policies affected her ability to engage fully in her graduate studies.

You [don’t have] control, you can’t even plan for a future life. [...] As [international] grad students, we need to focus one hundred percent on our stuff, which is tough. Every morning we’re waking up following the news [about changing immigration policies], mostly just trying to get back to the path and do our regular job, and it’s like a routine every day.

This inability to plan for the future due to changing rules was described by Hermes as “the worst part” and was described as much more difficult to deal with than the standard high-intensity environment of graduate school. Furthermore, Hermes described the IRCC as “scary” for its power to create uncertainty through changing rules, limiting his ability to plan for the future for himself and his wife, which was a primary reason for pursuing graduate school. He shared a poetic phrase from his first language with the group to summarize his feelings of uncertainty and worry:

With [the] IRCC [department policies’] changing left and right, we don’t know, especially nowadays, if I wake up tomorrow, [maybe my] wife has to leave the country because of the [changing] laws. [...] When they are changing the laws, it’s like you are not on the ground, it’s like we say in Farsi, “You are between ground and air.” So, you don’t know where you are.

For Jennifer, the changes in policies had already taken shape in her life due to the reduction in the number of international students coming to the university, which impacted her job security and well-being:

I'm teaching English, so my students are all international students, and then, because of the huge cutback [policies to reduce new international students in Canada], I just lost my job for the next semester because they have fewer classes. [...] I've been so anxious the whole semester. I knew that they were cutting the numbers severely, and it [had] a direct impact on me.

Whereas the power exerted by IRCC was felt as enduring and inflexible, their relationships with supervisors and professors were described as more nuanced and varied. We further explore these experiences in the following section.

4.4.2 Theme 2: Are the Gods on your side?

Supervisors and professors hold a unique position in international graduate students' lives. As we saw in the first theme, they exert significant influence over the game in many ways, and their powerful position is clearly felt by students. However, there are also institutional norms and expectations that they will offer support, resources, and guidance to help students navigate graduate school successfully. This theme captures the various ways in which students experienced the sharing of resources and support, and how this shaped their experiences in the relationship and their studies more broadly.

Among the thesis-based students, some described feeling very "lucky" to have positive relationships with their supervisors. In the workshop, Ava explains the feeling of comfort and care provided by her supervisor and depicted in her art (Figure 4.4). She says, "I think I was

lucky enough to have a very nice supervisor [...] [she] has provided such a space in the lab for us [students], that I really feel like home.”

Figure 4.4

Ava’s collage section representing the feeling of home provided by her supervisor



Some students noted that their supervisors provided resources throughout their studies that helped them overcome some of the obstacles they faced with finances and housing. For some, this took the form of more indirect knowledge-sharing about scholarships and funding opportunities (Nora). However, for others, the supervisor provided direct resources, such as financial support (Seya) and, in Jennifer’s case, even housing when she was unable to find suitable accommodations. Jennifer describes how access to such a critical and personal resource led to a more friendship-like relationship than she expected from a supervisor:

Sometimes I want to consider my supervisor as a friend. She has helped me a lot, in terms of my stud[ies], and my life. [...] I actually live in one of her properties because I couldn't find a place to live.

In contrast, Nora describes how she had to adjust her expectations of a more supportive relationship when her supervisor clearly outlined the limits of her role as advisor. She says:

At the beginning, I thought that it [the PhD] was a journey that I shared with my supervisor. [...] She [her supervisor] always was saying: 'I'm always here [...] but [the PhD], that's your job.' She was very clear about it. [...]. That's why she's everywhere, she's along the path, but not [with] me exactly. (See Figure 4.1)

Nora also reflects on how she has compared her relationship with other students, leading to feelings of disappointment and jealousy of those with closer relationships to their supervisor, "Sometimes, I compare my journey with others. I see [how] they are invited to their supervisors' houses, they have some gatherings with other classmates, but I didn't experience it the same way."

In non-thesis programs, participants shared their experience of professors who were willing to call out power dynamics at play in higher education and beyond, valued students' lived experiences, shared vital knowledge to navigate and resist power dynamics in academia and the job market, and dedicated their time to personal mentorship. Lilian shared her experience with a professor during a class: "[This professor], I admire her so much, and I feel she's so special. [During class], she reflected on the power relationship. [She said] 'you are already graduate students, I think we could learn from each other.'"

In another example, Ivan described how a professor shared important knowledge, which enabled her to adopt new and expanded perspectives to examine her experiences of power

dynamics and gender in her field of engineering. She depicts the significance of this knowledge in her piece (Figure 4.5) through birds representing herself and her shifting perspectives, set against words that represent knowledge transfer.

Figure 4.5

Ivan's collage section depicting the significance of knowledge transfer from a professor



In another example, Hermes described how a professor shared important knowledge to help him deal with challenging people in academia. He says: “She [a professor] shared some of the stories about how she managed to find her way through all those [difficult] people [in academia]. To me, that was a good experience because, that gave me hope.”

Finally, Lilian highlighted the significance of her mentorship experiences since arriving in Canada. She describes this sharing of knowledge and experience as occurring at least in part because of less hierarchical relationships between students and mentors. She says: “I wanted to emphasize the mentorship culture in Canada because it’s [...] so common here, but not that common back in my home country. There is no such culture. It’s more of a hierarchy, I think, back in China.”

While students shared many examples of institutional agents actively choosing to share important information and support their success, they also noted their acute awareness that professors and supervisors remain in positions of power. Jennifer depicted this tension by representing academic faculty with stuffed-animal dolls and noting that they can be seen as both cuddly and caring figures and as intimidating, potentially “putting on fake smiles,” making it more difficult to build trust in these relationships.

Participants experienced varying levels of support and resource-sharing from their supervisors and professors, shaping their relational experience and broader graduate studies experience. In the final theme, we explore how participants in the study described the importance of successfully navigating such institutional relationships for academic success and career advancement.

Figure 4.6

Jennifer's collage section depicting the power dynamics in relationships with faculty



4.4.3 Theme 3: Winning the Game

Students attempt to build strategic relationships (which Bourdieu would characterize as social investments) with professors and supervisors to get ahead. Obstacles to building these relationships, as well as reminders that they have yet to master the game, can lead to frustration and stress. There is hope that these social investments will lead them to win the game, as depicted by developing expertise and knowledge, completing their studies, building financial security, advancing in their academic careers, and securing their future.

Many participants emphasized the importance of building connections and relationships with supervisors, professors, and other professionals to gain access to resources that would improve their circumstances and increase their chances of success. In the context of succeeding

in academia, Jennifer talks about increasing the possibility of publishing her dissertation by seeking out the help of her supervisor and other professors:

I see that there is a path to go up in terms of academia. [...] I want to publish my dissertation and [...] maybe I need some help from my supervisor and the other professors. I need them to pull some strings.

Other participants focused on learning to develop networks to facilitate access to job opportunities. For example, Lilian, talked about how “they always say, if you want to get a job, you need to network with people and you really need to invite someone to have a coffee and a chat.” Nora also discusses the importance of building social connections to provide employment opportunities and notes the substantial time and effort international students put in to create such networks. She says:

One of the most important parts [of social connections], is [that they are] not just for supporting your emotional stuff, another aspect is making connections to have better job options, to improve your life, and those things, and that’s why many of us are trying so hard to create [a social network].

While domestic students have time to build their Canadian networks long before starting graduate school, international students often only meaningfully begin building these networks once they arrive. As Ava says: “All my supports and all my connections [were] formed after moving here [Canada].” The time it takes to build relationships was reiterated by multiple participants (Ava, Seya, Lilian).

Beyond the time it takes to build connections, participants also described important challenges and the effort required to build and navigate them, especially in relation to language, cultural, and academic norms. The ability to engage in conversation in English (a non-dominant

language) was brought up by many participants as a key challenge in connecting with others, especially those with higher academic status. Nora says:

[In a conference setting] ... consider this point. English is not our main language, we [always] have this [on our] mind, we judge ourselves. “That sentence that I’ve used, was [that] correct?” You’re in an academic [setting], and all those people, they are kind of your ideals. So, many times, for me, it has stopped me from starting conversations. [...]

The language problem is always there in the background.

During Jennifer’s interview, when we discussed why she may not have incorporated as much text in her piece, we co-created the interpretation that it represented a sense of not having the right words when talking to professors. Jennifer described how conversations between domestic students and professors appear very smooth and natural. She compares their knowledge of what is relevant to discuss and how best to keep the conversation going to her own below:

[I saw this domestic student, she,] can start a conversation with the professor, any of the professors, very naturally. [...] I’ve watched them having a conversation, I mean, they don’t have to only talk about, you know, studies and stuff. They can talk about anything. [...]. The conversations just went very smoothly. [...] And they branched out. I mean, the conversations didn’t have a fixed path. They talked a lot about, for example, the news and everything. And in my case, I can only go with “Oh, professor, how are your cats?” She was like, “they’re doing pretty well.” And then I didn’t know what else to talk about. [...] I don’t know how to, you know, stay in the flow. Even if I read the news, I don’t know how to engage [with] it in the conversation.

In the context of both institutional and broader social connections, students reflected on the effort and energy they invested in forming new relationships. Seya says: “A simple new

connection that I'm trying to make, and I have to think about how to approach [it], how to act [...] It does not come natural[ly]." In another example, Ava describes a need for more "emotional intelligence" to make and sustain connections compared to when she is back home. Finally, Jennifer uses an image of a young girl with a forced expression (Figure 4.7) to illustrate the conscious effort to be social even when it does not come naturally.

That's [the photo of the girl] me. It's the smile I make every time when I am at school, I [smile and say] "Hi, how are you? Good morning, how's life?" Yeah, so, I have to do that a lot if I'm in the office, and around seeing my professors and colleagues.

Figure 4.7

Jennifer's collage section depicting her conscious effort to be sociable



Despite their efforts to learn the rules and embody them effectively, participants were not always able to develop or mobilize their relationships successfully. This sometimes led to a sense of frustration and confusion, and feelings of exclusion. Nora explains:

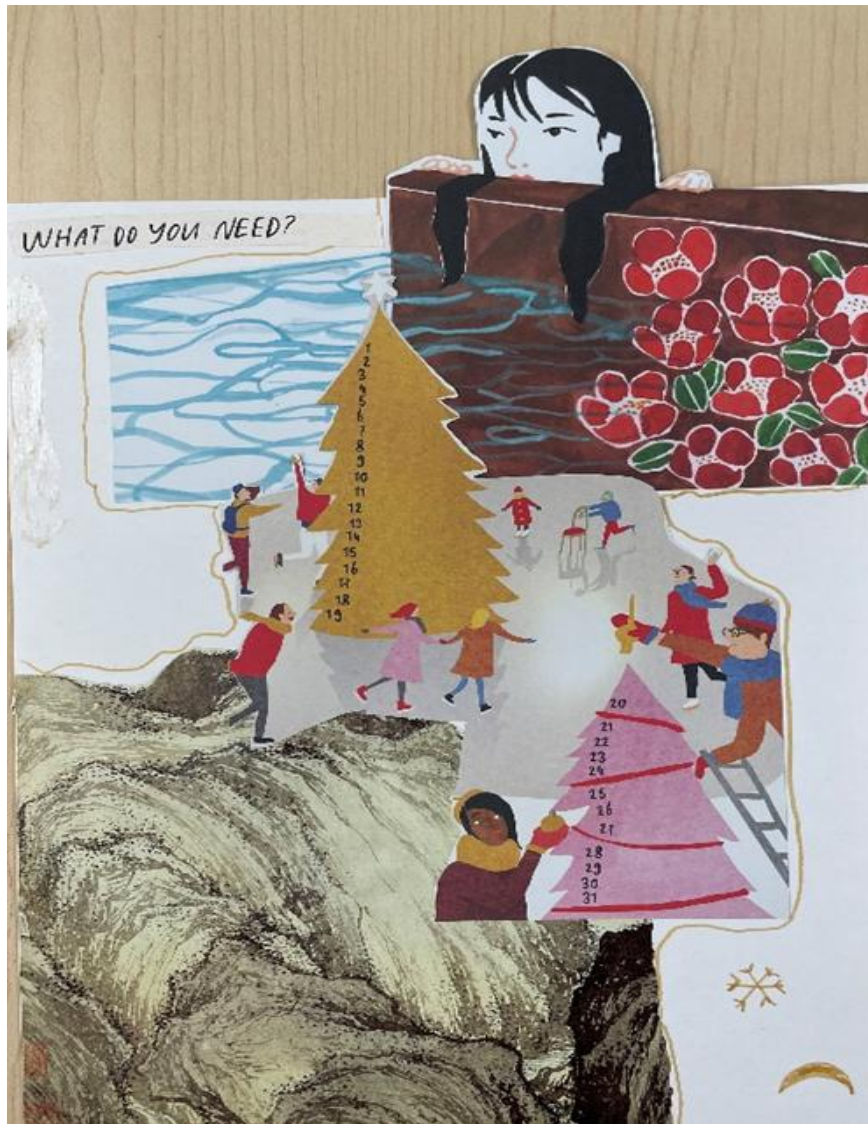
I've tried many times to get closer [to my supervisor], I remember, [...] I asked her "OK, Do you have any project I [would] really like to be involved, and to [grow our] connection." But, there was no result and I don't know why. I don't know why.

Nonetheless, some participants describe a sense of hope and confidence that they will, at some point, accumulate enough knowledge and expertise to win the game, and potentially change their position in the game of higher education itself. Lilian illustrates this sentiment in Figure 4.8, and describes:

The bottom corner is the Chinese traditional painting of high mountains [representing professors]. It represents someone you respect. And they may have more knowledge, more experience. The right [upper] corner is you [...] and maybe someday you will become the mountain.

Figure 4.8

Lilian's collage section representing her hope to become the one with expertise



4.5 Discussion

This study aimed to explore the ways in which international graduate students perceive, experience, and negotiate institutional relationships in the context of international higher education. While other studies have used the concept of the game to explore higher education

(Bathmaker, 2015; Winzler, 2025), to our knowledge, this is the first study to explore these dynamics through an arts-based methodology and with international students in Canada.

Our findings draw attention to universities as sites of overlapping powers (higher education institutions and the federal immigration system) that significantly influence the lives of international graduate students. Indeed, when presented with the concept of creating art on their “institutional relationships” in higher education, participants actively and intuitively chose to include the immigration system in their exploration. Through the metaphor of the dragon, participants described IRCC procedures and policy changes as the most important source of daily stress. Yet, stress around immigration status and processes is often overlooked in the literature on international graduate students’ experiences and well-being (Bekkouche et al., 2022).

Through the strong metaphor of supervisors as Gods, supervisors are positioned as powerful and highly important in international students’ experiences throughout their studies. This is consistent with other research, which found that international graduate students viewed their relationship with their supervisor as the greatest influence on their success in graduate school (Takashiro, 2017). Our findings underscore that international graduate students feel acute pressure to demonstrate their competence (through formal and informal interactions) to their supervisors and professors, given their power to shape their experiences (Gopaul, 2011).

Interestingly, our findings illuminate how the supervisor’s influential role in graduate school admissions is perceived not only as gatekeeping entry to graduate school but also as deeply intertwined with access to migration opportunities. Recently, Henderson et al. (2025) brought much-needed attention to the role of supervisors in doctoral recruitment practices, a decision-making power that is often left implicit in the literature and practice despite its potential to influence equitable entry into graduate programs. For international graduate students, such

decisions not only affect their access to graduate studies but also shape decisions around migration and citizenship. Furthermore, given the average age of graduate students, such decisions are likely to impact not only them as individuals but also their larger family units (Fandino & Banerjee, 2022).

Participants experienced varying levels and types of support and resource-sharing from their supervisors and faculty members, including the provision of supportive spaces, economic and housing resources, academic support, and knowledge sharing. The provision of resources beyond academic borders, such as housing and groceries, was also found in an earlier study by Calder et al. (2016), reflecting a long-standing lack of broader organizational and system-level (i.e., university, provincial, national, etc.) funding support for international students. Our findings support earlier research demonstrating the important role that supervisors and faculty can play in demystifying the “rules of the game” and the hidden curriculum of graduate studies (Bastalich, 2017; Orón Semper & Blasco, 2018) and suggest that this role is even more important for supporting international students. This sharing of valuable cultural capital may also help foster trusting and cooperative relationships that can be especially difficult to foster in relationships of unequal power (Szreter & Woolcock, 2004).

To win the game of graduate studies, international graduate students invest time and energy in strategically navigating their institutional relationships for success. Bourdieu describes efforts to accumulate capital and incorporate new norms into habitus as unwitnessed labour that comes at personal cost and sacrifice (Bourdieu & Wacquant, 1992; Webb, 2002). Using this lens, and through the textual and visual descriptions of the participants, the conscious and unconscious efforts to learn and embody cultural capital (including the fluidity of language and knowledge of cultural norms) are revealed, illuminating a form of unwitnessed labour performed by

international students. The invisible social labour and psychological stress that can accompany navigating these interactions are underemphasized in the literature on mental health in higher education, yet they are especially relevant to international graduate students (Bekkouche et al., 2022; Fandino & Banerjee, 2022). Furthermore, while domestic students must also learn and adapt to the hidden curriculum of graduate studies, their early socialization and integration of Western ways provide an undeniable head start. Through this academic habitus, domestic students can more easily navigate institutional social relationships, in turn, providing further opportunities to learn the ways of academia, thereby further widening the gap.

Limitations

The main limitation of our study relates to the recruitment strategy, specifically the demands for participation (a full-day workshop and a follow-up interview) that may have led to a less diverse set of participants. While our data collection methods enabled an in-depth exploration of their personal experiences, a more time-sensitive approach might have encouraged broader participation. That participants came from two distinct cultures confirmed that these experiences were not unique to students from a specific region. Nevertheless, a more intentional approach to recruiting diverse cultural experiences could have also been meaningful.

Conclusion

International graduate students are a significant sub-group of graduate students in Canadian universities. Using Bourdieu's theory of practice to locate international graduate students' social relationships within broader structural dynamics and arts-based methods, our findings emphasize higher education institutions as important sites of interacting power. Higher education institutions must acknowledge that the social interactions occurring within their walls

are deeply embedded in broader structural factors, such as migration and citizenship policies, which can impact international graduate students in various ways,

Furthermore, the social and emotional labour international graduate students undertake to navigate these relationships for success is an invisible, underappreciated psychosocial stressor that must be considered. To promote equity in higher education, supervisors and faculty members can share knowledge with international students to help them navigate the “invisible curriculum” more effectively, thereby promoting students’ social inclusion and positive socialization.

Finally, our study provides an example of how arts-based practices can be used as a tool for promoting equity in higher education by providing underserved students with opportunities to reflect and recognize the implicit social forces at play, thereby equipping them to navigate them more effectively. Future research may wish to explore whether joint art-making in higher education research and practice, across hierarchies of power (for example, between international graduate students and institutional agents), may provide opportunities to critically reflect on roles, build trust, and share important knowledge for navigating the game of graduate studies.

4.6 Endnotes

¹ Participants provided an English translation for the researchers to analyze.

² 1) How do the images reinforce the interview data? 2) How do the images contradict the interview data? 3) What is in the interviews but not the images? 4) What is in the images but not the interviews?

³ Participants self-identified gender identity may not align with their chosen pseudonym based on traditional male/female naming conventions.

⁴ Given that Hermes is the name of a Greek God, there was some concern that this choice of pseudonym could potentially undermine the coherence of the supervisors-as-God subtheme. However, the participant described how his choice of the name Hermes was intentional, given the story of the rivalry between Hermes and his brother, Apollo. He explained that Hermes uses his cunning and resourcefulness to get ahead, while Apollo uses his symbolic power as a more traditional God-like figure. We wanted to honour the participant's meaningful choice and believed it was relevant to the idea of negotiating power in institutional relationships; therefore, we kept the pseudonym.

4.7 References

- Bastalich, W. (2017). Content and context in knowledge production: A critical review of doctoral supervision literature. *Studies in Higher Education*, 42(7), 1145–1157.
<https://doi.org/10.1080/03075079.2015.1079702>
- Bathmaker, A.-M. (2015). Thinking with Bourdieu: Thinking after Bourdieu. Using ‘field’ to consider in/equalities in the changing field of English higher education. *Cambridge Journal of Education*, 45(1), 61–80. <https://doi.org/10.1080/0305764X.2014.988683>
- Bekkouche, N. S., Schmid, R. F., & Carliner, S. (2022). “Simmering pressure”: How systemic stress impacts graduate student mental health. *Performance Improvement Quarterly*, 34(4), 547–572. <https://doi.org/10.1002/piq.21365>
- Bourdieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). Greenwood Press.
- Bourdieu, P. (1988). *Homo academicus* (P. Collier, Trans.). Stanford University Press.
- Bourdieu, P., & Wacquant, L. J. D. (1992). *An invitation to reflexive sociology*. The University of Chicago Press.
- Braun, V., & Clarke, V. (2022). *Thematic analysis: A practical guide*. SAGE.
- Butler-Kisber, L. (2014). Collage as inquiry. In J. Knowles & A. Cole (Eds.), *Handbook of the arts in qualitative research: Perspectives, methodologies, examples, and issues*. SAGE Publications, Inc. <https://doi.org/10.4135/9781452226545>
- Calder, M. J., Richter, M. S., Mao, Y., Kovacs Burns, K., Mogale, R. S., & Danko, M. (2016). International students attending Canadian universities: Their experiences with housing, finances, and other issues. *Canadian Journal of Higher Education*, 46(2), 92–110.
<https://doi.org/10.47678/cjhe.v46i2.184585>

- Clarke, K. (2023). International graduate students' mental health diagnoses, challenges, and support: A descriptive comparison to their non-international graduate student peers. *Journal of International Students*, 13(3), 280–304.
<https://doi.org/10.32674/jis.v13i3.3148>
- Evans, T. M., Bira, L., Gastelum, J. B., Weiss, L. T., & Vanderford, N. L. (2018). Evidence for a mental health crisis in graduate education. *Nature Biotechnology*, 36(3), 282–284.
<https://doi.org/10.1038/nbt.4089>
- Fandino, I., & Banerjee, P. (2022). Temporary residents, lasting issues: International graduate students and Covid-19. *Canadian Ethnic Studies*, 54(3), 33–62.
<https://doi.org/10.1353/ces.2022.0024>
- Forbes-Mewett, H., & Sawyer, A.-M. (2016). International students and mental health. *Journal of International Students*, 6(3), 661–677. <https://doi.org/10.32674/jis.v6i3.348>
- Gardner, S. K. (2008). Fitting the mold of graduate school: A qualitative study of socialization in doctoral education. *Innovative Higher Education*, 33(2), 125–138.
<https://doi.org/10.1007/s10755-008-9068-x>
- Gopaul, B. (2011). Distinction in doctoral education: Using Bourdieu's tools to assess the socialization of doctoral students. *Equity & Excellence in Education*, 44(1), 10–21.
<https://doi.org/10.1080/10665684.2011.539468>
- Guo, Y., & Guo, S. (2017). Internationalization of Canadian higher education: Discrepancies between policies and international student experiences. *Studies in Higher Education*, 42(5), 851–868. <https://doi.org/10.1080/03075079.2017.1293874>

- Gupta, S., Jaiswal, A., Paramasivam, A., & Kotecha, J. (2022). Academic writing challenges and supports: Perspectives of international doctoral students and their supervisors. *Frontiers in Education*, 7. <https://doi.org/10.3389/feduc.2022.891534>
- Henderson, E. F., Akkad, A., Kier-Byfield, S., Burford, J., & Dangen. (2025). Seeking supervisability: The inclusivity implications of doctoral supervisors' engagement with prospective applicants prior to formal admissions. *Research Papers in Education*, 40(2), 167–187. <https://doi.org/10.1080/02671522.2024.2349989>
- Hooks, B. (1998). *Art on my mind: Visual politics*. New Press.
- ICEF Monitor. (2025, November 6). *Canada announces new incentives for international recruitment of master's and PhD students*. <https://monitor.icef.com/2025/11/canada-announces-new-incentives-for-international-recruitment-of-masters-and-phd-students/>
- Jackson, M. R. (2021). Addressing inequity through public health, community development, arts, and culture: Confluence of fields and the opportunity to reframe, retool, and repair. *Health Promotion Practice*, 22(1_suppl), 141S-146S. <https://doi.org/10.1177/1524839921996369>
- Javadizadeh, E., Oudshoorn, A., Letts, L., Barbic, S., & Marshall, C. A. (2025). The mental well-being of graduate students in Canada: A scoping review. *American Journal of Health Promotion*, 39(6), 921–935. <https://doi.org/10.1177/08901171251326308>
- Jeong, S., Blaney, J. M., & Feldon, D. F. (2019). Identifying faculty and peer interaction patterns of first-year biology doctoral students: A latent class analysis. *CBE—Life Sciences Education*, 18(4), ar59. <https://doi.org/10.1187/cbe.19-05-0089>
- Laufer, M., & Gorup, M. (2019). The invisible others: Stories of international doctoral student dropout. *Higher Education*, 78(1), 165–181. <https://doi.org/10.1007/s10734-018-0337-z>

- Leavy, P. (2007). *Method meets art: Arts-based research practice* (Third edition). The Guilford Press.
- Leavy, P. (2025). *Handbook of Arts-Based Research* (2nd ed). Guilford Publications.
- Lenette, C. (2022). Cultural safety in participatory arts-based research: How can we do better? *Journal of Participatory Research Methods*, 3(1). <https://doi.org/10.35844/001c.32606>
- Ogunsanya, M. E., Bamgbade, B. A., Thach, A. V., Sudhapalli, P., & Rascati, K. L. (2018). Determinants of health-related quality of life in international graduate students. *Currents in Pharmacy Teaching & Learning*, 10(4), 413–422. <https://doi.org/10.1016/j.cptl.2017.12.005>
- Orón Semper, J. V., & Blasco, M. (2018). Revealing the hidden curriculum in higher education. *Studies in Philosophy and Education*, 37(5), 481–498. <https://doi.org/10.1007/s11217-018-9608-5>
- Ray, M. E., Coon, J. M., Al-Jumaili, A. A., & Fullerton, M. (2019). Quantitative and qualitative factors associated with social isolation among graduate and professional health science students. *American Journal of Pharmaceutical Education*, 83(7), 1558–1569. <https://doi.org/10.5688/AJPE6983>
- Simons, H., & McCormack, B. (2007). Integrating arts-based inquiry in evaluation methodology: Opportunities and challenges. *Qualitative Inquiry*, 13(2), 292–311. <https://doi.org/10.1177/1077800406295622>
- Soufi Amlashi, R., Majzoobi, M., & Forstmeier, S. (2024). The relationship between acculturative stress and psychological outcomes in international students: A systematic review and meta-analysis. *Frontiers in Psychology*, 15, 1403807. <https://doi.org/10.3389/fpsyg.2024.1403807>

- Statistics Canada. (2024). *Proportion of Canadian and international student graduates, by International Standard Classification of Education*.
<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3710016403>
- Szreter, S., & Woolcock, M. (2004). Health by association? Social capital, social theory, and the political economy of public health. *International Journal of Epidemiology*, 33(4), 650–667. <https://doi.org/10.1093/IJE/DYH013>
- Takashiro, N. (2017). Asian international graduate students' extrinsic motivation to pursue degrees. *Psychological Thought*, 10. <https://doi.org/10.5964/psyct.v10i1.199>
- Tan, S. R., Lin, A., Fisher, C., Bouras, H., D'Mello, C., Hill, J., Hansen, A., & Marriott, R. (2025). Understanding the risk and protective factors associated with depressive symptoms in international students: A systematic review and meta-analysis. *Journal of International Students*, 15(10), 199–249. <https://doi.org/10.32674/47n8z156>
- Trombeta, G., & Cox, S. (2022). The textual-visual thematic analysis: A framework to analyze the conjunction and interaction of visual and textual data. *The Qualitative Report*.
<https://doi.org/10.46743/2160-3715/2022.5456>
- Van Leeuwen, T., & Jewitt, C. (2004). *The handbook of visual analysis*. SAGE Publications Ltd.
<https://doi.org/10.4135/9780857020062>
- Varughese, A., & Schwartz, S. (2022). The pandemic exposed the vulnerability of international students in Canada. *Carleton Newsroom*. <https://newsroom.carleton.ca/story/pandemic-international-students-vulnerability/>
- Webb, J. (with Schirato, T., & Danaher, G.). (2002). *Understanding Bourdieu*. SAGE.
- Williams, B. (n.d.). *Introduction to Whole Person Process Facilitation*. Retrieved
<https://www.dalarinternational.com/wp-content/uploads/2019/05/intro-wppf.pdf>

- Winchester-Seeto, T., Homewood, J., Thogersen, J., Jacenyik-Trawoger, C., Manathunga, C., Reid, A., & Holbrook, A. (2014). Doctoral supervision in a cross-cultural context: Issues affecting supervisors and candidates. *Higher Education Research & Development*, 33(3), 610–626. <https://doi.org/10.1080/07294360.2013.841648>
- Winzler, T. (2025). What's (in) a game? An empirical reflection on the relationship of higher education students to their disciplines. *Critical Studies in Education*, 66(1), 1–19. <https://doi.org/10.1080/17508487.2024.2317232>
- Xing, C., Mu, G. M., & Henderson, D. (2023). Power imbalance and power shift between Chinese international research students and their supervisors. In G. M. Mu & K. Dooley, *Bourdieu and Sino–Foreign higher education* (1st ed., pp. 104–123). Routledge. <https://doi.org/10.4324/9781003326694-9>
- Yang, G., & Xiangming, L. (2025). Graduate socialization and anxiety: Insights via hierarchical regression analysis and beyond. *Studies in Higher Education*, 50(7), 1365–1381. <https://doi.org/10.1080/03075079.2024.2375563>

4.8 Appendix A

Art Workshop Guide and Instructions

Art Workshop Guide



Theme: The lived experience of social connections as an international graduate student.

Art Activity: Combination of collage and poetry.

Thank you for your participation in this study. This guide has some tips and tricks to help make the most out of the art session. Don't forget, process over product!



Collage Making Tips

- Brainstorm by grouping images and other materials that you like (or are drawn to) in different ways on your page.
- Try choosing a colour palette (3–4 colours) and use images and other materials that primarily fit with this palette. You can always supplement with neutral (white, black, beige, grey) colours as well.
- Consider how you can overlap your materials to make it more visually interesting.
- Consider how you can repeat elements to make it more cohesive.
- You can also outline certain images or make marks on them to create intrigue.
- If using paint or liquid glue, paint it thinly so that it will dry faster.
- Keep baby wipes or clean rags handy to remove paint and glue.
- Tearing papers (rather than cutting with scissors) can create more interesting lines and dimensions. Or, you can use a mixture.
- As you answer the call of your creative work, think about balance (e.g., between light and dark, heavy and light), shape... rotate your piece, photograph your work in progress -- all of these considerations can help you to figure out where to go next.

**Remember, these are all just guidelines
and sometimes rules are meant to be
broken!**





Poetry Writing Tips

We will be doing free verse poems. This is a very flexible form of poetry, you do not need to have anything rhyme and it can flow in any way you wish.

- In poetry, a line is single line of words and a stanza is the combination of multiple lines.
- You can have as many lines and as many stanzas as you wish.
- Read and get inspired by the poems and materials provided.
- Think of words as symbols and how they can represent vivid images of experiences and emotions.
- Try finishing your line with very vivid and concrete nouns or verbs.
- You can get inspired by the cadence of your speech or your heartbeat to add rhythm to your poem.
- Experiment with space, leaving little or lots of space between lines.
- You can write your poem in the language of your choice. Please provide an English translation on a separate paper.
- You might have to write out a few versions, edit and adapt your poem before finalizing it.
- Don't forget to give your poem a title!



Remember, you can write your own poem, or cut out words and phrases you find in the materials provided and piece them together.



Please reflect on your relationships with people from the broader University institution (e.g. thesis supervisor, professors, other faculty members).

- With whom do you experience these types of social ties?
- Do you feel satisfied with both the quantity and quality of these relationships?
- What do you have in common, and how are you different from these individuals? (e.g. culture, language, position, age, etc.)?
- In which ways do you feel connected to these people?
- Do you feel satisfied with both the quantity and quality of these relationships?
- In what context do you experience these types of relationships?
- In which ways do these relationships support or not support your graduate student experience? (e.g. emotional support, sharing advice and information, providing opportunities, setting expectations)
- How do you feel your experience of being an international student influences these relationships?
- How could these relationships be enhanced to improve your experience?



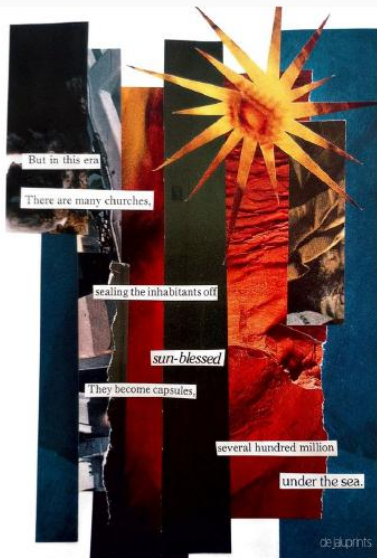
What images, words, colours, textures could help symbolize these relationships, connections, experiences and my thoughts and stories related to them?

Use the space below to write or doodle any ideas that come to mind.

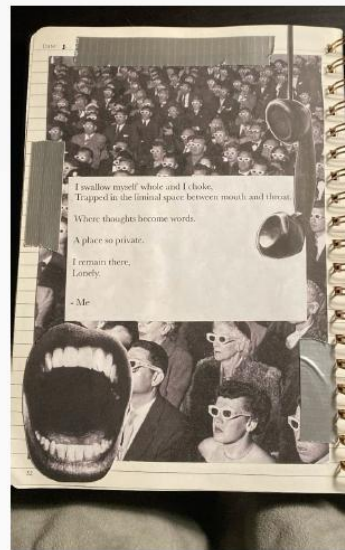
Examples mixing collage and poetry



Artist: Eden Roh



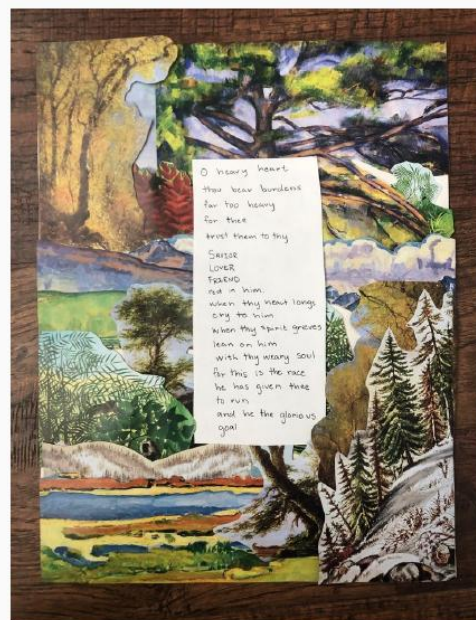
Retrieved from DeJaLuPrints



Poem by Avery Longfield



Artist: Anonymous



Retrieved from Rachel Smid

Your final pieces will be a mix of collage and poetry – otherwise known as poetry collage art.



4.9 Appendix B

Individual Interview Guide

Sample Questions

1. Can you describe your final art piece?
2. Which relationships inspired you when you created this piece?
3. Which specific elements of your piece represent these relationships?
4. How does the poem you created or chose to represent these ties?
5. Broader institutional social ties are often with people with different power levels. What do you have in common, and how are you different from these people?

How does this relate to the relationships represented in your piece?

6. In what ways do these relationships support or not support your graduate student experience?
 7. Do you feel satisfied with the quantity and quality of these relationships?
 8. Can you think of ways in which these relationships could be enhanced?
 9. How do you feel your experience of being an international student influences these relationships?
 10. Did you learn anything new about these relationships while creating the piece?
 11. With some time away from your piece, do you have any new insights that come to mind?
-

Chapter 5: Integrated Discussion

The overall aim of my dissertation was *to explore the ways in which arts-based practices can help both enhance and understand social connection in groups experiencing social isolation, such as graduate students*. To achieve my overall objective, I conducted three studies, presented in chapters 2-4¹. In this final chapter, I provide a brief summary of each study's main findings. I then follow with an integrated discussion of my findings in the context of the broader literature. Next, I outline the implications and contributions of my thesis research for higher education and the rehabilitation sciences. Subsequently, I provide an overview of the limitations, strengths and areas for future research. Finally, I offer an overall conclusion for the thesis.

¹ In accordance with the University of Ottawa's thesis guidelines, I provide a description of the roles and contributions of the various collaborators for each study in Appendix G.

5.1 Summary of Findings

In this section, I provide a brief overview of the main findings from each individual study.

5.1.1 Study 1: Theoretical Synthesis

The purpose of this first study was to understand the relationship between community arts and health equity using social capital theories. Using a theoretical synthesis approach, I analyzed literature on community arts (domain) from a social capital perspective (method theory). This led to the articulation of three interrelated premises linking community arts to health equity.

The first premise, *community arts can provide opportunities for accessing social capital*, highlights the potential of community arts programs as sites for individuals and groups to build social ties and access benefits associated with these relationships. Engaging in shared creativity often allowed for the development of reciprocal, supportive, and trusting relationships.

The second premise, *community arts-generated social capital is mobilized through individual and collective pathways to health and health equity*, captures the individual- and collective-level pathways through which the social capital and resources held and generated in community arts spaces may affect health and health equity.

The final theoretical premise is *that equitable access to community arts-generated social capital is essential for advancing health equity*. For community arts to develop social capital that positively impacts health equity, programs must be built on a thorough understanding of how resources are accessed and by whom, and of the meaning of those resources in the specific context.

Altogether, my first study supports the potential for community arts to advance health equity through providing opportunities for isolated individuals and groups to access and develop meaningful social relationships and their benefits, reinforcing the importance of equitable access to community arts participation.

5.1.2 Study 2: Arts-based and Qualitative Exploration of Art and Play

My second study's objective was to explore the experiences of graduate students who participated in an occupation-based, peer-led community art group called "Art and Play" as it relates to social connection. Using thematic analysis of the textual and visual data (individual qualitative interview transcripts, group collage, group discussion), I developed four interconnected themes centred around participants' experiences of the Art and Play Program.

The first theme, *beyond solitude*, captures participants' experiences of social isolation, especially those of international students, and how Art and Play provided opportunities for meaningful social engagement, strengthening pre-existing relationships with friends and family and providing an avenue for finding other students with similar experiences.

The second theme, *bridging the gap*, captures participants' experiences with art-making as a catalyst for revealing one's sense of plurality and familiarizing them with diverse social experiences, thereby promoting social connections between individuals with different backgrounds and experiences.

In the third theme, *belonging and connection*, participants shared how the Art and Play program increased their sense of belonging. They described the value of spaces and services dedicated to graduate students, as well as the importance of Art and Play in linking them to these resources.

The final theme, cultivating a community, captures the motivation, enthusiasm, and increased agency that participants described in building a supportive community of graduate students.

Together, this study's findings shed light on community arts as an important tool for enhancing social connection and belonging among graduate students, including international graduate students, in higher education.

5.1.3 Study 3: Arts-based and Qualitative Exploration with International Graduate Students

The goal of this final study was to explore the ways in which international graduate students perceive, experience, and navigate institutional relationships in the context of a Canadian higher education setting. Using a thematic textual-visual analysis approach and drawing on Bourdieu's social theory, I analyzed the data (individual collages, group discussion transcripts, and individual qualitative interview transcripts) and developed three main themes centred on the idea of graduate studies as a game.

The first theme, *rulers of the realm*, highlights the dynamic, overlapping power exerted by supervisors, professors, and the IRCC in the lives of international graduate students.

The second theme, *are the Gods on your side?*, reflects the variable relationship between students and their supervisors and professors in terms of support and style. Given the inherent hierarchical relationship, the sharing of resources and knowledge about "how to play the game" was especially meaningful for students.

The third and final theme, *winning the game*, captures the social and emotional investments international students make to navigate institutional relationships for success, and the obstacles they encounter, which may lead to experiences of frustration and stress but also hope for a time when they will have mastered the game.

This study highlights intersecting institutional powers shaping the experiences of international graduate students and the important efforts they make to navigate them successfully. It also draws attention to the significant role supervisors and faculty can play for international graduate students, by sharing resources and knowledge to help them navigate the hidden curriculum of graduate studies for success and promote their inclusion in academic settings.

5.2 Integrated Discussion

Having provided a detailed discussion of each study's findings and implications in the corresponding chapters, I now turn to an integrated discussion of my findings as they relate to the overall aim of this dissertation: *exploring the ways in which arts-based practices can help both enhance and understand social connection in groups experiencing social isolation, such as graduate students.*

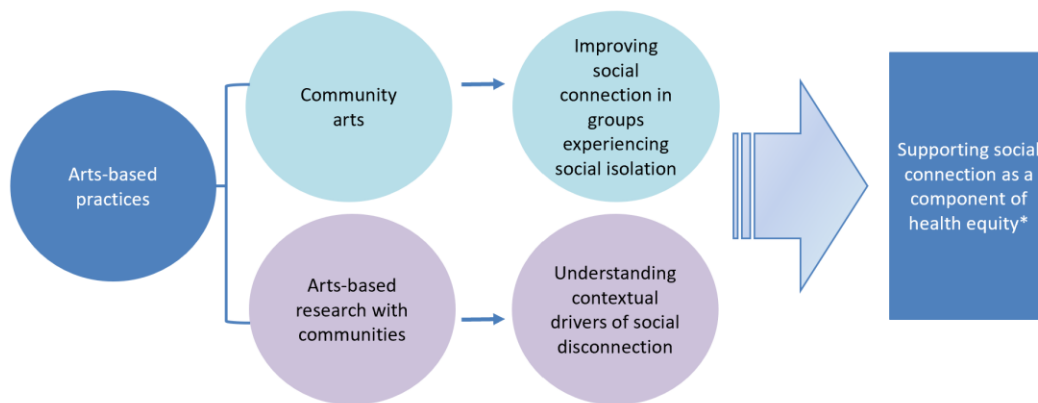
Sweeping claims that the arts can contribute to advancing health equity (All Party Parliamentary Group on Arts, Health and Wellbeing, 2017; Fancourt & Finn, 2019) have been criticized for lacking conceptual clarity around the type of arts and health practice, the kinds of inequities they may help address and in which ways, and the overreliance on testimonies from program websites and other grey literature rather than empirical qualitative or quantitative evidence (Clift et al., 2023). My research begins to fill some of these gaps through the in-depth theoretical and arts-based empirical exploration of arts-based practices and social connection.

Drawing on Lewis et al.'s (2021) approach to developing an integrated discussion for an article-based thesis, I examined the findings of each of my individual studies and considered how they overlap and differ, as well as their position within the broader literature. From this, I developed two main syntheses with implications for my overall research objective. The first,

Strengthening Social Connection Through Community Arts, highlights the value of community arts as a community-level approach for fostering positive social connection and its benefits in groups experiencing social isolation. The second, *Revealing Drivers of Social Disconnection Through Arts-based Research*, discusses the ways in which arts-based research can be a useful tool for better understanding the contextual factors that lead to social isolation and loneliness. Together, they offer two potential paths for supporting the value of arts-based practices for health equity. They also have important implications for integrating arts-based practices into broader health action to address social disconnection. In Figure 5.1. I provide a visual depiction of the relationship between the two main syntheses of the integrated discussion (light blue and purple) as proposed paths to support the value of arts-based practices for health equity (dark blue). Following the integrated discussion, I focus on describing the thesis's overall implications and contributions to higher education and rehabilitation sciences.

Figure 5.1

Visual depiction of the relationship between the main discussion syntheses as proposed paths to support the value of arts-based practices for health equity



*Supporting social connection as a component of health equity refers to addressing differences in opportunities for accessing social relationships and their benefits for health.

5.2.1 Strengthening Social Connection Through Community Arts

Improving social connection has increasingly been prioritized by global health leaders, given the extensive evidence of its role as a critical determinant of health (WHO Commission on Social Connection, 2025). Previous arts and health studies have provided evidence that arts participation can foster positive social connection in various groups across the lifespan (Fancourt & Finn, 2019; Gordon-Nesbitt & Howarth, 2020). The findings from my first and second studies expand on this research by showing how community arts can create opportunities for socially isolated individuals to build various types of relationships and access resources within them.

Since the COVID-19 pandemic, the implementation of individual approaches to enhancing social connection (e.g. interventions to enhance social skills, peer-to-peer support,

cognitive-behavioural therapy for loneliness) has grown rapidly (Holt-Lunstad, 2022; WHO Commission on Social Connection, 2025). While these interventions are important, community-level approaches are particularly well-suited for increasing opportunities for positive social connection on a broader scale. For this reason, there is a growing interest in community-level interventions, such as strengthening social infrastructure to facilitate social connection, promoting access and development of third places (e.g. community places outside one's home or work), and developing community programs that foster social connection (Aldrich et al., 2024; Sugiyama et al., 2023; Swader & Moraru, 2023; WHO Commission on Social Connection, 2025). In the following section, I consider the value of community arts as a community-level approach, describing how it addresses key facets of social connection to support better health. I then explore the specific characteristics of art-making that may be especially important for strengthening social connection.

5.2.1.1 Community Arts and Key Facets of Social Connection. As discussed in the introductory chapter, the World Health Organization (2025) recently adopted a conceptualization of social connection comprising three key facets: structure, function, and quality. Together, the three facets provide a “full scope” of how social connection impacts health (WHO Commission on Social Connection, 2025, p. 14). I consider how each facet interacts with my findings below.

The structural facet of social connection relates to the “number and variety of relationships, roles, and interaction” (WHO Commission on Social Connection, 2025, p. 9). While having a large quantity of social relationships does not necessarily mean they will provide benefits (function) or be positive (quality), the more opportunities to build social relationships, the greater the likelihood that these benefits will emerge (WHO Commission on

Social Connection, 2025). From a social capital perspective, it is through these structural opportunities that individuals experiencing social isolation can expand their networks, access social relationships, and draw on these resources for better health (Kawachi & Berkman, 2001). In both my first and second studies, community arts initiatives were found to serve as important sources of social relationships and networks (WHO Commission on Social Connection, 2025).

Importantly, my first study highlighted the need to consider the contextual nature of social capital when creating new sources of social connection. In my second study, international graduate students described how their access to the social benefits of the Art and Play program was facilitated by the creation of a non-judgemental space, the social quality of art, the program's central location, and the cost-free nature of the events. Community approaches looking to increase opportunities for social connection and social capital in local contexts must consider whether groups at the highest risk of social disconnection will be able to access the social benefits created; if not, they may inadvertently widen gaps in health outcomes related to social connection.

Notably, the structural dimension of social connection is thought to underpin the other two facets (function and quality), underscoring the need to acknowledge the specific types and patterns of relationships available through community arts programs. According to well-known social capital researchers Szreter and Woolcock (2004), a “balanced portfolio of relationships” that includes positive bonding, bridging and linking ties is thought to be especially beneficial for health and well-being (p. 655). My second study highlights the diversity of relationships that can be accessed and developed within a community arts program in a higher education setting. The fostering of bonding relationships between students of similar backgrounds (e.g.,

international students) and bridging relationships (e.g., students from different academic programs) was often reported. Linking social capital was less prominent, although the building of relationships between participants and the facilitators was noted. Whereas bonding ties are especially important for providing support to mitigate difficult health and social conditions, bridging and linking ties are critical for redistributing resources and creating social change (Szreter & Woolcock, 2004). Building linking ties (i.e. trusting relationships between people with different levels of power) has been described as a challenge in both the overall social capital literature (Szreter & Woolcock, 2004), and the arts and health literature more specifically (Daykin et al., 2020). Nevertheless, in my first study, several community arts programs were found to foster relationships between community members and people in positions of power (including law enforcement and business owners). The intentional approach to developing linking ties through community arts programs is an important path forward for realizing their potential for health equity.

Szreter and Woolcock (2004) contend that the formation of bonding, bridging and linking ties is only possible when one belongs to a broader network of trust, solidarity, and “shared norms of reciprocity” (p. 655). The development of a sense of belonging and caring communities are reported in the community arts literature more broadly (Dam et al., 2008; Gordon-Nesbitt & Howarth, 2020; Stickley, 2010), and in Art and Play more specifically. Indeed, participants in the Art and Play program described experiences of enhanced belonging to the collective space and its people. They also demonstrated a desire to reciprocate their positive experiences in the program by sharing their art with the broader student community and offering ideas to expand the program. This provides a useful perspective on how community arts can lay a positive relational foundation for diverse social ties to emerge.

Beyond the structural facet of social connection, my first and second studies also provide important insights into the function of social relationships created in community arts initiatives. In study 1, I explored and mapped community arts examples to individual-level pathways through which social relationships can impact health, including by providing social support and accessing material and information resources. I also found that social relationships developed through community arts can operate at the group or community level. For example, by enhancing collective efficacy for social and community development, influencing healthy social norms and creating safe and caring environments. Similar findings were observed in the context of my second study, where students described the sharing of resources for navigating student life, increased feelings of belonging and support, and the creation (and motivation to continue supporting) of a vibrant and inclusive graduate student community.

Finally, regarding the quality of relationships built in community arts programs, in my first study, I found many examples of trusting, cooperative, and reciprocal relationships (Groot et al., 2021; MacLeod et al., 2016). In study 2, I found similar positive experiences with the Art and Play program. Nevertheless, in both study 1 and the broader literature, negative social experiences among participants have been reported, including feelings of loss of support, discomfort around group participation, and exclusion in group decision-making (Daykin et al., 2017, 2020). These findings underscore the importance of creating and sustaining welcoming, non-judgmental environments, establishing safeguards for disagreements and conflicts, and understanding the broader social dynamics within which the program operates. Some key actions taken in Art and Play include grounding all activities in the spirit of experimentation, respect, and an emphasis on process over product, providing multiple avenues for reaching out to facilitators for feedback, establishing group rules, and ensuring facilitators stay informed of

current issues and tensions on campus (e.g., union issues, human rights protests, heightened stress around exam periods).

Overall, my thesis research advances important knowledge on the ways in which community arts can act on key facets of social connection. In the following section, I explore the particular characteristics of art-making that may be especially important for strengthening social connection.

5.2.1.2 Characteristics of Art-Making. Understanding and articulating “what is ‘in’ arts” has been described as “notoriously difficult” (Warran et al., 2022, p. 13). Moreover, in a community setting, untangling the complex interplay between artistic and social experiences and the unique components of each program’s context, participants, artistic content, facilitation, and social composition can be challenging (Warran et al., 2022). Nevertheless, my studies revealed important characteristics of community art-making for social connection, and I now consider them in the broader context of the literature.

Engagement in an aesthetic experience has been proposed by many as a distinctive feature of art-making for wellbeing (Chatterjee & Vartanian, 2014; Sonke et al., 2019; Warran et al., 2022; Wright & Pascoe, 2015). An aesthetic experience can be thought of as “making ordinary moments notable and extraordinary,” often involving high levels of awareness, feelings of flow and positive emotion, and providing the opportunity to engage with one’s own perspective of beauty and meaning (Sonke et al., 2019, p. 16). In my second study, participants expressed strong positive emotion about their experience with art-making, stating, “I loved it!” and “It made us feel really good.”

Importantly, the act of sharing a positive aesthetic experience and witnessing each other’s creative and meaning-making process was described by participants as key to

developing trusting, reciprocal relationships in several studies I reviewed in my first study (Groot et al., 2021; MacLeod et al., 2016). Similarly, in my second study, students reported that creating together helped build “something in common” with other students. Perkins et al. (2021) report similar findings in their survey on art-making and social connection, in which participants describe art as facilitating feelings of similarity through a sense of shared purpose. My second study expands on this idea, where students discussed art-making as a reminder of their own personal plurality and multifaceted selves (e.g., a participant reflecting on how they are an engineering student but also enjoy the social sciences and dance), increasing their awareness of the complexity of others. This aligns with a recent phenomenological study by Sagan et al. (2025) that explored the meaning of art-making for participants experiencing mental health challenges in a community setting. In this study, participants describe art-making as an opportunity for “connecting with one’s self” and “becom[ing] open to others.” The ability of art to engage in a dual process of making sense of the self and others during the art-making process may be an especially useful way to understand and explain the unique relational potential of community arts. Facilitating such opportunities through community initiatives may be especially significant for fostering social connection in people from diverse backgrounds.

Interestingly, while sharing in the art-making process itself is generally described as key for fostering connection (Perkins et al., 2021; Sagan, 2025; Sonke et al., 2019), in my second study, a student shared a significant bonding experience with her grandparents outside the events. This example demonstrates how community arts can also facilitate relationships beyond the immediate program events through the relational moments fostered by sharing or gifting one’s artwork. Furthermore, in my second study, participants reported a desire to share their artwork with students outside the Art and Play program to encourage others to participate

(e.g., by showcasing their art on campus). To this end, the product of art-making becomes a visual representation of the Art and Play community and can be used to raise awareness of the program and drive further participation. The impact of community arts artifacts on fostering social relationships beyond the art program is rarely recognized in the literature. Mobilizing participants' desire to share their artwork with the broader community (for example, through community exhibitions) may be an important way to expand grassroots initiatives, share program successes, and encourage broader community involvement and support around the creation and sustaining of creative spaces.

Overall, the findings from my thesis help articulate the value of community arts for fostering key aspects of social connection. This positions community arts as an important community approach to help address concerns about critically high rates of social isolation and loneliness, more generally, and among graduate students, more specifically. I discuss further implications of these findings later in the manuscript. Now, I turn to the second main synthesis, where I discuss the use of arts-based research as a tool for understanding and making visible experiences and drivers of social connection and disconnection.

5.2.2 Revealing Drivers of Social Disconnection Through Arts-based Research

Consistent trends demonstrate that economically or socially marginalized groups experience greater social isolation and associated health risks (Kim et al., 2008; WHO Commission on Social Connection, 2025). Developing a better understanding of the experiences of social (dis)connection of groups experiencing social isolation, such as international graduate students, and broader structures of exclusion has been designated as a priority in the recent WHO Commission on Social Connection report (2025). The authors of the report note the complexity of this task, given the multifaceted interactions among

“individual, interpersonal, community and societal factors” that drive experiences of social disconnection (p. 55), underscoring the need for diverse and comprehensive research approaches.

This synthesis explores how arts-based practices are an important tool for understanding and making visible the experiences and drivers of social (dis)connection. Specifically, I discuss two important and interconnected methodological strengths of arts-based research as revealed in my research. The first is the ability of arts-based research to foster varied and overlapping sources of knowledge, and the second is its value in accessing the structural context of individual experiences.

5.2.2.1 Arts-based research fosters varied and overlapping sources of knowledge.

In my research, I found that using arts-based methods, such as collage and poetry, fostered the integration of diverse and overlapping forms of knowledge, allowing me to address my research objectives in rich and comprehensive ways. The specific types of knowledge that became intertwined using arts-based research in my thesis include lived experience, relational knowledge, and theoretical knowledge. I discuss each one below.

In both my second and third studies, participants provided rich descriptions of their lived experiences of social (dis)connection. For instance, study 2 showed that graduate students, especially international graduate students, experienced persistent feelings of isolation in their program, as reflected in images of cats throughout their group collages. These findings correspond with previous research showing that graduate students are at high risk of social isolation, and international graduate students are even more likely to experience significant social challenges (Bekkouche et al., 2022; Fandino & Banerjee, 2022). My findings also highlight the significant efforts international graduate students make to build their social

networks, as well as the obstacles they face regarding language, culture, and the hidden curriculum. In study 3, participants expressed these experiences through varied artistic choices in their artworks. For example, one participant reflected how her non-use of text in her piece about institutional relationships paralleled her everyday experience of not knowing how and what to talk about with faculty members.

The ability of art to facilitate narrative expression, or give form to personal stories and experiences, making them more easily understood, has been well documented (Leavy, 2025; Sonke et al., 2019). The opportunity to express oneself visually may be especially important for participants with language barriers in research contexts, including international graduate students. Indeed, in my third study, international graduate students specifically mentioned language barriers as a key obstacle to positive socialization and inclusion in academic activities. It is notable that in study three, the rich imagery of Gods and Dragons representing institutional actors helped convey the intensity of the power hierarchy felt by international students, and the almost supernatural efforts they must make to navigate the hidden rules governing socialization with institutional agents.

Another important aspect of the arts-based research process that is thought to help develop meaningful and authentic findings around lived experiences is its participatory qualities (Barndt, 2004; Phillips et al., 2022). A participatory approach aims to reduce the hierarchy between researchers and participants with lived experience by sharing power and control in the research process (Brown, 2022). This was especially evident in my third study, where, as part of initiating the creative process during the workshop, I invited participants to reflect and brainstorm on how they wished to approach institutional relationships, acknowledging the complexity and abstraction of this concept. Based on my theoretical

knowledge, I expected participants to discuss their relationships with faculty and supervisors. However, students voiced the importance of integrating the immigration system as a significant power in their lives. In this way, the participatory approach helped capture the realities of international students' lived experiences that I, as a domestic student researcher, had not fully grasped, and ultimately illuminated interacting forms of power in higher education that are rarely acknowledged in the literature.

Another important form of knowledge enacted through the arts-based workshops was relational knowledge. In their study exploring participatory research, including arts-based research, Brown (2022) describes how sharing a task can foster a sense of closeness between participants, enabling relational knowledge to emerge. In the second study's group collage workshop, I observed how participants built on and extended each other's artistic decisions, ultimately creating a cohesive, meaningful story about experiences with graduate studies and the Art and Play program. During the group collage activity discussion, participants noted the various images (e.g., cats and a person alone at a window) that showcased their individual experiences of social isolation. They described how Art and Play was a formal opportunity to "come together" to alleviate social isolation and loneliness. However, a participant noted how they could also "come together" around their shared sense of isolation and loneliness. Using the text "art of solo travel" in the group collage, the participant invited other students to embrace their individual experiences as a collective and suggested that through this shared experience, students can find community and enhanced well-being. Phillips et al., (2022) describes this as "emergent knowing among participants," where participants develop personal knowledge through the research experience. The authors note that this kind of knowledge

production is often undervalued, yet it may be especially important for advancing social transformation through increasing participant agency.

Importantly, while individual collage is a well-established arts-based method (Butler-Kisber, 2014; Chilton & Scotti, 2014; Leavy, 2025), “group collage” as a method has not been explored in detail in the literature. I contend that this method was especially valuable in allowing students to engage in a shared act of creating together, building on and trusting each other’s aesthetic choices, generating meaningful connections between their sense-making processes, and co-creating knowledge around a shared experience. This produced a relational moment similar to Charise et al. (2024) description of art making as “an active means of giving form to ineffable moments of relationality, community, and thus social wellness” (p.455).

Opportunities for such experiences can be especially valuable for individuals who experience social isolation and exclusion. In a scoping review, Salma (2024) found that arts-based research with immigrant and racialized older adults often lead to a sense of social connectedness and self-empowerment through opportunities to be seen and heard on one’s own terms. Similarly, in my third study with international graduate students, participants supported one another’s art processes, decisions, and experiences, often leading to moments of group empowerment and significant knowledge generation. For example, a participant shared with the group her piece depicting her relationship with her supervisor, using the image of a long road to represent her journey through the PhD. Participants applauded the significance of her work and noted how much her collage looked like a board game. This led her and others to describe the PhD as a game, a theme that eventually became central to the overall research findings.

One final type of knowledge harnessed through an arts-based approach is theoretical knowledge. While there are different perspectives around the role of theory in arts-based research,² I found the use of theory highly compatible with this methodological approach.

In both my second and third studies, I found that using social capital theories helped me understand different aspects of social connection, types of relationships, their potential benefits, and intersections with other forms of capital. Using this knowledge, I organized both arts-based workshops to deepen my understanding of these patterns and concepts in the context of graduate students' and international graduate students' experiences. Well-established arts-based researchers, Barone and Eisner (2012) contend that arts-based methods can help us become aware and "say something" about the relationships and connections suggested by theoretical and conceptual frameworks (p. 7). In both studies, participants created artwork that led to a better understanding and awareness of social connection through a social capital lens. For example, the theoretical concept of bridging social capital has increasingly been used to explain the benefits of community arts for fostering social relationships between different groups (Daykin et al., 2020; Lee, 2013). Findings from my second study help extend understanding of how the arts may foster bridging social capital through fostering awareness of one's sense of plurality and that of others.

The use of theory also helped extend arts-based findings in my research. For example, in my third study, I found that I could build on participants' intuitive and relational knowledge by using Bourdieu's social practice theory to write rich findings and map the higher education field as a game with specific rules, people in different positions of power, and ongoing negotiations for capital. Barone and Eisner (2012) describe the use of theory in arts-based

² For a more complete discussion see Barone and Eisner (2012)

research as an “oscillating pendulum” between the different types of awareness and understanding that both theory and arts-based research can reveal, building on each other to create a rich and comprehensive picture of human experiences.

In summary, my thesis helps support the ways in which arts-based research can foster different kinds of knowledge for understanding experiences of social (dis)connection, including lived experience, relational knowledge and theoretical knowledge. In this final section, I engage with my findings and the literature to examine how arts-based research can help develop an understanding of the social structures that shape personal experiences of social (dis)connection.

5.2.2.2 Arts-based research allows us to access the structural context of individual experiences. From a sociological perspective, Bourdieu’s social theory of practice reinforces the view that differences in social connection are not a failure of individuals or communities, but rather the result of long-standing, taken-for-granted (and often invisible) socio-political factors that influence one’s social position and access to capital, including social capital (Bourdieu & Wacquant, 1992; E. P. Uphoff et al., 2013). He also notes that fundamental structures of a field (norms, values, rules, culture, positions of power) are often thought as necessary, leading to “symbolic violence” of certain groups, including being “denied resources, treated as inferior or limited in terms of realistic aspirations” (Webb, 2002, p. xvi). Importantly, even those who experience the symbolic violence can “misrecognize” the conditions as necessary, limiting their ability to “see” and question the broader social relations and structures at play (Bourdieu & Wacquant, 1992; Webb, 2002). Leavy (2025) asserts that arts-based research can help “forge micro-macro connections” between individual experiences and the broader context. I found multiple examples of this in my research.

For example, in the second study, as students began co-creating their group collage exploring their experiences of Art and Play, they intuitively began exploring and collaging their experiences within the broader “story” of their graduate student journey. While I only included the findings specifically related to Art and Play in my manuscript (in order to stay in line with the main study objective and restrictions around length), the analysis of the entire data set captured experiences of stress around financial stability, immigration pathways, job and academic prospects, gender and racial discrimination on campus, lack of mental health support and stigma around seeking support, and an institutional culture that valued student independence rather than fostering connection and community³. In this way, the data collected provided a rich context for students’ personal experiences, contributing to an understanding of the drivers of social disconnection in higher education.

Similarly, in my third study, the findings went beyond their daily interactions with institutional agents, capturing higher education as a site of overlapping powers and their perceived position within it, highlighting stress around immigration policies, and depicting their experiences of navigating the norms and culture of academia. The embodied, often invisible effort of navigating the hidden curriculum and feelings of exclusion was especially meaningfully captured in a participant’s description of how she included the image of a girl with a forced, uncomfortable smile in her collage, as it reminded her of her own discomfort in academic social settings. This aligns with the known benefits of visual methods, which can help participants consider daily experiences through fresh perspectives “to reveal understandings that they would not otherwise recognize.” (Leavy, 2017, p. 13)

³ I plan to write an additional manuscript on the broader experience of graduate studies in the near future.

In a recent systematic review exploring the role of the arts for disease prevention and promotion, the authors found that the arts can help advance health equity by amplifying the voices of marginalized groups to “identify and illuminate systemic, structural and social drivers of health” (Sonke et al., 2025, p. 3911). My findings support and expand these findings by revealing how arts-based research can help integrate various forms of knowledge and may help participants and researchers “see” the more implicit and taken-for-granted contextual drivers of social isolation and exclusion. Overall, my thesis supports the use of arts-based research as a valuable tool for understanding experiences and drivers of social (dis)connection, a current priority in health research (WHO Commission on Social Connection, 2025).

Together, the syntheses in my integrated discussion help demonstrate how arts-based practices can support health equity by enhancing social connection among groups experiencing social isolation and by understanding its drivers. I have discussed implications for integrating arts-based practices into broader health action to address social disconnection above. Now, I turn to providing the contributions and implications of my thesis research as they relate to higher education and rehabilitation sciences.

5.3 Contributions and Implications

The findings from my thesis make valuable contributions and have implications for higher education and rehabilitation at research, policy, and practice levels. I discuss these below, then follow with a review of the overall thesis’s strengths, limitations, and recommendations for future research.

5.3.1 Higher Education

In this section, I discuss the implications and contributions of my thesis to the field of higher education.

5.3.1.1 Higher Education Research. The findings from my thesis help fill gaps in higher education research on the experiences of social (dis)connection among graduate students. My thesis findings reinforce the need to consider social isolation as an important determinant of graduate students' health and well-being. This is particularly important in the context of a growing graduate student "mental health crisis" (Evans et al., 2018).

Importantly, my research helps illuminate the experiences of Canadian international graduate students, whose experiences are often rendered invisible in the literature (Fandino & Banerjee, 2022). It reveals important psychosocial stressors that have received little attention in the literature, including navigating changing immigration policies in an unpredictable global environment, socialization obstacles, and the emotional and cognitive labour required to navigate institutional social relationships for success. These findings support recent research that contends that graduate student mental health "simmer under pressure" of accumulated and interacting system-level factors, including academic culture, institutional policies, cohort-level socialization, and the broader socioeconomic system (Bekkouche et al., 2022).

5.3.1.2 Approaches for Positive Student Connection. The findings from my second study have important implications for supporting efforts towards more comprehensive approaches to improving student well-being (Davidson & Locke, 2010; Okanagan Charter, 2015). They support the value of integrating community arts initiatives into higher education spaces to foster students' access to positive social connection. While there are few documented studies on community arts in higher education settings, there appears to be a growing interest in incorporating community arts on campuses (Duke Arts, 2025; The Foundation for Art & Healing, n.d.; University of Arizona News, 2025).

My findings provide important considerations for the development of current and future art programs in higher education. Given the diversity of graduate students' identities and experiences, program leaders and developers must analyze how groups known for social isolation on campuses (e.g. international students, students experiencing disabilities, or students in caregiving roles) will access (or not) these programs to avoid further reinforcing inequities in social connection on campus. The Arts Annex at Duke University (2025) provides a useful model for a hybrid “drop-in” approach to student art programming alongside scheduled events, enabling access for diverse students.

For international graduate students, community art programs provide structured opportunities to expand their social networks, thereby fostering opportunities for positive socialization. Peer networks can be important moderators of stress among graduate students and a source of knowledge for better understanding the hidden curriculum (Patrick, 2025). While the Art and Play program did not provide specific opportunities to develop relationships with institutional agents, such as professors and supervisors, the addition of intentional activities between students and supervisors could be an important avenue for building trust and sharing cultural capital in these critical relationships.

On a broader level, my third study highlights the challenges posed by the hidden curriculum for international graduate students. Given the important role that professors and supervisors can play in this regard, I suggest that training and information sessions on the impact of the hidden curriculum be held to inform and guide how best to support students' success. Finally, it could be meaningful to follow in the footsteps of John Hopkins University, which created a “demystifying the hidden curriculum for minoritized students” symposium,

including workshops and presentations surrounding academic culture and success, financial literacy, and creating social networks (Hopkins et al., 2024).

5.3.1.3 Educational Policy for Student Inclusion and Well-being. As previously discussed, many institutions in Canada have signed the Okanagan Charter (Okanagan Charter, 2015), committing to integrating health into all aspects of campus life, leading with a health promotion approach, and collaborating with local sectors to enhance students' mental and overall well-being. Building on these commitments, institutions generally create their own mental health and strategic frameworks. For example, the University of Ottawa (2023) has elaborated the Strategic Framework for Mental Health and Wellness for All.

Notably, the report acknowledges that efforts to address mental health in higher education must be guided by a diversity and equity lens. My research highlights how institutions must take into account the social practices and policies that create disadvantage in socialization for certain groups, including international graduate students. In my third study, a participant describes her frustration and disappointment when she was unsuccessful in becoming involved in her supervisor's research projects, leading to stress around "why" she was not included. This example speaks to the importance of transparent policies that guide how students are selected to engage with their supervisor's research and hired for research and teaching positions. At a broader level, universities must consider the ways in which unpredictable immigration policies and processes impact international graduate students, an important psychosocial stress that receives relatively little attention in efforts to support this sub-group.

Finally, the University of Ottawa (2023) mental health report highlights the importance of "breaking down silos" and increasing collaboration between university programs, services

and initiatives. The report calls for “foster[ing] connectedness for all in a variety of formal and informal ways in the workplace and the classroom” (University of Ottawa, 2023, p. 14). This is especially important for graduate students in general and international graduate students more specifically, who are less likely to use traditional mental health services (Kotera et al., 2022; Ray et al., 2019). For these students, non-clinical programs aimed at increasing social participation and connection may be especially important. These non-clinical programs are often run by individual faculties or student organizations supported by student activity fees. For example, Art and Play is funded by the Graduate Student Association (GSAED). Consequently, the sustainability of such programs is affected by their limited visibility among university decision-makers. Closer collaboration between the leaders of academic affairs (in charge of the mental health framework) and student organizations (e.g., GSAED) and their programs would help foster understanding of the different efforts that intersect with mental health on campus, leading to a better use of resources and promoting sustainability of programs that operate at various levels in the university.

5.3.2 Rehabilitation Sciences

In this section, I consider the implications and contributions of my thesis to the field of rehabilitation sciences, particularly occupational therapy. This thesis is positioned within a growing tradition of imaging “rehabilitation otherwise” (Gibson, 2016; Gibson et al., 2018). This tradition invites rehabilitation researchers and practitioners to critically examine dominant ways of knowing and doing in rehabilitation and to envision new possibilities for research, professional education and practice. To this end, critical scholars in occupational therapy have called for greater commitment to the situated, relational, political, and social aspects of participation as well as the transformative potential of occupation in relation to health and

health equity (Egan & Restall, 2022; Hammell, 2014; Rudman, 2021). My research responds to these calls by focusing on a key global health issue, social disconnection, as well as drawing on sociological and arts-based approaches to illuminate potential ways for occupational therapists to further develop their role in supporting social connection. Building occupational therapy's capacity to support individuals and groups experiencing social isolation and other forms of exclusion has become an increasing priority for the profession (Collins et al., 2020; Hammell, 2014).

While social aspects of health and occupation have long been at the center of some occupational therapy research and practice, such as the social occupational therapy tradition in Brazil (Lopes & Malfitano, 2020; Malfitano et al., 2014), in North America, they largely remain on the margins. One way this status quo persists is the discipline's reliance on occupation-based theories and models, with little attention to other potentially useful perspectives from sociological, feminist, and disability theorists (Turcotte & Holmes, 2021). My research demonstrates that social capital theories may be especially useful for filling significant gaps in knowledge about the influence of social relationships on occupational opportunities. Especially critical social capital theories, such as Bourdieu's, can provide insight into how inequities in access to positive social relationships interact with other forms of capital (economic and cultural) to limit occupational participation and possibilities.

The intentional use of art as an activity to promote well-being is consistent with core and historical occupational therapy assumptions and values. Nevertheless, to date, occupational therapists have engaged very little with the contemporary arts and health field globally and in Canada. Indeed, an ongoing stigma surrounding the use of the arts in both research and practice has continued to permeate the profession (Bissell & Mailloux, 1981; Perrin, 2001; Turcotte &

Holmes, 2021). For example, to date, the potential of arts-based occupations to support social transformation has received limited attention (Cunningham et al., 2022). Social transformation in occupational therapy refers “to mobiliz[ing] occupation in social change efforts that shift beyond a focus on individuals and their occupational needs to address sociopolitical forces contributing to occupational inequities (Rudman, 2021, p. 98).

A useful starting point for interdisciplinary engagement with arts and health practices, specifically community arts, can be envisioned within community-level practices for promoting occupational participation (Letts et al., 2022). Community-level practice in occupational therapy emphasizes the impact and inequities related to social determinants of health, including gender, health care services, housing, food security, employment, working conditions, immigrant status, income, and social exclusion (Letts et al., 2022). In this context, occupational therapists engage in community development and participatory research projects to support communities in building self-determination and community capacity, advocate for changes in health and social policy that shape inequities in health, and build community-based groups to support social participation among groups experiencing social marginalization and exclusion (Letts et al., 2022; K. Rebeiro Gruhl & Lauckner, 2022).

Occupational therapists are well positioned to help develop and sustain community art programs and arts-based research projects that promote social connection and amplify the voices of groups experiencing social isolation and exclusion. Indeed, occupational therapists have had a hand in creating or supporting some notable arts-based programs in Canada, including the Creative Works Studio in Toronto (Dam et al., 2008), and the Artists Loft and Warm Hearts, Warm Bodies at the Northern Initiative for Social Action in Sudbury (K. L. Rebeiro Gruhl et al., 2021). The development and research on the Art and Play program serves

as another example, specifically illuminating the potential of community arts programs in higher education settings and non-clinical groups.

While group and community-level practices are the most compatible with arts and health practices, occupational therapy practice remains dominated by individual approaches (Lauckner et al., 2019). Considering this and the profession's ongoing discomfort with arts-based approaches, there remain multiple barriers to meaningful interdisciplinary practice between occupational therapy and arts and health practices for advancing goals of social transformation. I discuss potential policy-level action and consideration to help address this below.

5.3.2.1 Considerations of Occupational Therapy Policy. My research provides important considerations for policy and decision-making at both the education and practice levels of occupational therapy to increase collaboration between occupational therapy and the arts and health fields within community practice as envisioned above.

At the education level, decision-makers responsible for occupational therapy program procedures and curricula should ensure increased visibility and emphasis on the role of occupational therapists in non-clinical groups facing social barriers to health and occupational well-being, including people experiencing social isolation and exclusion. Specifically, they can deepen students' understanding of the importance of social relationships by integrating broader theories and models that emphasize social facets of health, including social capital theories. A recent textbook integrating broader sociological and political theories relevant to occupational therapy may be a useful tool (Ikiugu et al., 2025).

To destigmatize arts-based approaches, I suggest that professors use diverse art forms in the classroom, encourage dialogue on the history of occupational therapy, and explore the

potential of community arts for social transformation. Furthermore, encouraging research projects and placements that use arts-based research and engage with community arts would help students interested in using the arts in practice be better equipped to engage with the broader arts and health movement in future practice.

With regard to broader professional decision-making and policy, the Canadian Association of Occupational Therapy (CAOT) is responsible for advocating for the profession's role in society and providing practice resources for therapists. I suggest the CAOT engage in conversations with broader health decision-makers and projects looking to address social isolation in Canada (e.g., National Seniors Council, 2025; Women's Age Lab, 2024) to promote occupational therapists' potential to support these efforts. Finally, the CAOT could provide practice support through webinars and courses on the role of OTs in communities, social connection, and community arts.

5.4 Limitations, Strengths, and Suggestions for Future Research

In this section, I detail the main limitations, strengths, and suggestions for future research derived from my thesis. Given that the limitations of each individual study have already been discussed in each respective manuscript, I focus here on the limitations of my thesis more broadly.

An important consideration for my thesis is the dominant Western health lens through which I explored my research on arts-based practices and social connection. The arts and health field originates primarily from researchers in the United Kingdom and is known for its Eurocentric perspective on both arts and health. This focus most certainly limited my research to Western understandings of community arts activities, despite long-standing traditions of intersecting art and health practices in Indigenous Peoples (in Canada and more broadly) and

the Global South. Future research exploring diverse, non-dominant cultural meanings and practices in community arts is warranted.

Similarly, regarding social connection, I use the World Health Organization and other Western health researchers' definitions of social isolation and loneliness. These definitions position social disconnection as a health issue. However, certain critical perspectives have argued that medicalizing social isolation can minimize the social factors that lead to systemic social exclusion of certain groups. To mitigate this risk, I drew on social capital theories, including Bourdieu's more critical perspectives, to highlight how different sociopolitical factors create disadvantages in social connections. Nevertheless, other critical and nuanced perspectives on social isolation and loneliness are necessary, as well as considering different cultural experiences and meanings of social connection and how they interact with health and well-being.

Finally, I acknowledge that my population of interest, with high levels of education, may have greater knowledge of the factors driving social isolation and exclusion, which may have influenced the extent to which the arts-based practices were successful in providing comprehensive and complex findings. Further research is needed to continue exploring the potential of arts-based research to support understanding of the sociopolitical drivers of health and social inequities, and to identify the best approaches for doing so across different groups.

A key strength of my research is its interdisciplinary approach, strategically drawing on conceptualizations and methods from sociology, arts, and health to make important contributions to these fields, as well as to higher education and rehabilitation sciences. Specifically, using non-dominant approaches in health and higher education, including social capital theories and arts-based approaches, offers new perspectives on social connection,

community arts, and the social experiences of graduate students. By engaging with arts-based methods and developing novel group collage, individual collage, and poetry data-collection activities, my research provided a space for collective student knowledge to emerge, illuminating key social processes in community arts and making visible the nuanced socialization experiences of international graduate students. Future research may wish to further explore the potential of group collage as a method for relational knowledge production.

Finally, my research helps position and illuminate differences in international students' socialization experiences as a key consideration for graduate student mental health. This is a fairly novel perspective and provides new possibilities for addressing mental health by fostering social inclusion and connection.

5.5 Conclusion

High rates of social isolation and loneliness have become a critical health issue and have raised equity concerns over disproportionate levels of social disconnection in certain groups. Graduate students are well-known for having high levels of social isolation and loneliness and associated mental health issues. Furthermore, specific groups of students, such as international graduate students, face additional barriers to building positive social relationships and networks, yet their experiences are often rendered invisible in the literature.

Building on research demonstrating the value of arts participation for overall health and well-being, some researchers contend that arts-based practices can play an important role in addressing inequities in health, including those related to social connection. Nevertheless, theoretical, conceptual, and empirical gaps have limited the integration of the arts in a comprehensive approach to tackling health inequities more broadly, and social isolation and loneliness more specifically.

My thesis helps fill the knowledge gaps above through its overarching aim to explore the ways in which arts-based practices can help to both enhance and understand social connection in groups experiencing social isolation, such as graduate students. I conducted three individual studies, including a theoretical synthesis exploring the relationship between community arts and health equity, a qualitative, arts-based exploration of graduate students' social experiences in a community arts program, and a qualitative, arts-based study exploring the ways in which international graduate students perceive, experience, and navigate institutional relationships in the context of a Canadian higher education setting.

Drawing on social capital theories, my first study provides important insights into the social experience and processes linking the arts and health equity, including how community arts can serve as sources of social capital and the pathways through which these relationships can be mobilized to advance better health and health equity. It also underscores the need to foster equitable access to the arts as an important health resource by considering both individual experiences and how programs operate in specific social contexts. My second study builds on these findings by illuminating the specific social relationships and experiences developed in a community arts program with graduate students. The findings emphasize how the program provides opportunities for isolated students, especially international students, to build diverse relationships offering support, access to resources and knowledge, a sense of belonging, and collective agency to sustain the program for other students. My third study offers important perspectives into the specific experiences of international graduate students, drawing attention to universities as sites of overlapping power (higher education institutions and the federal immigration system), the significant role of supervisors and professors in their ability to share knowledge and resources to help navigate the system, and the substantial effort

international students engage in to build positive social relationships and networks despite barriers.

My research makes valuable contributions to the fields of health, higher education, and rehabilitation sciences. Notably, my research helps build knowledge about the value of community arts for fostering social relationships and networks among groups experiencing isolation, including graduate students. It also makes visible the particular experience of Canadian international graduate students, revealing important obstacles to positive social connection and the powerful role of institutional agents in shaping their experiences. Regarding rehabilitation sciences and occupational therapy, my thesis provides a valuable example of the use of non-dominant approaches, specifically social capital and arts-based approaches, to highlight the relational, structural, and transformative aspects of participation and occupations. It also provides evidence for the value of advancing our role in arts-based and community initiatives for supporting people experiencing social disconnection.

References

- Aldrich, R., Rudman, D. L., Fernandes, K., Nguyen, G., & Larkin, S. (2024). (Re)making ‘third places’ in precarious times: Conceptual, empirical, and practical opportunities for occupational science. *Journal of Occupational Science*, 31(4), 721–739.
<https://doi.org/10.1080/14427591.2023.2234382>
- Ali, A., & Kohun, F. (2006). Dealing with isolation feelings in IS doctoral programs. *International Journal of Doctoral Studies*, 1, 21–33. <https://doi.org/10.28945/58>
- All Party Parliamentary Group on Arts, Health and Wellbeing. (2017). *Creative health: The arts for health and wellbeing* (Second Edition).
https://ncch.org.uk/uploads/Creative_Health_Inquiry_Report_2017_-_Second_Edition.pdf
- American College Health Association. (2019). *American College Health Association-National College Health Assessment II: Canadian Consortium executive summary spring 2019*.
https://www.acha.org/wp-content/uploads/2024/07/NCHA-II_SPRING_2019_CANADIAN_REFERENCE_GROUP_EXECUTIVE_SUMMARY.pdf
- Anderson, S., Fast, J., Keating, N., Eales, J., Chivers, S., & Barnet, D. (2017). Translating knowledge: Promoting health through intergenerational community arts programming. *Health Promotion Practice*, 18(1), 15–25. <https://doi.org/10.1177/1524839915625037>
- Argyle, E., & Winship, G. (2018). Creative practice with clay: A mutual route to recovery? *Journal of Applied Arts & Health*, 9(3), 385–397.
https://doi.org/10.1386/jaah.9.3.385_1

- Barndt, D. (2004). By whom and for whom? Intersections of participatory research and community arts. In *Provoked by art: Theorizing arts-based inquiry*. Backlong Books and Centre for Arts-Informed Research.
- Barone, T., & Eisner, E. W. (2012). Is There a Place for Theory in Arts Based Research? *Arts Based Research*, 156–163. <https://doi.org/10.4135/9781452230627.N9>
- Bastalich, W. (2017). Content and context in knowledge production: A critical review of doctoral supervision literature. *Studies in Higher Education*, 42(7), 1145–1157. <https://doi.org/10.1080/03075079.2015.1079702>
- Bathmaker, A.-M. (2015). Thinking with Bourdieu: Thinking after Bourdieu. Using ‘field’ to consider in/equalities in the changing field of English higher education. *Cambridge Journal of Education*, 45(1), 61–80. <https://doi.org/10.1080/0305764X.2014.988683>
- Baum, F. (2000). Social capital, economic capital and power: Further issues for a public health agenda. *Journal of Epidemiology and Community Health*, 54(6), 409–410. <https://doi.org/10.1136/jech.54.6.409>
- Becker, L., & Jaakkola, E. (2020). Customer experience: Fundamental premises and implications for research. *Journal of the Academy of Marketing Science*, 48(4), 630–648. <https://doi.org/10.1007/s11747-019-00718-x>
- Bekkouche, N. S., Schmid, R. F., & Carliner, S. (2022). “Simmering pressure”: How systemic stress impacts graduate student mental health. *Performance Improvement Quarterly*, 34(4), 547–572. <https://doi.org/10.1002/piq.21365>
- Berkman, L. F., Glass, T., Brissette, I., & Seeman, T. E. (2000). From social integration to health: Durkheim in the new millennium. *Social Science & Medicine*, 51, 843–857. [https://doi.org/10.1016/s0277-9536\(00\)00065-4](https://doi.org/10.1016/s0277-9536(00)00065-4)

- Bissell, J. C., & Mailloux, Z. (1981). The use of crafts in occupational therapy for the physically disabled. *The American Journal of Occupational Therapy*, 35(6), 369–374. <https://doi.org/10.5014/ajot.35.6.369>
- Boell, S. K., & Cecez-Kecmanovic, D. (2014). A hermeneutic approach for conducting literature reviews and literature searches. *Communications of the Association for Information Systems*, 34(1), 257–286. <https://doi.org/10.17705/1cais.03412>
- Bourdieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). Greenwood Press.
- Bourdieu, P. (1988). *Homo academicus* (P. Collier, Trans.). Stanford University Press.
- Bourdieu, P., & Wacquant, L. J. D. (1992). *An invitation to reflexive sociology*. The University of Chicago Press.
- Braun, V., & Clarke, V. (2022). *Thematic analysis: A practical guide*. SAGE.
- Bravo, A. J., Wedell, E., Villarosa-Hurlocker, M. C., Looby, A., Dickter, C. L., & Schepis, T. S. (2023). Perceived racial/ethnic discrimination among young adult college students: Prevalence rates and associations with mental health. *Journal of American College Health*, 71(7), 2062–2073. <https://doi.org/10.1080/07448481.2021.1954012>
- Brown, N. (2022). Scope and continuum of participatory research. *International Journal of Research & Method in Education*, 45(2), 200–211. <https://doi.org/10.1080/1743727X.2021.1902980>
- Burge, A., Godinho, M. G., Knottenbelt, M., & Loads, D. (2016). “... But we are academics!” a reflection on using arts-based research activities with university colleagues. *Teaching in Higher Education*, 21(6), 730–737. <https://doi.org/10.1080/13562517.2016.1184139>

- Butler-Kisber, L. (2014). Collage as inquiry. In J. Knowles & A. Cole (Eds.), *Handbook of the arts in qualitative research: Perspectives, methodologies, examples, and issues*. SAGE Publications, Inc. <https://doi.org/10.4135/9781452226545>
- Calder, M. J., Richter, M. S., Mao, Y., Kovacs Burns, K., Mogale, R. S., & Danko, M. (2016). International students attending Canadian universities: Their experiences with housing, finances, and other issues. *Canadian Journal of Higher Education*, 46(2), 92–110. <https://doi.org/10.47678/cjhe.v46i2.184585>
- Canadian Association of Graduate Studies. (2012). *Graduate studies: A practical guide*. https://www.cags.ca/documents/publications/best_practices/Graduate_Studies_A_Practical_Guide_FINAL_15OCT12.Eng.pdf
- Canadian Bureau for International Education. (2024). *International students in Canada infographic*. <https://cbie.ca/media/facts-and-figures/international-students/>
- Canadian Health Promoting Campuses Network. (n.d.). *Okanagan Charter*. Retrieved December 31, 2025, from <https://www.chpcn.ca/okanagan-charter>
- Carpiano, R. M., Link, B. G., Phelan, J. C., Editor, B., Lareau, A., & Conley, D. (2008). Social inequality and health: Future directions for the fundamental cause explanation. In A. Lareau & D. Conley (Eds.), *Social class: How does it work?* (pp. 232–263). Russell Sage Foundation.
- Charise, A., Dufoe, N., & Rodricks, D. J. (2024). “This is what you get when you lead with the arts”: Making the case for social wellness. *Journal of Medical Humanities*, 45(4), 449–463. <https://doi.org/10.1007/s10912-024-09895-5>
- Chatterjee, A., & Vartanian, O. (2014). Neuroaesthetics. *Trends in Cognitive Sciences*, 18(7), 370–375. <https://doi.org/10.1016/j.tics.2014.03.003>

- Chilton, G., & Scotti, V. (2014). Snipping, gluing, writing: The properties of collage as an arts-based research practice in art therapy. *Art Therapy, 31*(4), 163–171.
<https://doi.org/10.1080/07421656.2015.963484>
- Clarke, J. N. (2020). *Health, illness, and medicine in Canada*. Oxford University Press.
- Clarke, K. (2023). International graduate students' mental health diagnoses, challenges, and support: A descriptive comparison to their non-international graduate student peers. *Journal of International Students, 13*(3), 280–304.
<https://doi.org/10.32674/jis.v13i3.3148>
- Clift, S., & Camic, P. (2015). *Oxford textbook of creative arts, health, and wellbeing: International perspectives on practice, policy and research*. Oxford University Press.
<https://doi.org/10.1093/MED/9780199688074.001.0001>
- Clift, S., & Grebosz-Haring, K. (2025). The need for a critical perspective on arts and health research and reviews. Comment on “Can arts-based interventions improve health? A conceptual and methodological critique” by Martin Skov and Marcos Nadal. *Physics of Life Reviews, 54*, 116–119. <https://doi.org/10.1016/j.plrev.2025.07.005>
- Clift, S., McCrary, M., Kreutz, G., Musgrave, G., Danso, A. A., Silverstein-Bamford, Pelowski, M., Davies, C., Shurig, E., Koehler, F., Bungay, H., Holt, N., Jensen, A., Kahlol, R., Philips, K., Pickard, A., Thun-Hohenstein, L., Comeau, G., Martin, T., & Grebosz-Haring, K. (2023). *Arts, cultural engagement and health inequalities. Critical reflections on the UK Creative Health Review*.
https://doi.org/10.31235/osf.io/p6ywg_v1

- Clift, S., Phillips, K., & Pritchard, S. (2021). The need for robust critique of research on social and health impacts of the arts. *Cultural Trends*, 30(5), 442–459.
<https://doi.org/10.1080/09548963.2021.1910492>
- Cobb, S. (1976). Social support as a moderator of life stress. *Psychosomatic Medicine*, 38(5), 300–314. <https://doi.org/10.1097/00006842-197609000-00003>
- Coggan, C., Saunders, C., & Grenot, D. (2008). Art and safe communities: The role of Big hART in the regeneration of an inner city housing estate. *Health Promotion Journal of Australia*, 19(1), 4–9. <https://doi.org/10.1071/he08004>
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98(2), 310–357. <https://doi.org/10.1037/0033-2909.98.2.310>
- Coleman, J. S. (1988). Social capital in the creation of human capital. *The American Journal of Sociology*, 94(1), S95–S120. <https://doi.org/10.1086/228943>
- Collins, T., Davys, D., Martin, R., Russell, R., & Kenney, C. (2020). Occupational therapy, loneliness and social isolation: A thematic review of the literature. *International Journal of Therapy and Rehabilitation*, 27(10). Scopus.
<https://doi.org/10.12968/ijtr.2019.0044>
- Cox, S. M., Lafrenière, D., Brett-MacLean, P., Collie, K., Cooley, N., Dunbrack, J., & Frager, G. (2010). Tipping the iceberg? The state of arts and health in Canada. *Arts & Health*, 2(2), 109–124. <https://doi.org/10.1080/17533015.2010.481291>
- Cunningham, M., Warren, A., Pollard, N., & Abey, S. (2022). Enacting social transformation through occupation: A narrative literature review. *Scandinavian Journal of Occupational Therapy*, 29(8), 611–630.
<https://doi.org/10.1080/11038128.2020.1841287>

- Dahlgren, G., & Whitehead, M. (2021). The Dahlgren-Whitehead model of health determinants: 30 years on and still chasing rainbows. *Public Health*, 199, 20–24. <https://doi.org/10.1016/j.puhe.2021.08.009>
- Dam, A., Fryszberg, I., & Kirsh, B. (2008). Understanding the experience and impact of a community art studio initiative for adults with serious mental illness through narrative explorations. *The International Journal of the Arts in Society*, 3(2), 53–63. <https://doi.org/10.18848/1833-1866/CGP/v03i02/35462>
- Davidson, L., & Locke, J. H. (2010). Using a public health approach to address student mental health. In *Mental health care in the college community* (pp. 267–288). John Wiley and Sons. <https://doi.org/10.1002/9780470686836.ch14>
- Davies, C., & Clift, S. (2022). Arts and health glossary—A summary of definitions for use in research, policy and practice. *Frontiers in Psychology*, 13, 949685. <https://doi.org/10.3389/fpsyg.2022.949685>
- Daykin, N. (2019). *Arts, health and well-being: A critical perspective on research, policy and practice*. Routledge. <https://doi.org/10.4324/9780429356049>
- Daykin, N. (2021). Creativity, health and wellbeing: Challenges of research and evidence. *Musiikki*, 55(4). <https://doi.org/10.51816/musiikki.113249>
- Daykin, N., de Viggiani, N., Moriarty, Y., & Pilkington, P. (2017). Music-making for health and wellbeing in youth justice settings: Mediated affordances and the impact of context and social relations. *Sociology of Health & Illness*, 39(6), 941–958. <https://doi.org/10.1111/1467-9566.12549>
- Daykin, N., Mansfield, L., Meads, C., Gray, K., Golding, A., Tomlinson, A., & Victor, C. (2020). The role of social capital in participatory arts for wellbeing: Findings from a

- qualitative systematic review. *Arts & Health*, 13(2), 134–157.
<https://doi.org/10.1080/17533015.2020.1802605>
- Diamond, J., & Gordon, I. (2017). Community crafts: A sustainable resource contributing to health, well-being, and community cohesion. In D. Sakellariou & N. Pollard (Eds.), *Occupational therapies without borders* (2nd ed., pp. 468–475). Elsevier Canada.
- Dow, R., Warran, K., Letrondo, P., & Fancourt, D. (2023). The arts in public health policy: Progress and opportunities. *The Lancet Public Health*, 8(2), e155–e160.
[https://doi.org/10.1016/S2468-2667\(22\)00313-9](https://doi.org/10.1016/S2468-2667(22)00313-9)
- Dudha, A. (2025, January 3). U of Regina international students say they felt numb, angry after being targeted in racist incident. *CBC News*.
<https://www.cbc.ca/news/canada/saskatchewan/regina-international-students-racist-drive-by-1.7422659>
- Duke Arts. (2025). *Arts Annex*. <https://arts.duke.edu/places/arts-annex/>
- Dunn, K. (2010). *Creative illustration workshop for mixed-media artists: Seeing, sketching, storytelling, and using found materials*. Quarry Books. <http://www.katherinedunn.us/>
- Egan, M., & Restall, G. (Eds.). (2022). *Promoting occupational participation: Collaborative relationship-focused occupational therapy*. Canadian Association of Occupational Therapists.
- Ehsan, A. M., & De Silva, M. J. (2015). Social capital and common mental disorder: A systematic review. *Journal of Epidemiology and Community Health*, 69(10), 1021–1028. <https://doi.org/10.1136/jech-2015-205868>

- Ehsan, A. M., Klaas, H. S., Bastianen, A., & Spini, D. (2019). Social capital and health: A systematic review of systematic reviews. *SSM - Population Health*, 8, 100425. <https://doi.org/10.1016/j.ssmph.2019.100425>
- Erichsen, E. A., & Bolliger, D. U. (2011). Towards understanding international graduate student isolation in traditional and online environments. *Educational Technology Research and Development*, 59(3), 309–326. <https://doi.org/10.1007/s11423-010-9161-6>
- Eriksson, M. (2011). Social capital and health – implications for health promotion. *Global Health Action*, 4(1), 5611–5611. <https://doi.org/10.3402/GHA.V4I0.5611>
- Evans, T. M., Bira, L., Gastelum, J. B., Weiss, L. T., & Vanderford, N. L. (2018). Evidence for a mental health crisis in graduate education. *Nature Biotechnology*, 36(3), 282–284. <https://doi.org/10.1038/nbt.4089>
- Fancourt, D. (2017). *Arts in health: Designing and researching interventions* (Vol. 1). Oxford University Press. <https://doi.org/10.1093/oso/9780198792079.001.0001>
- Fancourt, D., Bone, J., Bu, F., Mak, H., & Bradbury, A. (2023). *The impact of arts and cultural engagement on population health findings from major cohort studies in the UK and USA 2017 – 2022*. University College London. <https://sbbresearch.org/wp-content/uploads/2023/03/Arts-and-population-health-FINAL-March-2023.pdf>
- Fancourt, D., & Finn, S. (with World Health Organization & Health Evidence Network). (2019). *What is the evidence on the role of the arts in improving health and well-being? A scoping review* (67). WHO Regional Office for Europe. <https://apps.who.int/iris/bitstream/handle/10665/329834/9789289054553-eng.pdf>

- Fandino, I. (2021). *Lost in translation: The (unseen) experiences of international graduate students and families* [Master's thesis, University of Calgary].
<https://ucalgary.scholaris.ca/items/3597614e-f873-49d5-a3d0-76bf08307378>
- Fandino, I., & Banerjee, P. (2022). Temporary residents, lasting issues: International graduate students and Covid-19. *Canadian Ethnic Studies*, 54(3), 33–62.
<https://doi.org/10.1353/ces.2022.0024>
- Fanian, S., Young, S. K., Mantla, M., Daniels, A., & Chatwood, S. (2015). Evaluation of the Kts'ihl̓tla ("We Light the Fire") Project: Building resiliency and connections through strengths-based creative arts programming for Indigenous youth. *International Journal of Circumpolar Health*, 74(1), 27672. <https://doi.org/10.3402/ijch.v74.27672>
- Finfgeld-Connett, D., & Johnson, E. D. (2013). Literature search strategies for conducting knowledge-building and theory-generating qualitative systematic reviews. *Journal of Advanced Nursing*, 69(1), 194–204. <https://doi.org/10.1111/j.1365-2648.2012.06037.x>
- Finsveen, E., & Van Oorschot, W. (2008). Access to resources in networks: A theoretical and empirical critique of networks as a proxy for social capital. *Acta Sociologica*, 51(4), 293–307. <https://doi.org/10.1177/0001699308097375>
- Fodouop Kouam, A. W. (2024). Interpretivism or constructivism: Navigating research paradigms in social science research. *International Journal of Research Publications*, 143. <https://doi.org/10.47119/IJRP1001431220246122>
- Forbes-Mewett, H., & Sawyer, A.-M. (2016). International students and mental health. *Journal of International Students*, 6(3), 661–677. <https://doi.org/10.32674/jis.v6i3.348>

- Fox, A. L. (2009). Evaluation of a pilot arts and health module in a graduate community nutrition program. *Canadian Journal of Dietetic Practice and Research*, 70(2), 81–86.
<https://doi.org/10.3148/70.2.2009.81>
- Gaither, S. E. (2018). The multiplicity of belonging: Pushing identity research beyond binary thinking. *Self and Identity*, 17(4), 443–454.
<https://doi.org/10.1080/15298868.2017.1412343>
- Gao, Y. (2019). Experiences of Chinese international doctoral students in Canada who withdrew: A narrative inquiry. *International Journal of Doctoral Studies*, 14, 259–276.
<https://doi.org/10.28945/4240>
- Gardner, S. K. (2008). Fitting the mold of graduate school: A qualitative study of socialization in doctoral education. *Innovative Higher Education*, 33(2), 125–138.
<https://doi.org/10.1007/s10755-008-9068-x>
- Gerber, N., Biffi, E., Biondo, J., Gemignani, M., Hannes, K., & Siegesmund, R. (2020). Arts-based research in the social and health sciences: Pushing for change with an interdisciplinary global arts-based research initiative. *Forum: Qualitative Social Research*, 21(2). <https://doi.org/10.17169/fqs-21.2.3496>
- Gerlach, A. J., Teachman, G., Laliberte-Rudman, D., Aldrich, R. M., & Huot, S. (2017). *Expanding beyond individualism: Engaging critical perspectives on occupation*. 25(1), 35–43. <https://doi.org/10.1080/11038128.2017.1327616>
- Gibson, B. (2016). *Rehabilitation: A post-critical approach*. CRC Press.
<https://doi.org/10.1201/b19085>

- Gibson, B., Nicholls, D., Synne Groven, K., & Setchell, J. (Eds.). (2018). *Manipulating practices: A critical physiotherapy reader*. Cappelen Damm Akademisk/NOASP (Nordic Open Access Scholarly Publishing). <https://doi.org/10.23865/noasp.29>
- Gopaul, B. (2011). Distinction in doctoral education: Using Bourdieu's tools to assess the socialization of doctoral students. *Equity & Excellence in Education*, 44(1), 10–21. <https://doi.org/10.1080/10665684.2011.539468>
- Gordon-Nesbitt, R., & Howarth, A. (2020). The arts and the social determinants of health: Findings from an inquiry conducted by the United Kingdom All-Party Parliamentary Group on Arts, Health and Wellbeing. *Arts & Health*, 12(1), 1–22. <https://doi.org/10.1080/17533015.2019.1567563>
- Gordon-Nesbitt, R., & Parkinson, C. (2015). *Exploring the longitudinal relationship between arts engagement and health*. <https://www.artsforhealth.org/research/artsengagementandhealth/ArtsEngagementandHealth.pdf>
- Government of Canada, S. C. (2022, November 20). *The Daily—Canadian postsecondary enrolments and graduates, 2022/2023*. <https://www150.statcan.gc.ca/n1/daily-quotidien/241120/dq241120b-eng.htm>
- Groot, B., De Kock, L., Liu, Y., Dedding, C., Schrijver, J., Teunissen, T., Van Hartingsveldt, M., Menderink, J., Lengams, Y., Lindenberg, J., & Abma, T. (2021). The value of active arts engagement on health and well-being of older adults: A nation-wide participatory study. *International Journal of Environmental Research and Public Health*, 18(15), 8222. <https://doi.org/10.3390/ijerph18158222>

- Grootaert, C., & Van Bastelar, T. (2013). *Understanding and measuring social capital: A multidisciplinary tool for practitioners*. World Bank. <https://doi.org/10.1596/0-8213-5068-4>
- Guo, Y., & Guo, S. (2017). Internationalization of Canadian higher education: Discrepancies between policies and international student experiences. *Studies in Higher Education*, 42(5), 851–868. <https://doi.org/10.1080/03075079.2017.1293874>
- Gupta, S., Jaiswal, A., Paramasivam, A., & Kotecha, J. (2022). Academic writing challenges and supports: Perspectives of international doctoral students and their supervisors. *Frontiers in Education*, 7. <https://doi.org/10.3389/feduc.2022.891534>
- Hammell, K. R. W. (2014). Belonging, occupation, and human well-being: An exploration. *Canadian Journal of Occupational Therapy*, 81(1), 39–50. <https://doi.org/10.1177/0008417413520489>
- Hamza, C. A., Ewing, L., & Heath, N. (2021). When social isolation is nothing new: A longitudinal study on psychological distress during COVID-19 among university students with and without preexisting mental health concerns. *Canadian Psychology / Psychologie Canadienne*, 62(1), 20–30. <https://doi.org/10.1037/cap0000255>
- Hansji, N. L., Wilson, N. J., & Cordier, R. (2015). Men’s Sheds: Enabling environments for Australian men living with and without long-term disabilities. *Health & Social Care in the Community*, 23(3), 272–281. <https://doi.org/10.1111/HSC.12140>
- Hartman, L. R., Mandich, A., Magalhães, L., & Orchard, T. (2011). How do we ‘see’ occupations? An examination of visual research methodologies in the study of human occupation. *Journal of Occupational Science*, 18(4), 292–305. <https://doi.org/10.1080/14427591.2011.610776>

- Henderson, E. F., Akkad, A., Kier-Byfield, S., Burford, J., & Dangen. (2025). Seeking supervisability: The inclusivity implications of doctoral supervisors' engagement with prospective applicants prior to formal admissions. *Research Papers in Education*, 40(2), 167–187. <https://doi.org/10.1080/02671522.2024.2349989>
- Holt-Lunstad, J. (2015). Social integration, social networks, and health. In *International encyclopedia of the social & behavioral sciences* (2nd ed., pp. 365–370). Elsevier Inc. <https://doi.org/10.1016/B978-0-08-097086-8.14040-1>
- Holt-Lunstad, J. (2018). Why social relationships are important for physical health: A systems approach to understanding and modifying risk and protection. *Annual Review of Psychology*, 69(1), 437–458. <https://doi.org/10.1146/annurev-psych-122216-011902>
- Holt-Lunstad, J. (2021). Loneliness and social Isolation as risk factors: The power of social connection in prevention. *American Journal of Lifestyle Medicine*, 15(5), 567–573. <https://doi.org/10.1177/15598276211009454>
- Holt-Lunstad, J. (2022). Social connection as a public health issue: The evidence and a systemic framework for prioritizing the “social” in social determinants of health. *Annual Review of Public Health*, 43(1), 193–213. <https://doi.org/10.1146/annurev-publhealth-052020-110732>
- Holt-Lunstad, J. (2024). Social connection as a critical factor for mental and physical health: Evidence, trends, challenges, and future implications. *World Psychiatry*, 23(3), 312–332. <https://doi.org/10.1002/wps.21224>
- Holt-Lunstad, J., & Steptoe, A. (2022). Social isolation: An underappreciated determinant of physical health. *Current Opinion in Psychology*, 43, 232–237. <https://doi.org/10.1016/j.copsyc.2021.07.012>

- hooks, B. (1998). *Art on my mind: Visual politics*. New Press.
- Hopkins, M. J., Moore, B. N., Jeffery, J. L., & Young, A. S. (2024). Demystifying the ‘hidden curriculum’ for minoritized graduate students. *eLife*, 13, e94422.
<https://doi.org/10.7554/eLife.94422>
- Houle, S., Charles, C., & Thomas, R. (2023a, April 14). *Art and Play: Utilizing the transformative power of art with graduate students* [Poster Presentation]. Canadian Association for the Health Humanities, Creating Space 2023, Quebec City, QC.
- Houle, S., Charles, C., & Thomas, R. (2023b, May 16). *Creating connections: A qualitative exploration of graduate students’ experiences with a pilot arts-based program* [Poster Presentation]. Collaborating Across Borders (CAB) VIII Hope and Trust in Health and Social Care Conference.
- Houle, S., Charles, C., & Thomas, R. (2023c, June 8). *Art & Play: A pilot arts-based program for graduate students’ well-being* [Poster Presentation]. Society for Teaching and Learning in Higher Education, Charlottetown, PEI.
- Houle, S., Thomas, R., Egan, M., & Sauvé-Schenck, K. (2025). *Community Arts and Health Equity: A Theoretical Synthesis using Social Capital Theories* [Unpublished manuscript]. Faculty of Health Sciences, University of Ottawa.
- Hurlbut, K., & Brousselle, A. (2025). Arts-based evaluation of the Communities ChooseWell program. *Evaluation and Program Planning*, 108, 102496.
<https://doi.org/10.1016/j.evalprogplan.2024.102496>
- Hwang, I. C., Park, K. H., Kim, J. J., Yim, J., Ko, K. P., Bae, S. M., & Kyung, S. Y. (2017). Perceived social support as a determinant of quality of life among medical students: 6-

- month follow-up study. *Academic Psychiatry*, 41(2), 180–184.
<https://doi.org/10.1007/s40596-016-0503-5>
- ICEF Monitor. (2025, November 6). *Canada announces new incentives for international recruitment of master's and PhD students*. <https://monitor.icef.com/2025/11/canada-announces-new-incentives-for-international-recruitment-of-masters-and-phd-students/>
- Ikiugu, M. N., Taff, S. D., Kantartzis, S., & Pollard, N. (Eds.). (2025). *Routledge companion to occupational therapy: Theories, concepts and models*. Routledge.
<https://doi.org/10.4324/9781003526766>
- Immigration, Refugees and Citizenship Canada. (n.d.). *Understanding student and temporary worker numbers in Canada*. Retrieved August 22, 2025, from
<https://www.canada.ca/en/immigration-refugees-citizenship/corporate/reports-statistics/statistics-open-data/immigration-stats/students-workers.html>
- Immigration, Refugees and Citizenship Canada. (2024, November 15). *New International Student Program regulations take effect* [News release].
<https://www.canada.ca/en/immigration-refugees-citizenship/news/2024/11/new-international-student-program-regulations-take-effect.html>
- Institute of Health Equity. (2010). *Fair Society, Healthy Lives The Marmot Review*.
<https://www.instituteofhealthequity.org/resources-reports/fair-society-healthy-lives-the-marmot-review/fair-society-healthy-lives-full-report-pdf.pdf>
- Institute of Health Equity. (2026). *The Institute of Health Equity*.
<https://www.instituteofhealthequity.org/about-us>

- Islam, M. K., Merlo, J., Kawachi, I., Lindström, M., & Gerdtham, U. G. (2006). Social capital and health: Does egalitarianism matter? A literature review. *International Journal for Equity in Health*, 5(1). <https://doi.org/10.1186/1475-9276-5-3>
- Jaakkola, E. (2020). Designing conceptual articles: Four approaches. *AMS Review*, 10(1–2), 18–26. <https://doi.org/10.1007/s13162-020-00161-0>
- Jackson, M. R. (2021). Addressing inequity through public health, community development, arts, and culture: Confluence of fields and the opportunity to reframe, retool, and repair. *Health Promotion Practice*, 22(1_suppl), 141S-146S. <https://doi.org/10.1177/1524839921996369>
- Janta, H., Lugosi, P., & Brown, L. (2014). Coping with loneliness: A netnographic study of doctoral students. *Journal of Further and Higher Education*, 38(4), 553–571. <https://doi.org/10.1080/0309877X.2012.726972>
- Javadizadeh, E., Oudshoorn, A., Letts, L., Barbic, S., & Marshall, C. A. (2025). The mental well-being of graduate students in Canada: A scoping review. *American Journal of Health Promotion*, 39(6), 921–935. <https://doi.org/10.1177/08901171251326308>
- Jensen, A., Bungay, H., & Holt, N. J. (2025). Apples and oranges? The importance of recognizing heterogeneity in arts and health research publications. *Frontiers in Public Health*, 13. <https://doi.org/10.3389/fpubh.2025.1670166>
- Jeong, S., Blaney, J. M., & Feldon, D. F. (2019). Identifying faculty and peer interaction patterns of first-year biology doctoral students: A latent class analysis. *CBE—Life Sciences Education*, 18(4), ar59. <https://doi.org/10.1187/cbe.19-05-0089>
- Karkou, V., Sacco, P. L., Pelowski, M., Theofanopoulou, C., Carr, C., Huet, V., Bourne, J., Dowlen, R., & Chatterjee, H. (2025). Comment on “Can arts-based interventions

- improve health? A conceptual and methodological critique” by Skov and Nadal - A critique of the critique: Towards a more nuanced evaluation of current research on the health outcomes of arts-based interventions. *Physics of Life Reviews*, 54, 147–151.
<https://doi.org/10.1016/j.plrev.2025.07.015>
- Kawachi, I., & Berkman, L. F. (2001). Social ties and mental health. *Journal of Urban Health*, 78(3), 458–467. <https://doi.org/10.1093/jurban/78.3.458>
- Kawachi, I., Subramanian, S. V., & Almeida-Filho, N. (2002). A glossary for health inequalities. *Journal of Epidemiology and Community Health*, 56(9), 647–647.
<https://doi.org/10.1136/JECH.56.9.647>
- Kawachi, I., Subramanian, S. V., & Daniel, K. (Eds.). (2008). *Social capital and health*. Springer New York. <https://doi.org/10.1007/978-0-387-71311-3>
- Kay, A. (2000). Art and community development: The role the arts have in regenerating communities. *Community Development Journal*, 35(4), 414–424.
<https://doi.org/10.1093/cdj/35.4.414>
- Keller-Dupree, E. A., & Perryman, K. L. (2013). The effects of an expressive arts therapy group on female counselors-in-training: A qualitative study. *Journal of Poetry Therapy*, 26(4), 223–235. <https://doi.org/10.1080/08893675.2013.849041>
- Kim, D., Subramanian, S. V., & Kawachi, I. (2008). Social capital and physical health. In I. Kawachi, S. V. Subramanian, & D. Kim (Eds.), *Social capital and health* (pp. 139–190). Springer New York. <https://doi.org/10.1007/978-0-387-71311-3>
- Kotera, Y., Tsuda-McCaie, F., Edwards, A.-M., Bhandari, D., Williams, D., & Neary, S. (2022). Mental health shame, caregiver identity, and self-compassion in UK education students. *Healthcare*, 10(3), 584. <https://doi.org/10.3390/healthcare10030584>

- Lagaert, S., Snaphaan, T., Vyncke, V., Hardyns, W., Pauwels, L. J. R., & Willems, S. (2021). A multilevel perspective on the health effect of social capital: Evidence for the relative importance of individual social capital over neighborhood social capital. *International Journal of Environmental Research and Public Health Article*.
<https://doi.org/10.3390/ijerph18041526>
- Langer, S. (1953). *Feeling and form a theory of art*. Charles Scribner's Sons.
https://monoskop.org/images/1/11/Langer_Susanne_K_Feeling_and_Form_A_Theory_of_Art.pdf
- Lauckner, H., Leclair, L., & Yamamoto, C. (2019). Moving beyond the individual: Occupational therapists' multi-layered work with communities. *British Journal of Occupational Therapy*, 82(2), 101–111. <https://doi.org/10.1177/0308022618797249>
- Laufer, M., & Gorup, M. (2019). The invisible others: Stories of international doctoral student dropout. *Higher Education*, 78(1), 165–181. <https://doi.org/10.1007/s10734-018-0337-z>
- Leavy, P. (2007). *Method meets art: Arts-based research practice* (Third edition). The Guilford Press.
- Leavy, P. (2009). *Method meets art: Arts-based research practice* (pp. xvii, 286). The Guilford Press.
- Leavy, P. (2017). *Research design: Quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches*. The Guilford Press.
- Leavy, P. (2025). *Handbook of Arts-Based Research* (2nd ed). Guilford Publications.
- Lee, D. (2013). How the arts generate social capital to foster intergroup social cohesion. *The Journal of Arts Management*, 43(1), 4–17.
<https://doi.org/10.1080/10632921.2012.761167>

- LeMieux, J., & Sachant, P. (2015). What is art. In P. Sachant, P. Blood, J. LeMieux, & R. Tekippe (Eds.), *Introduction to art design, context, and meaning* (pp. 1–30). University of North Georgia Press.
- Lenette, C. (2022). Cultural safety in participatory arts-based research: How can we do better? *Journal of Participatory Research Methods*, 3(1). <https://doi.org/10.35844/001c.32606>
- Letts, L., Donnelly, C., Hand, C., Leclair, L., & Wener, P. (2022). Promoting occupational participation with communities. In *Promoting occupational participation: Collaborative relationship-focused occupational therapy*. Canadian Association of Occupational Therapists.
- Lewis, K. B., Graham, I. D., Boland, L., & Stacey, D. (2021). Writing a compelling integrated discussion: A guide for integrated discussions in article-based theses and dissertations. *International Journal of Nursing Education Scholarship*, 18(1), 20200057. <https://doi.org/10.1515/ijnes-2020-0057>
- Lin, N. (2000). Inequality in social capital. *Contemporary Sociology*, 29(6), 785–795. <https://doi.org/10.2307/2654086>
- Lomas, J. (1998). Social capital and health: Implications for public health and epidemiology. *Social Sciences and Medecine*, 47(9), 1181–1188. [https://doi.org/10.1016/s0277-9536\(98\)00190-7](https://doi.org/10.1016/s0277-9536(98)00190-7)
- Lombardo, C. (2021). Mapping the discourse on the health-promoting impacts of community arts. In J. H. Corbin, M. Sanmartino, E. A. Hennessy, & H. B. Urke (Eds.), *Arts and health promotion: Tools and bridges for practice, research, and social transformation*. Springer. <http://www.ncbi.nlm.nih.gov/books/NBK585549/>

- Lopes, R., & Malfitano, A. P. (2020). *Social occupational therapy theoretical and practical designs* (1st ed.). Elsevier.
- Lorenzetti, D., Lorenzetti, L., Nowell, L., Jacobsen, M., Clancy, T., Freeman, G., & Paolucci, E. O. (2023). Exploring international graduate students' experiences, challenges, and peer relationships: Impacts on academic and emotional well-being. *Journal of International Students*, 13(4), 22–41. <https://doi.org/10.32674/jis.v14i2.5186>
- Lukka, K., & Vinnari, E. (2014). Domain theory and method theory in management accounting research. *Accounting, Auditing & Accountability Journal*, 27(8). <https://doi.org/10.1108/AAAJ-03-2013-1265>
- Mackenzie, N., & Knipe, S. (2016). IIER 16: Mackenzie and Knipe—Research dilemmas: Paradigms, methods and methodology. *Issues In Educational Research*, 16. <https://www.iier.org.au/iier16/mackenzie.html>
- MacLeod, A., Skinner, M. W., Wilkinson, F., & Reid, H. (2016). Connecting socially isolated older rural adults with older volunteers through expressive arts. *Canadian Journal on Aging*, 35(1), 14–27. <https://doi.org/10.1017/S071498081500063X>
- Macnaughton, J., White, M., & Stacy, R. (2005). Researching the benefits of arts in health. *Health Education*, 105(5), 332–339. <https://doi.org/10.1108/09654280510617169>
- Magasi, S., Wong, A., Gray, D. B., Hammel, J., Baum, C., Wang, C.-C., & Heinemann, A. W. (2015). Theoretical foundations for the measurement of environmental factors and their impact on participation among people with disabilities. *Archives of Physical Medicine and Rehabilitation*, 96(4), 569–577. <https://doi.org/10.1016/j.apmr.2014.12.002>
- Maidment, J., Bay, U., & Courtney, M. (2014). Crafting social connectedness: A community development model. In L. Beddoe & J. Maidment (Eds.), *Social work practice for*

promoting health and wellbeing: Critical issues (pp. 230–241). Routledge.

<https://doi.org/10.4324/9780203112816>

Malfitano, A. P. S., Lopes, R. E., Magalhães, L., & Townsend, E. A. (2014). Social occupational therapy: Conversations about a Brazilian experience. *Canadian Journal of Occupational Therapy*, 81(5), 298–307. <https://doi.org/10.1177/0008417414536712>

Mann, F., Wang, J., Pearce, E., Ma, R., Schlieff, M., Lloyd-Evans, B., Ikhtabi, S., & Johnson, S. (2022). Loneliness and the onset of new mental health problems in the general population. *Social Psychiatry and Psychiatric Epidemiology*, 57(11), 2161–2178. <https://doi.org/10.1007/s00127-022-02261-7>

Mason, J. (2018). *Qualitative researching* (Third edition). SAGE.

McConnell, B. B. (2016). Music and health communication in The Gambia: A social capital approach. *Social Science & Medicine*, 169, 132–140. <https://doi.org/10.1016/J.SOCSCIMED.2016.09.028>

McCray, J., & Joseph-Richard, P. (2020). Towards a model of resilience protection: Factors influencing doctoral completion. *Higher Education*, 80(4), 679–699. <https://doi.org/10.1007/s10734-020-00507-4>

McKim, C. (2023). Meaningful member-checking: A structured approach to member-checking. *American Journal of Qualitative Research*, 7(2), 41–52.

McNiff, S. (2008). Art-based research. In J. Knowles & A. Cole, *Handbook of the arts in qualitative research: Perspectives, methodologies, examples, and issues* (pp. 29–41). SAGE Publications, Inc. <https://doi.org/10.4135/9781452226545.n3>

- Miller, A. N., & Orsillo, S. M. (2020). Values, acceptance, and belongingness in graduate school: Perspectives from underrepresented minority students. *Journal of Contextual Behavioral Science*, 15, 197–206. <https://doi.org/10.1016/j.jcbs.2020.01.002>
- Moore, S., & Kawachi, I. (2017). Twenty years of social capital and health research: A glossary. *Journal of Epidemiology and Community Health*, 71(5), 513–517. <https://doi.org/10.1136/jech-2016-208313>
- Moustakas, L. (2023). Social cohesion: Definitions, causes and consequences. *Encyclopedia*, 3(3), 1028–1037. <https://doi.org/10.3390/encyclopedia3030075>
- Muntaner, C., & Lynch, J. (2002). Social capital, class gender and race conflict, and population health: An essay review of bowling alone's implications for social epidemiology. *International Journal of Epidemiology*, 31(1), 261–267. <https://doi.org/10.1093/IJE/31.1.261>
- National Centre for Creative Health. (2022). *National centre for creative health briefing – February 2022*. <https://www.culturehealthandwellbeing.org.uk/sites/default/files/2022-03/NCCH%20Briefing%20-%20Health%20and%20Care%20Bill%20%28Creative%20Health%29.pdf>
- National Seniors Council. (2025, September 18). *Dialogue – Preventing social isolation and loneliness and promoting social engagement and social connectedness in Canada*. <https://www.canada.ca/en/national-seniors-council/programs/publications-reports/dialogue-social.html>
- Ogunsanya, M. E., Bamgbade, B. A., Thach, A. V., Sudhapalli, P., & Rascati, K. L. (2018). Determinants of health-related quality of life in international graduate students.

Currents in Pharmacy Teaching & Learning, 10(4), 413–422.

<https://doi.org/10.1016/j.cptl.2017.12.005>

Okanagan Charter. (2015). *An international charter for health promoting universities & colleges* (Version 1). University of British Columbia.

<https://doi.org/10.14288/1.0132754>

Okoro, C., Owojori, O. M., & Umeokafor, N. (2022). The developmental trajectory of a decade of research on mental health and well-being amongst graduate students: A bibliometric analysis. *International Journal of Environmental Research and Public Health*, 19(9), 4929. <https://doi.org/10.3390/ijerph19094929>

Orón Semper, J. V., & Blasco, M. (2018). Revealing the hidden curriculum in higher education. *Studies in Philosophy and Education*, 37(5), 481–498. <https://doi.org/10.1007/s11217-018-9608-5>

Park, H. J., Ruberton, P. M., Smyth, J. M., Cohen, G. L., Purdie-Greenaway, V., & Cook, J. E. (2023). Lower SES PhD students experience interpersonal disconnection from others both inside and outside of academia. *Journal of Social Issues*, 79(1), 79–107. <https://doi.org/10.1111/josi.12556>

Park, K. E., Sibalis, A., & Jamieson, B. (2021). The mental health and well-being of master's and doctoral psychology students at an urban Canadian university. *International Journal of Doctoral Studies*, 16, 429–447. <https://doi.org/10.28945/4790>

Parkinson, C. (2018). Weapons of mass happiness: Social justice and health equity in the context of the arts. In N. Sunderland, N. Lewandowski, D. Bendrups, & B.-L. Bartleet (Eds.), *Music, Health and Wellbeing* (pp. 269–288). Palgrave Macmillan UK. https://doi.org/10.1057/978-1-349-95284-7_14

- Parkinson, C., & White, M. (2013). Inequalities, the arts and public health: Towards an international conversation. *Arts & Health*, 5(3), 177–177.
<https://doi.org/10.1080/17533015.2013.826260>
- Patrick, J. (2025). Hidden curriculum barriers hindering graduate student success: An autoethnography on student status discrimination. *Power and Education*, 17577438251331924. <https://doi.org/10.1177/17577438251331924>
- Penninkilampi, R., Casey, A.-N., Singh, M. F., & Brodaty, H. (2018). The association between social engagement, loneliness, and risk of dementia: A systematic review and meta-analysis. *Journal of Alzheimer's Disease*, 66(4), 1619–1633.
<https://doi.org/10.3233/JAD-180439>
- Perkins, R., Mason-Bertrand, A., Tymoszuk, U., Spiro, N., Gee, K., & Williamon, A. (2021). Arts engagement supports social connectedness in adulthood: Findings from the HEartS Survey. *BMC Public Health*, 21(1), 1208. <https://doi.org/10.1186/s12889-021-11233-6>
- Perrin, T. (2001). Don't despise the fluffy bunny: A reflection from practice. *British Journal of Occupational Therapy*, 64(3), 129–134. <https://doi.org/10.1177/030802260106400304>
- Phillips, L., Christensen-Strynø, M. B., & Frølund, L. (2022). *Arts-based co-production in participatory research: Harnessing creativity in the tension between process and product*. <https://doi.org/10.1332/174426421X16445103995426>
- Picher, M. (2007). Democratic process and the Theater of the Oppressed. *New Directions for Adult and Continuing Education*, 2007(116), 79–88. <https://doi.org/10.1002/ace.278>
- Poortinga, W. (2012). Community resilience and health: The role of bonding, bridging, and linking aspects of social capital. *Health & Place*, 18, 286–295.
<https://doi.org/10.1016/j.healthplace.2011.09.017>

- Portes, A. (1998). Social capital: Its origins and applications in modern sociology. *Annual Review of Sociology*, 24(1), 1–24. <https://doi.org/10.1146/annurev.soc.24.1.1>
- Portes, A. (2000). The two meanings of social capital. *Sociological Forum*, 15(1), 1–12. <https://doi.org/10.1023/A:1007537902813>
- Proctor, A. S., Barth, A., & Holt-Lunstad, J. (2023). A healthy lifestyle is a social lifestyle: The vital link between social connection and health outcomes. *Lifestyle Medicine*, 4(4). <https://doi.org/10.1002/lim2.91>
- Public Health Agency of Canada. (2024). *Social determinants of health and health inequalities*. <https://www.canada.ca/en/public-health/services/health-promotion/population-health/what-determines-health.html>
- Putland, C., Baum, F., Ziersch, A., Arthurson, K., & Pomagalska, D. (2013). Enabling pathways to health equity: Developing a framework for implementing social capital in practice. *BMC Public Health*, 13(1), 1–12. <https://doi.org/10.1186/1471-2458-13-517>
- Putnam, R. D. (1995). Bowling alone: America's declining social capital. *Journal of Democracy*, 6(1), 65–78. <https://doi.org/10.1353/jod.1995.0002>
- Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. Touchstone Books/Simon & Schuster. <https://doi.org/10.1145/358916.361990>
- Putnam, R. D., & Feldstein, L. (2004). *Better together: Restoring the American community*. Simon & Schuster.
- Quinn, E. A., Millard, E., & Jones, J. M. (2025). Group arts interventions for depression and anxiety among older adults: A systematic review and meta-analysis. *Nature Mental Health*, 3(3), 374–386. <https://doi.org/10.1038/s44220-024-00368-1>

Radical Connections. (2021). *The arts and health movement takes root*.

<https://www.radicalconnections.ca/blog/the-arts-and-health-movement-takes-root>

Raw, A., Lewis, S., Russell, A., & Macnaughton, J. (2012). A hole in the heart: Confronting the drive for evidence-based impact research in arts and health. *Arts & Health*, 4(2), 10.1080/17533015.2011.619991. <https://doi.org/10.1080/17533015.2011.619991>

Ray, M. E., Coon, J. M., Al-Jumaili, A. A., & Fullerton, M. (2019). Quantitative and qualitative factors associated with social isolation among graduate and professional health science students. *American Journal of Pharmaceutical Education*, 83(7), 1558–1569. <https://doi.org/10.5688/AJPE6983>

Rebeiro Gruhl, K. L., Boucher, M., & Lacarte, S. (2021). Evaluation of an occupation-based, mental-health program: Meeting being, belonging and becoming needs. *Australian Occupational Therapy Journal*, 68(1), 78–89. <https://doi.org/10.1111/1440-1630.12707>

Rebeiro Gruhl, K., & Lauckner, H. (2022). Promoting occupational participation with groups. In M. Egan & G. Restall, *Promoting occupational participation: Collaborative relationships-focused occupational therapy*. Canadian Association of Occupational Therapists.

Revington, N. (2025). Housing advantage, hidden curriculum, habitus: Students' past and future housing pathways revisited. *Journal of Youth Studies*, 28(2), 428–445. <https://doi.org/10.1080/13676261.2023.2271860>

Rodriguez, A. K., Akram, S., Colverson, A. J., Hack, G., Golden, T. L., & Sonke, J. (2024). Arts engagement as a health behavior: An opportunity to address mental health inequities. *Community Health Equity Research and Policy*, 44(3), 315–322. <https://doi.org/10.1177/2752535X231175072>

- Rolling, J. H. (2010). A paradigm analysis of arts-based research and implications for education. *Studies in Art Education*, 51(2), 102–114.
<https://doi.org/10.1080/00393541.2010.11518795>
- Rudman, D. L. (2021). Mobilizing occupation for social transformation: Radical resistance, disruption, and re-configuration. *Canadian Journal of Occupational Therapy*, 88(2), 96–107. <https://doi.org/10.1177/00084174211020836>
- Sagan, O. (2025). Loneliness, social cohesion, and the role of art making. *Societies*, 15, 237.
<https://doi.org/10.3390/soc15090237>
- Sajnani, N., & Fietje, N. (2023). The Jameel Arts & Health Lab in collaboration with the WHO–Lancet global series on the health benefits of the arts. *The Lancet*, 402(10414), 1732–1734. [https://doi.org/10.1016/S0140-6736\(23\)01959-1](https://doi.org/10.1016/S0140-6736(23)01959-1)
- Salma, J., Mirhashemi, B., & Kennedy, M. (2024). Arts-based research with immigrant and racialized older adults: A scoping review. *Qualitative Social Work*, 23(5), 754–776.
<https://doi.org/10.1177/14733250231185961>
- Shapiro, J., Youm, J., Heare, M., Hurria, A., Miotto, G., Nguyen, B.-N., Nguyen, T., Simonson, K., & Turakhia, A. (2018). Medical students’ efforts to integrate and/or reclaim authentic identity: Insights from a mask-making exercise. *Journal of Medical Humanities*, 39(4), 483–501. <https://doi.org/10.1007/s10912-018-9534-0>
- Shiell, A., Hawe, P., & Kavanagh, S. (2020). Evidence suggests a need to rethink social capital and social capital interventions. *Social Science & Medicine*, 257.
<https://doi.org/10.1016/j.socscimed.2018.09.006>

- Simons, H., & McCormack, B. (2007). Integrating arts-based inquiry in evaluation methodology: Opportunities and challenges. *Qualitative Inquiry*, 13(2), 292–311. <https://doi.org/10.1177/1077800406295622>
- Skov, M., & Nadal, M. (2025). Can arts-based interventions improve health? A conceptual and methodological critique. *Physics of Life Reviews*, 53, 239–259. <https://doi.org/10.1016/j.plrev.2025.03.003>
- Smart, E., Edwards, B., Kingsnorth, S., Sheffe, S., Curran, C. J., Pinto, M., Crossman, S., & King, G. (2018). Creating an inclusive leisure space: Strategies used to engage children with and without disabilities in the arts-mediated program Spiral Garden. *Disability and Rehabilitation*, 40(2), 199–207. <https://doi.org/10.1080/09638288.2016.1250122>
- Smigelsky, M. A., Neimeyer, R. A., Murphy, V., Brown, D., Brown, V., Berryhill, A., & Knowlton, J. (2016). Performing the peace: Using playback theatre in the strengthening of police–community relations. *Progress in Community Health Partnerships: Research, Education, and Action*, 10(4), 533–539. <https://doi.org/10.1353/cpr.2016.0061>
- Solar, O., & Irwin, A. (2010). *A conceptual framework for action on the social determinants of health*. World Health Organization. <https://www.who.int/publications/i/item/9789241500852>
- Sonke, J., B. Lee, J., Helgemo, M., Rollins, J., Carytsas, F., Imus, S., Lambert, P. D., Mullen, T., Pabst, M., Rosal, M., Spooner, H., & Walsh, I. (2018). Arts in health: Considering language from an educational perspective in the United States. *Arts & Health*, 10(2), 151–164. <https://doi.org/10.1080/17533015.2017.1334680>
- Sonke, J., Golden, T., Francois, S., Hand, J., Chandra, A., Clemmons, L., Fakunle, D., Jackson, M. R., Magsamen, S., Rubin, V., Sams, K., & Springs, S. (2019). *Creating healthy*

- communities through cross-sector collaboration* [White paper].
https://creativeplacemakingresearch.org/wp-content/uploads/2020/12/2019-09_ArtPlace-Field-Scan_Public-Health_UF-CHC-Whitepaper.pdf
- Sonke, J., Rodriguez, A. K., Colverson, A., Akram, S., Morgan, N., Hancox, D., Wagner-Jacobson, C., & Pesata, V. (2024). Defining “arts participation” for public health research. *Health Promotion Practice*, 25(6), 985–996.
<https://doi.org/10.1177/15248399231183388>
- Sonke, J., Tan, M. K. B., Lee, J. B., Pesata, V., Akram, S., Golden, T., Morgan-Daniel, J., Oduntan, S., Abdulla, S., Fancourt, D., Pratt, M., Miranda, J. J., Pyche, C., Wickramasinghe, K., Fietje, N., & Sajnani, N. (2025). The arts for disease prevention and health promotion: A systematic review. *Nature Medicine*, 31(11), 3907–3916.
<https://doi.org/10.1038/s41591-025-03962-7>
- Soufi Amlashi, R., Majzoobi, M., & Forstmeier, S. (2024). The relationship between acculturative stress and psychological outcomes in international students: A systematic review and meta-analysis. *Frontiers in Psychology*, 15, 1403807.
<https://doi.org/10.3389/fpsyg.2024.1403807>
- Spiegel, J. B., Breilh, M. C., Campaña, A., Marcuse, J., & Yassi, A. (2015). Social circus and health equity: Exploring the national social circus program in Ecuador. *Arts and Health*, 7(1), 65–74. <https://doi.org/10.1080/17533015.2014.932292>
- Spiegel, J. B., & Parent, S. N. (2018). Re-approaching community development through the arts: A “critical mixed methods” study of social circus in Quebec. *Community Development Journal*, 53(4), 600–617. <https://doi.org/10.1093/cdj/bsx015>

- Squires, V., & London, C. (2022). The Okanagan Charter: Evolution of health promotion in Canadian higher education. *Canadian Journal of Higher Education*, 51(3), 100–114. <https://doi.org/10.47678/cjhe.vi0.189109>
- Statistics Canada. (2024). *Proportion of Canadian and international student graduates, by International Standard Classification of Education*. <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3710016403>
- Stickley, T. (2010). The arts, identity and belonging: A longitudinal study. *Arts & Health*, 2(1), 23–32. <https://doi.org/10.1080/17533010903031614>
- Sugiyama, M., Chau, H.-W., Abe, T., Kato, Y., Jamei, E., Veeroja, P., Mori, K., & Sugiyama, T. (2023). Third places for older adults' Social engagement: A scoping review and research agenda. *The Gerontologist*, 63(7), 1149–1161. <https://doi.org/10.1093/geront/gnac180>
- Sukhera, J. (2022). Narrative reviews: Flexible, rigorous, and practical. *Journal of Graduate Medical Education*, 14(4), 414–417. <https://doi.org/10.4300/JGME-D-22-00480.1>
- Sverdlik, A., Hall, N. C., McAlpine, L., & Hubbard, K. (2018). The PhD experience: A review of the factors influencing doctoral students' completion, achievement, and well-being. *International Journal of Doctoral Studies*, 13, 361–388. <https://doi.org/10.28945/4113>
- Swader, C. S., & Moraru, A.-V. (2023). Social infrastructure and the alleviation of loneliness in Europe. *KZfSS Kölner Zeitschrift Für Soziologie Und Sozialpsychologie*, 75(S1), 387–414. <https://doi.org/10.1007/s11577-023-00883-6>
- Szreter, S., & Woolcock, M. (2004). Health by association? Social capital, social theory, and the political economy of public health. *International Journal of Epidemiology*, 33(4), 650–667. <https://doi.org/10.1093/IJE/DYH013>

- Takashiro, N. (2017). Asian international graduate students' extrinsic motivation to pursue degrees. *Psychological Thought*, 10. <https://doi.org/10.5964/psyct.v10i1.199>
- Tan, S. R., Lin, A., Fisher, C., Bouras, H., D'Mello, C., Hill, J., Hansen, A., & Marriott, R. (2025). Understanding the risk and protective factors associated with depressive symptoms in international students: A systematic review and meta-analysis. *Journal of International Students*, 15(10), 199–249. <https://doi.org/10.32674/47n8z156>
- The Foundation for Art & Healing. (n.d.). *Campus UnLonely*. Retrieved March 11, 2026, from <https://www.artandhealing.org/campus-unlonely/>
- Thoits, P. A. (2010). Stress and health: Major findings and policy implications. *Journal of Health and Social Behavior*, 51(5), 41–53. <https://doi.org/10.1177/0022146510383499>
- Thoits, P. A. (2011). Mechanisms linking social ties and support to physical and mental health. *Journal of Health and Social Behavior, Source: Journal of Health and Social Behavior*, 52(2), 145–161. <https://doi.org/10.1177/0022146510395592>
- TONYC. (2024). *Theatre of the Oppressed NYC*. Theatre of the Oppressed NYC. <https://www.tonyc.nyc/>
- Travis, R., Rodwin, A. H., & Allcorn, A. (2019). Hip Hop, empowerment, and clinical practice for homeless adults with severe mental illness. *Social Work with Groups*, 42(2), 83–100. <https://doi.org/10.1080/01609513.2018.1486776>
- Trombeta, G., & Cox, S. (2022). The textual-visual thematic analysis: A framework to analyze the conjunction and interaction of visual and textual data. *The Qualitative Report*. <https://doi.org/10.46743/2160-3715/2022.5456>

- Turcotte, P.-L., & Holmes, D. (2021). The (dis)obedient occupational therapist: A reflection on dissent against disciplinary propaganda. *Cadernos Brasileiros de Terapia Ocupacional*, 29, e2924. <https://doi.org/10.1590/2526-8910.ctoarf2211>
- University of Arizona News. (2025). *New U of A partnership promotes student wellness through art*. <https://news.arizona.edu/news/new-u-partnership-promotes-student-wellness-through-art>
- University of Ottawa. (2023). *Strategic framework for the mental health and wellness of all: Working towards a caring and compassionate University of Ottawa community*. https://www.uottawa.ca/about-us/sites/g/files/bhrs36/files/2023-06/VREA-23-DWM-3999_Mental_Health_Report_ENG_V7-For-Web.pdf
- Uphoff, E. P., Pickett, K. E., Cabieses, B., Small, N., & Wright, J. (2013). A systematic review of the relationships between social capital and socioeconomic inequalities in health: A contribution to understanding the psychosocial pathway of health inequalities. *International Journal for Equity in Health*, 12(1), 1–12. <https://doi.org/10.1186/1475-9276-12-54>
- Uphoff, N. T. (2000). Understanding social capital: Learning from the analysis and experience of participation. In *Social capital: A multifaceted perspective* (pp. 215–249). World Bank. <https://www.ircwash.org/sites/default/files/Uphoff-2000-Understanding.pdf>
- Valtorta, N. K., Kanaan, M., Gilbody, S., Ronzi, S., & Hanratty, B. (2016). Loneliness and social isolation as risk factors for coronary heart disease and stroke: Systematic review and meta-analysis of longitudinal observational studies. *Heart*, 102(13), 1009–1016. <https://doi.org/10.1136/heartjnl-2015-308790>

- van der Meulen, E., & Omstead, J. (2021). *The limits of rehabilitation and recidivism reduction: Rethinking the evaluation of arts programming in prisons*. 101(1), 102–122.
<https://doi.org/10.1177/0032885520978477>
- Van Leeuwen, T., & Jewitt, C. (2004). *The handbook of visual analysis*. SAGE Publications Ltd. <https://doi.org/10.4135/9780857020062>
- Varughese, A., & Schwartz, S. (2022). The pandemic exposed the vulnerability of international students in Canada. *Carleton Newsroom*. <https://newsroom.carleton.ca/story/pandemic-international-students-vulnerability/>
- Villalonga-Olives, E., Wind, T. R., & Kawachi, I. (2018). *Social capital interventions in public health: A systematic review*. 2, 203–218.
<https://doi.org/10.1016/j.socscimed.2018.07.022>
- Warran, K. (2025). Towards a sociology of arts and health: How can sociology reveal ‘that which is hidden’? *Perspectives in Public Health*, 145(3), 132–134.
<https://doi.org/10.1177/17579139241290391>
- Warran, K., Burton, A., & Fancourt, D. (2022). What are the active ingredients of “arts in health” activities? Development of the INgredients iN ArTs in hEalth (INNATE) Framework. *Wellcome Open Research*, 7, 10.
<https://doi.org/10.12688/wellcomeopenres.17414.2>
- Webb, J. (with Schirato, T., & Danaher, G.). (2002). *Understanding Bourdieu*. SAGE.
- Welsh, S., & Regehr, C. (2024, May 9). *How to meet students’ soaring mental health needs without soaring funding*. Times Higher Education (THE).
<https://www.timeshighereducation.com/depth/how-meet-students-soaring-mental-health-needs-without-soaring-funding>

White, M. (2009). *Arts development in community health: A social tonic* (1st ed.). CRC Press.

<https://doi.org/10.1201/9781003576518>

WHO Commission on Social Connection. (2025). *From loneliness to social connection charting a path to healthier societies: Report of the WHO commission on social connection*. World Health Organization.

<https://www.who.int/publications/i/item/978240112360>

Wilkinson, R. G. (1997). *Unhealthy societies: The afflictions of inequality*. Routledge.

<https://doi.org/10.4324/9780203421680>

Wilkinson, R. G. (2005). *The impact of inequality: How to make sick societies healthier*.

Routledge. <https://doi.org/10.4324/9781003060505>

Williams, B. (n.d.). *Introduction to Whole Person Process Facilitation*. Retrieved

<https://www.dalarinternational.com/wp-content/uploads/2019/05/intro-wppf.pdf>

Winchester-Seeto, T., Homewood, J., Thogersen, J., Jacenyik-Trawoger, C., Manathunga, C.,

Reid, A., & Holbrook, A. (2014). Doctoral supervision in a cross-cultural context:

Issues affecting supervisors and candidates. *Higher Education Research &*

Development, 33(3), 610–626. <https://doi.org/10.1080/07294360.2013.841648>

Winzler, T. (2025). What's (in) a game? An empirical reflection on the relationship of higher

education students to their disciplines. *Critical Studies in Education*, 66(1), 1–19.

<https://doi.org/10.1080/17508487.2024.2317232>

Women's Age Lab. (2024). *Loneliness epidemic among older adults in Canada*.

<https://www.womensacademics.ca/wp-content/uploads/2024/03/Recommendations-for-action-to-tackle-the-loneliness-epidemic-among-older-adults-in-Canada.pdf>

- World Health Organization. (1948). *Constitution of the World Health Organization*.
<https://www.who.int/about/governance/constitution>
- World Health Organization. (2026). *Health equity*. <https://www.who.int/health-topics/health-equity>
- Wright, P. R., & Pascoe, R. (2015). Eudaimonia and creativity: The art of human flourishing. *Cambridge Journal of Education*, 45(3), 295–306.
<https://doi.org/10.1080/0305764X.2013.855172>
- Wu, J., Guzman, L., Patt, C., Eppig, A., & Mendoza-Denton, R. (2025). Can program structure advance equity in graduate education? *Innovative Higher Education*.
<https://doi.org/10.1007/s10755-025-09808-x>
- Xing, C., Mu, G. M., & Henderson, D. (2023). Power imbalance and power shift between Chinese international research students and their supervisors. In G. M. Mu & K. Dooley, *Bourdieu and Sino–Foreign higher education* (1st ed., pp. 104–123). Routledge. <https://doi.org/10.4324/9781003326694-9>
- Yang, G., & Xiangming, L. (2025). Graduate socialization and anxiety: Insights via hierarchical regression analysis and beyond. *Studies in Higher Education*, 50(7), 1365–1381. <https://doi.org/10.1080/03075079.2024.2375563>
- Zheng, K., Johnson, S., Jarvis, R., Victor, C., Barreto, M., Qualter, P., & Pitman, A. (2023). The experience of loneliness among international students participating in the BBC Loneliness Experiment: Thematic analysis of qualitative survey data. *Current Research in Behavioral Sciences*, 4, 100113. <https://doi.org/10.1016/j.crbeha.2023.100113>

Appendices

Appendix A: Study 2 Ethics Approval Certificate	237
Appendix B: Study 2 Interview Guide.....	238
Appendix C: Study 2 Arts-Based Workshop Guide	245
Appendix D: Study 3 Ethics Approval Certificate	248
Appendix E: Study 3 Arts-based Workshop Guide	249
Appendix F: Study 3 Qualitative Interview Guide	252
Appendix G: Statement of Contribution of Collaborators	258

Appendix A: Study 2 Ethics Approval Certificate

21/04/2023

Université d'Ottawa

Bureau d'éthique et d'intégrité de la recherche

University of Ottawa

Office of Research Ethics and Integrity

CERTIFICAT D'APPROBATION ÉTHIQUE | CERTIFICATE OF ETHICS APPROVAL

Numéro du dossier / Ethics File Number

H-04-23-8607

Titre du projet / Project Title

Creating Connections: A Pilot
Qualitative Exploration of
Graduate Student Experiences
with an Arts-based Program

Type de projet / Project Type

Projet indépendant d'étudiant /
Independent student project

Statut du projet / Project Status

Approuvé / Approved

Date d'approbation (jj/mm/aaaa) / Approval Date (dd/mm/yyyy)

21/04/2023

Date d'expiration (jj/mm/aaaa) / Expiry Date (dd/mm/yyyy)

20/04/2024

Équipe de recherche / Research Team

**Chercheur /
Researcher**

Affiliation

Role

Sandra HOULE

École des sciences de la réadaptation / School of
Rehabilitation Sciences

Chercheur Principal / Principal
Investigator

Roanne THOMAS

École des sciences de la réadaptation / School of
Rehabilitation Sciences

Superviseur / Supervisor

Christina CHARLES

École des sciences de la réadaptation / School of
Rehabilitation Sciences

Étudiant-chercheur /
Student-researcher

Conditions spéciales ou commentaires / Special conditions or comments

Appendix B: Study 2 Interview Guide

Before the interview commences, participants will have read and completed the consent form. At this point, the interviewer ensures no outstanding questions and asks the participant to re-consent for the recording. The interviewer will thank participants for participating and remind them that they do not have to answer any questions they do not wish to answer and can withdraw from the study without consequences.

Section 1: Socio-Demographic Information		
<i>First, I will begin by asking you some basic demographic questions.</i>		
1. What is your age? 2. To which gender do you self-identify, if any? 3. What is your program of study? 4. What is your year of study? 5. Are you a domestic or international student? If international, what is your home country? 6. What is your primary language? Are you fluent in other languages? 7. Are you working during your studies? If so, in what kind of role? 8. What is your current marital status? 9. Do you have any children living at home?		
Section 2: Art Engagement and “Art and Play”		
<i>Next, we will discuss your experience with art engagement and the “Art and Play” group.</i>		
Question	Follow-up/ Guidance	Information to Obtain
1. Can you tell me about any previous experience you have with visual arts?	• What forms of art have you engaged with? • Individually or in a group? • Can you tell me more about these experiences?	• Familiarity with visual arts. • Experience with community arts and collective art-making.
2. Was this your first time participating in a community arts group?	• Have you ever done anything similar?	• Experience with community arts and collective art-making.

3. How did you first come across or hear about the “Art and Play” program?	• GSAED newsletters, word of mouth, accompanied a friend.	• First contact with Art and Play • Ways students are finding/accessing the program.
4. What first motivated you to register and attend an “Art and Play” event?	• How did you feel prior to coming to the event (e.g. nervous, excited) • About engaging in art, meeting new people, etc.	• Reason for joining the group. • Feelings prior to participating.
5. Can you share which event you have attended?	• By theme, date, art activity.	• Events attended.
6. Can you describe your overall experience participating in this/these events? Did you find you had adequate art supplies to engage in the proposed activity? Did you find you had adequate support and instructions to engage in the proposed activity?	• How did participating in the event make you feel? • Was it what you expected? If not, how was it different? • Did you feel you could fully engage with the activity? • Did you have everything you needed to participate fully?	• Overall satisfaction and experience with participation in events.
7. Can you describe any new skills or knowledge you developed while participating?	• Either directly from the workshop or other students. • Were you able to build on any existing skills?	• Development of new skills/knowledge.
8. Can you describe any helpful resources you learned about directly from the coordinators or other students?	• This could include information about services or other events happening on campus, guidance about your academic courses, or your overall journey.	• Accessing new information/knowledge.

9. “Art and Play” events often focus on themes related to social change (e.g., food sovereignty, anti-racism, promotion of women’s art). How was your experience engaging with these themes?	• Did you learn anything new? Did anything surprise you? • Are there themes you would like us to look at in the future?	• Accessing new information/knowledge.
10. What are the aspects of participating in “Art and Play” that you like the most?	• Is there anything especially meaningful or satisfying about participating in the “Art and Play” group?	• Views of positive aspects of participating in the program.
11. We always want to improve the program; what aspects of “Art and Play” could be improved?	• Is there anything you wish was different or that you did not enjoy while participating in the group?	• Views of negative aspects of participating in the program.
12. Can you tell me about any factors that facilitated your participation in the event (e.g., time and location, free event)?	• Was there anything about the way the events are set up that made it easier to participate?	• Facilitators promoting access to the program. • Interaction between social, cultural and economic capital. • Equitable access to the program.
13. Can you tell me about any barriers to accessing the event (e.g., time restraint, finances, transportation, lack of information)?	• Was there anything about the ways the events are set up that made it more difficult for you to participate?	• Barriers to accessing the program. • Interaction between social, cultural and economic capital. • Equitable access to the program.
14. How do you feel about the venue and overall atmosphere of the grad house?	• Do you find the grad house inviting? Have you used it before? What makes it safe/comfortable or not for you?	• Experience of the environment/space. • Equitable access to the program.

	• What are your thoughts on having spaces dedicated to grad students?	
15. Did your participation in “Art and Play” encourage you to engage in art activities beyond the group?	• In which ways? • How was your experience bringing your art home? Did you share your experience with anyone? What did you do with the art piece?	• Experience beyond the group. • Participation in art beyond the group.
16. Did you participation in “Art and Play” encourage you to engage in other university-related activities?	• In which ways? • Have you returned to the grad house since? Participated in other on-campus activities?	• Experience beyond the group. • Participation in other on-campus activities.
Section 3: Social Connection and “Art and Play”		
We will now discuss your experience with “Art and Play” as it relates to social connections.		
Question	Follow-up/ Guidance	Information to Obtain
1. How would you describe your experience of making art in a group setting? Art and Play events alternate between individual and group art activities. If you have experienced both, how are these two experiences different? Do you have a preference?	• How is it different than doing art individually? • How did you engage with others?	• Experience of collective art-making. • Quality of social connections.
2. How did participating in “Art and Play” impact your feeling of being socially connected to others?	• Did you feel more/less connected to other students? • How did the activity allow you to engage with others? • Did you feel supported by the other students? In which ways?	• Experience of social connection • Quality of social connections.

3. Has participating in “Art and Play” allowed you to meet any other students?	• How did you meet them during the event? (sitting at the same table, sharing materials) • How would you describe the new connections that you have built? • Are they students in your program or other faculties? • Domestic or international? • Have you kept in touch?	• Structure of social connections (quantity, diversity) • Quality of social connections
4. Social isolation is often part of the graduate student experience. Do you think community art groups for students can help address this?	• In which ways? • Do you feel you are part of the graduate student community?	• Opinion and suggestions on community arts to help with social connections.
5. How could we improve the program to support student connection and relationships better?	• Specific activities, providing a sharing session etc.	• Opinion and suggestions on community arts to help with social connections.
6. In general, do on-campus group activities make you feel you are a part of the graduate student community at your university?	• In which ways? • What else makes you feel connected to other graduate students (e.g., other activities, aspects of your program, location, etc.)?	• Overall thoughts on group activities for students.
7. How would you describe a positive and supportive graduate student community?	• How do you think it is different for undergraduate and graduate students?	• Personal vision of a positive and supportive student community.
8. Are there supports or services missing that could help foster your	• Can you describe how these services or supports could help with student isolation?	• Personal vision of a positive and supportive student community.

social connections with other students? If so, what kind?		
9. Have you joined the “Art and Play” FB group? If so, what do you think of this virtual extension of the group?	• Do you enjoy it/not enjoy it? • How do you engage with it?	• Online communities • Satisfaction with communication from the program.
<i>If participants have agreed to share photographs of their artwork, continue to section 4 below. If not, go to section 5 to complete the interview.</i>		
Section 4: Discussion of Artwork		
You have agreed to share photographs of your artwork completed during an “Art and Play” event. We will now briefly review these photographs.		
Question	Follow-up/ Guidance	Information to Obtain
1. Can you describe your artwork?	• Tell me about the colours/shapes/textures	• Description of art piece.
2. How was your overall experience and process completing this specific piece?	• What kind of feelings did you experience while creating it? (e.g. enjoyment, relaxation, stress, hesitation)	• The overall experience of creating the art piece.
3. How did you find working with the specific materials required for this piece?	• How was it working with paint/dried flowers/stencils/ eco dyes etc?	• Use of materials and supplies.
4. Can you describe any specific themes related to your piece that stand out?	• Think about what you were feeling/thinking while creating your piece. What were you hoping to convey?	• Main themes of the piece.
5. Did anything surprise you about your artwork?	• Either during the process or of the product itself?	• Further insights on process and product.
6. Is there anything else you would like to share regarding your piece?		• Further insights on process and product.

Section 5: Conclusion

Thank you for your insights today and for participating in our study. During the data analysis, we plan to share the key themes with our participants to ensure we have properly grasped the students' experience. Would you like us to share these themes with you for your feedback?

If you have any follow-up questions or concerns, please contact one of the investigators. Their contact information is on the consent form.

Researchers will ask current participants to share the recruitment poster within their networks. Researchers will advise current participants that interested parties can either :

- a) contact researchers to confirm their interest directly;
- b) give permission to the current participant to share their contact information (name and email) with the researchers to then be contacted by the research team.

Appendix C: Study 2 Arts-Based Workshop Guide

Location: Critical and Creative Practices Lab at 200 Lees, Room 472

Date: November 28, 2024

Facilitator: Sandra Houle

Volunteer: Willa McLean

Material List:

- Audio recording device
- Camera
- Magazines
- Coloured and patterned papers
- Glue
- Large mural paper
- Markers
- Paint and paint brushes
- Scissors
- Food and refreshments

Time (AM version sampled here but could easily be done during an afternoon instead)	Activity
8:30 AM	Introductions and share plan for the morning. - Reminder of study objectives, explain arts-based methods, and confidentiality reminder. - Reminder of audio recording throughout the session. - Participants can choose pseudonyms if desired. - Reminder that participants can take breaks and that food and refreshments are available.
9:00	Start recording. Introduction activity and ice breaker (transfer-in) - Image cards (with writing and photo) and intro (about themselves, which art and play event they have attended, what does the art and the play mean to them?)

-
- Reminder of the interviews they participated in and the kind of questions and themes being asked
-

9:30 AM

Explain group collage activity.

- Overview of materials and basics of mixed-media collective collage.
- Participants are invited to reflect on the following prompts and look through the magazines to find various images and words they feel represent their thoughts and experiences regarding their participation in Art and Play.
- They are invited to write down a series of 5-10 words and ideas that come to mind which they can use as inspiration.
- Large piece of paper will be on table. Participants are invite to start posing images on the paper. They can choose to hold off gluing and work together towards the final product.
- Participants are encouraged to build off other participants' images and add any desired words and drawings.
- Participants are reminded of the value of process over product.

Prompts:

- What images or words about my experiences with the Art and Play program come to mind?
- What kind of relationships have I made during Art and Play events?
- How do community and art relate to each other?
- When I make art alongside other students... I feel?
- I hope the following Art and Play sessions will...?

Prompts will be written on a PowerPoint slide and remain on a large screen for reference.

	Visual prompts, images of past Art and Play events and posters.
9:40 AM	Group collage activity in progress.
	The facilitator is available as needed.
	Breaks are taken as needed.
11:00 AM	Group discussion and sharing.
	- Participants invited to get food and come sit in a circle. - Participants are invited to share their contribution to the collage (e.g. How does their choice of images relate to their experiences with Art and Play? Was there a reason for their specific placement alongside other participants' work? How did they use the different materials?) - Participants are also invited to share their impressions and interpretations of the collective collage. (e.g. Did it turn out as they expected? Are there any elements they particularly like or relate to? How do they feel the overall collage represents the Art and Play program?) - Final remarks or comments.
12:30 PM	Session ends.
	Take photographs of the mural (overall and specific sections).

Appendix D: Study 3 Ethics Approval Certificate

22/08/2024

Université d'Ottawa

Bureau d'éthique et d'intégrité de la recherche

University of Ottawa

Office of Research Ethics and Integrity

CERTIFICAT D'APPROBATION ÉTHIQUE | CERTIFICATE OF ETHICS APPROVAL

Numéro du dossier / Ethics File Number

H-08-24-10673

Titre du projet / Project Title

An Arts-based Study of
International Graduate Students'
Social Connections

Type de projet / Project Type

Thèse de doctorat / Doctoral
thesis

Statut du projet / Project Status

Approuvé / Approved

Date d'approbation (jj/mm/aaaa) / Approval Date (dd/mm/yyyy)

22/08/2024

Date d'expiration (jj/mm/aaaa) / Expiry Date (dd/mm/yyyy)

21/08/2025

Équipe de recherche / Research Team

**Chercheur /
Researcher**

Affiliation

Role

Sandra HOULE

École des sciences de la réadaptation / School of
Rehabilitation Sciences

Chercheur Principal / Principal
Investigator

Roanne THOMAS

École des sciences de la réadaptation / School of
Rehabilitation Sciences

Superviseur / Supervisor

Katrine
SAUVÉ-SCHENK

École des sciences de la réadaptation / School of
Rehabilitation Sciences

Collaborateur / Collaborator

Mary EGAN

École des sciences de la réadaptation / School of
Rehabilitation Sciences

Collaborateur / Collaborator

Conditions spéciales ou commentaires / Special conditions or comments

Appendix E: Study 3 Arts-based Workshop Guide

Location: Critical and Creative Practices Lab at 200 Lees, Room 472

Date: December 4th, 2024

Facilitator: Sandra Houle

Assistant: Willa McLean

Material List:

- Audio recording device
- Camera
- Magazines
- Coloured and patterned papers
- Glue
- Markers
- Paint and paint brushes
- Scissors
- Used Books
- Cardstock paper
- Lunch and refreshments

Time 8-15h30	Activity
9:00-9:25 AM	Introductions and share plan for the morning. - Reminder of study objectives and arts-based methods, and keeping what is shared in the session confidential. - Reminder of audio recording throughout the session. Participants can choose pseudonyms if desired. - Reminder that participants can take breaks as needed and that food and refreshments are available.
9:25-10:00 AM	Explain the art activity and plan for discussions. Participants will create three pieces, each representing a component of their experience of social connections. After completing each piece, there will be a short sharing session. Only these discussions, not the time spent creating the art, will be audio-recorded. Provide an overview of materials and basic principles of mixed-media collage and poetry. Remind participants of the importance of process over product.
10:00-11:00 AM	Creation of the first art piece Participants are invited to create their first piece by reflecting on the following prompts. Prompts: - Please reflect on your closest relationships, such as your close friends and family. - With whom do you experience these close ties? - Do you feel satisfied with both the quantity and quality of these relationships? - What do you have in common, and how are you different from these individuals? (e.g. culture, language, position, age, etc.)?

	- In which ways do you feel connected to these people? - In which ways do you experience these close bonds? - In which ways do these relationships support or not support your graduate student experience? (e.g. social support, financial support, advice) - How does your experience of being an international student influence these relationships? - How could these relationships be enhanced to improve your experience?
11:00-11:30 AM	Group discussion concerning the first art piece. - Participants can present their art pieces and explain their process and reflections using the above prompts. They are reminded to share as much or as little as they feel comfortable in this group setting.
11:30-12:30 AM	Creation of the second art piece Participants can create their second art piece by reflecting on the following prompts. Prompts: - Please reflect on your relationships with people slightly outside your inner circle (e.g., classmates, peers, friends and acquaintances from groups and clubs). - With whom do you experience these types of social ties? - What do you have in common, and how are you different from these individuals? (e.g. culture, language, position, age, etc.)? - In which ways do you feel connected to these people? - In what context do you experience these types of relationships? - In which ways do these relationships support or not support your graduate student experience? (e.g. emotional support, sharing advice and information, competition) - How do you feel your experience of being an international student influences these relationships? - How could these relationships be enhanced to improve your experience?
12:30-1:30 PM	Break for lunch.
1:30-2:00 PM	Group discussion about the second art piece. - Participants can present their art pieces and explain their process and reflections using the above prompts. Participants will be reminded to share as much or as little as they feel comfortable in this group setting.
2:00-3:00 PM	Creation of the third art piece. Participants can create their third art piece by reflecting on the following prompts. Prompts: - Please reflect on your relationships with people from the broader University institution (e.g. thesis supervisor, professors, other faculty members). - With whom do you experience these types of social ties? - Do you feel satisfied with both the quantity and quality of these relationships?

	- What do you have in common, and how are you different from these individuals? (e.g. culture, language, position, age, etc.)? - In which ways do you feel connected to these people? - Do you feel satisfied with both the quantity and quality of these relationships? - In what context do you experience these types of relationships? - In which ways do these relationships support or not support your graduate student experience? (e.g. emotional support, sharing advice and information, providing opportunities, setting expectations) - How do you feel your experience of being an international student influences these relationships? - How could these relationships be enhanced to improve your experience?
3:00-4 PM	Group discussion about the third art piece and overall workshop. - Participants can present their art pieces and explain their process and reflections using the above prompts. Participants will be reminded to share as much or as little as they feel comfortable in this group setting. Group discussion of overall impressions and experience of the workshop. - Participants are invited to share their overall thoughts on the workshop (e.g. What did you like the most? The least? How was the experience of making art regarding this subject in a group setting?).
4:00-4:30 PM	Final remarks or comments. Take photographs of art pieces. End session

Appendix F: Study 3 Qualitative Interview Guide

Participants will have read and completed the consent form before the interview. At this point, the interviewer ensures there are no outstanding questions and asks the participant to orally re-consent for recording. The interviewer will thank participants for participating and remind them that they do not have to answer any questions they do not wish to answer and can withdraw from the study without consequences.

Section 1: Socio-demographics		
First, I will begin by asking you some basic socio-demographic questions.		
1. What is your age? 2. To which gender do you self-identify, if any? 3. What is your program of study? 4. What is your year of study? 5. What is your home country? 6. What is your primary language? Are you fluent in any other languages? 7. Are you working during your studies? If so, in what kind of role? 8. What is your current marital status? 9. Do you have any children living at home?		
Section 2: Discussion of Artwork		
I would like to hear about the art you created during the workshop and your thoughts on how it represents your experiences of social relationships as an international student.		
Art Piece #1 (Bonding Social Capital)		
For the first art piece, you were asked to create something based on your reflections on your close social relationships, such as those with close friends and family.		
Question	Follow-Up/Guidance	Information to Obtain
1. Can you describe your first art piece?	• How does the theme of close social bonds come through in your piece?	Overall description of the art piece. Main themes.
2. Which relationships inspired you when you created this piece?	• How would you describe your experience of these close social relationships?	Identifying “bonding relationships.” Experience of “bonding relationships.”
3. What specific elements of your piece represent these close relationships, and how?	• E.g. colour choice, images, words, passageways, textures, specific materials	Depiction of relationships and experiences through visual art (symbols, metaphors).

4. How does the poem you created or chose represent these bonds?	Do you feel any particular words or sections reflect these relationships?	Depiction of relationships and experiences through words chosen.
5. Close social ties are often with people who share similar social identities as us. What do you have in common, and how are you different from these people? How does this relate to the relationships represented in your piece?	E.g., culture, language, age, position, roles.	Similarities and differences in social identities in these relationships.
6. In what ways do these relationships support or not support your graduate student experience?		Social support and resources from “bonding relationships” for graduate studies.
7. Do you feel satisfied with the quantity and quality of these relationships?	Is there anything you would change?	Satisfaction with “bonding relationships.”
8. Can you think of ways in which these relationships could be enhanced?	If so, in which ways?	Satisfaction with “bonding relationships.”
9. How do you feel your experience of being an international student influences these relationships?		Influence of international student identity on relationships.
10. Did you learn anything new about these relationships while creating the piece?	Did anything surprise you while creating the piece?	New insights about “bonding relationships.”
11. With some time away from your piece, do you have any new insights that come to mind?		New insights about “bonding relationships.”

Art Piece #2 (Bridging Social Capital)

For the second piece, you were invited to reflect on more distant social ties, such as those with peers, acquaintances/friends, and classmates.

Question	Follow-Up/Guidance	Information to Obtain
1. Can you describe your second art piece?	How does the theme of more distant social relations come through in your piece?	Overall description of the art piece. Main themes.
2. Which relationships inspired you when you created this piece?	How would you describe your experience of social relationships with peers, friends, and classmates?	Identifying “bridging” relationships. Experience of “bridging relationships.”
3. Which specific elements of your piece represent these relationships?	E.g. colour choice, images, words, passageways, textures, particular materials)	Depiction of relationships and experiences through visual art (symbols, metaphors).
4. How does the poem you created or chose to represent these ties?	Do you feel any particular words or sections reflect these relationships?	Depiction of relationships and experiences through words chosen.
5. More distant social ties are often with people who share similarities in social identities as well as some differences. What do you have in common, and how are you different from these people? How does this relate to the relationships represented in your piece?	E.g. culture, language, position, roles.	Similarities and differences in these relationships.
6. In what ways do these relationships support or not support your graduate student experience?		Social support and resources from “bridging relationships.”

7. Do you feel satisfied with the quantity and quality of these relationships?	Is there anything you would change?	Satisfaction with “bridging relationships.”
8. Can you think of ways in which these relationships could be enhanced?		Satisfaction with “bridging relationships.”
9. How do you feel your experience of being an international student influences these relationships?		Influence of international student identity on relationships.
10. Did you learn anything new about these relationships while creating the piece?	Did anything surprise you while creating the piece?	New insights about “bridging relationships.”
11. With some time away from your piece, do you have any new insights that come to mind?		New insights about “bridging relationships.”
<i>Art Piece #3 (Linking Social Capital)</i> For the third piece, you were invited to focus on broader institutional ties, such as those with your thesis supervisor, professors, and other faculty members.		
Question	Follow-Up/Guidance	Information to Obtain
1. Can you describe your final art piece?	How does the theme of broader institutional connections come through in your piece?	Overall description of the art piece. Main themes.
2. Which relationships inspired you when you created this piece?	How would you describe your experience of social relationships with professors, supervisors, and administrators?	Identifying “linking relationships.” Experience of “linking relationships.”
3. Which specific elements of your piece represent these relationships?	E.g. colour choice, images, words, passageways, textures, specific materials	Depiction of relationships and experiences through visual art (symbols and metaphors).

4. How does the poem you created or chose to represent these ties?	Do you feel any particular words or sections reflect these relationships?	Depiction of relationships and experiences through words chosen.
5. Broader institutional social ties are often with people with different power levels. What do you have in common, and how are you different from these people? How does this relate to the relationships represented in your piece?	E.g. position, roles.	Similarities and differences in these relationships.
6. In what ways do these relationships support or not support your graduate student experience?		Social support and resources from “linking relationships.”
7. Do you feel satisfied with the quantity and quality of these relationships?	Is there anything you would change?	Satisfaction with “linking relationships.”
8. Can you think of ways in which these relationships could be enhanced?		Satisfaction with “linking relationships.”
9. How do you feel your experience of being an international student influences these relationships?		Influence of international student identity on relationships.
10. Did you learn anything new about these relationships while creating the piece?	Did anything surprise you while creating the piece?	New insights about “linking relationships.”
11. With some time away from your piece, do you have any new insights that come to mind?		New insights about “linking relationships.”
Section 3: Overall Arts-based Workshop Experience		

Finally, I would like to ask you about your experience of the art-based workshop you participated in for this study.		
Question	Follow-Up/Guidance	Information to Obtain
1. How would you describe your overall experience with the workshop?	Positive, negative, was it how you expected?	Overall experience with arts-based workshop.
2. Did you find that the arts-based tools facilitated your reflection and representation of your experiences of social relationships?	In which ways?	Experience/satisfaction in using art for reflection/representation.
3. What are your thoughts on the actual art forms used (i.e. collage and poetry)	Easy, difficult to use?	Experience/satisfaction with art forms chosen.
4. How was your experience of creating in a group setting?	- Positive, negative, was it how you expected? - Art activity vs discussion.	Experience of collective art-making.
5. Are there any improvements you would suggest for future workshops?	Anything that would make it easier, more meaningful, or more enjoyable?	Satisfaction with workshop.
6. Do you have any final comments or questions?		Final insights.

Thank you for your insights today and for participating in our study. We are planning on sharing the key themes with our participants during the data analysis to ensure we have properly grasped the students' experience. Would you like us to send you these themes for your feedback? If you have any follow-up questions or concerns, please contact one of the investigators. Their contact information is on the consent form.

Appendix G: Statement of Contribution of Collaborators

As the primary researcher, I led all aspects of my thesis research, am responsible for the content of this dissertation, and am the lead author on all three study manuscripts. This thesis is submitted in partial fulfillment of the requirements for the Doctor of Philosophy degree in Rehabilitation Sciences at the University of Ottawa. I received financial support from the University of Ottawa's Excellence and Admission Scholarships (2020-2024), the Canadian Occupational Therapy Foundation's Doctoral Scholarship Award (2023), and the Ontario Government Scholarship (2022-2025). I was also awarded the Faculty of Health Sciences Dean's Excellence Award (2023). Finally, I was awarded a Faculty of Health Sciences' travel conference grant to present my first thesis study (theoretical synthesis) at the Society of Occupational Science Conference in 2024. The funders were not involved in any part of the study's development or execution.

My research was supported by the involvement of numerous collaborators. My thesis supervisor, Dr. Roanne Thomas, provided guidance throughout all steps of the research, including conceptualization and design, and data collection for each study. She was also involved in the data analysis and provided feedback and editing on all three individual studies, as well as the dissertation overall. Additionally, my thesis committee members, including Dr. Katrine Sauvé-Schenk and Dr. Mary Egan, provided guidance and feedback on my research. They were especially involved in supporting my thesis proposal and providing important feedback on the individual study manuscripts. Each of these individuals met the authorship requirements according to the selected journal's guidelines. In Table A.1 below, I list the specific contributions of each co-author for each of the manuscripts.

My research was also supported by several other individuals. Notably, my PhD colleague, Dr. Christina Charles, has helped run the Art and Play program with me since 2021 and assisted with the recruitment and the first participant interview for the second study. I also received support from my University of Ottawa colleagues, Dr. Motahareh Karimijashni and Asefeh Memarian, PhD (c), in reviewing the third study's visual media for the data collection workshop, focusing on the cultural significance for international graduate students. My colleague Yousef Babish (PhD student at the University of Southern California) also reviewed my data collection instruments (workshop and interview guides) for my third study, providing valuable insights into the relevance of the questions and activities for international graduate students. Willa MacLean helped run both arts-based data-collection workshops for studies 2 and 3 and transcribed study 2's audio recordings. Christine Pillon provided transcription services for study 3. Finally, Alysson Rheault helped format each manuscript according to the journal guidelines and reviewed formatting and references for the overall thesis.

Table G.1*Summary of Co-author Contributions*

Manuscript Title	Community Arts and Health Equity: A Theoretical Synthesis Using Social Capital Theories	Creating Connections: An Arts-based and Qualitative Exploration of Graduate Students' Experiences in a Peer-led Community Art Group	Gods, Dragons, and Games: An Arts-Based Inquiry into the Experiences of Social Relationships of International Graduate Students
Design and conceptualization	SH, RT, KSS, ME	SH, RT, KSS, ME	SH, RT, KSS, ME,
Data collection	SH	SH	SH
Data analysis and interpretation	SH	SH, RT	SH, RT, ME
Initial draft preparation	SH	SH	SH
Review and Revision	SH, RT, KSS, ME	SH, RT, KSS, ME	SH, RT, KSS, ME
Manuscript Authorship	SH, RT, KSS, ME	SH, RT, KSS, ME	SH, RT, KSS, ME
Responsible for content	SH	SH	SH

Note. KSS: Katrine Sauvé-Schenk, ME: Mary Egan, SH: Sandra Houle, RT: Roanne Thomas.