

**Journal  
of  
Multidisciplinary  
Research**

---

**Vol. 16, No. 2**

**Fall 2024**

# Journal of Multidisciplinary Research

ISSN 1947-2900 (print) • ISSN 1947-2919 (online)

## **Founder, Publisher, & & Editor-in-Chief**

Hagai Gringarten, Ph.D., *St. Thomas University*

## **Managing Editor**

Raúl Fernández-Calienes, Ph.D., *St. Thomas University*

## **Associate Editor**

Ya'akov M. Bayer, Ph.D., *Ben Gurion University of the Negev*

Kate L. Nolt, M.P.H., Ph.D., *Creighton University*

## **Assistant Editor Law**

Anne-Marie Mitchell, J.D., *Kelley Drye & Warren, LL.P., NY*

## **Assistant Editor Health**

Jack D. Rudnick, Jr., Ph.D., *Thomas More College*

## **Student Corner Editor**

Kyler D. Wade, *University of Florida*

## **Asst. Student Corner Editor**

Sheena Kurakula, *State College of Florida, Manatee-Sarasota*

## **Photo Editor**

Scott E. Gillig, Ph.D.

## **Guest Artist**

Heather Crawford

## **Research Assistant**

Cristina Blaya San Pedro, M.B.A. (Class of 2025)

## **Technical Support**

Manuel Canoura

## Contact Information

Professor Hagai Gringarten, Ph.D., Editor-in-Chief, *Journal of Multidisciplinary Research*

c/o O'Mailia Hall, 16401 N.W. 37<sup>th</sup> Avenue, Miami Gardens, Florida 33054

Telephone +1 (305) 628-6635

E-mail: [jmr@stu.edu](mailto:jmr@stu.edu)

## Journal Web Address

<http://www.jmrpublication.org>

## Journal Indexing & Listing

Indexed in [ProQuest](#), [Cabells](#), [EBSCO](#), [Gale-Cengage Learning](#), [Business History Conference Collective Bibliography \(BHC\)](#), [CiteFactor](#), [Mendeley](#), [Ulrich's](#), [de Gruyter](#) (Germany), [Elektronische Zeitschriftenbibliothek \(EZB\)](#) (Germany), [European Reference Index for the Humanities and the Social Sciences \(ERIH PLUS\)](#) (Norway); and [Directory of Open Access Resources \(ROAD\)](#).

Listed in [AcademicKeys](#), [Cision Directory](#), [EconPapers](#), [Εθνικός Συλλογικός Κατάλογος Επιστημονικών Περιοδικών](#) (Greece), [Gaudeamus](#), [Google Scholar](#), [Isis Current Bibliography](#), [JournalSearches](#), [JournalSeek](#), [Journals4Free](#), [The Linguist List](#), [MediaFinder](#), [Microsoft Academic](#), [NewJour](#), [Research Papers in Economics \(RePEc\)](#), [Semantic Scholar](#), [ACNP](#) (Italy), [BVB-Bibliothek Verbund Bayern FAST-Zugang](#) (Germany), [CIRC](#) (Spain), [COPAC](#) (England), [CORE](#) (UK), [CUFTS Journal Database](#) (Canada), [EconBiz](#) (Germany), [Edanz](#) (Japan), [Globethics](#), (Switzerland), [HEC Paris Journal Finder](#) (France), [The Lens](#) (Australia), [Library Hub Discoverer](#) (UK), [MIAR](#) (Spain), [Mir@bel](#) (France), [National Library of New Zealand](#), [Norwegian Register for Scientific Journals, Series, and Publishers](#) (Norway), [NSD - Norwegian Register](#) (Norway), [PhilPapers](#) (Canada), [REBIUN-CRUE](#) (Spain), [ROAD: Directory of Open Access Scholarly Resources](#) (France), [SUDOC](#) (France), [ZeitschriftenDatenBank \(ZDB\)](#) (Germany), and the [Open University of Hong Kong Electronic Library](#) (Hong Kong). Accessible via [BASE-Bielefeld Academic Search Engine](#) (Germany).

## Mission Statement

The mission of the *Journal of Multidisciplinary Research* is to promote excellence by providing a venue for academics, students, and practitioners to publish current and significant empirical and conceptual research in the arts; humanities; applied, natural, and social sciences; and other areas that tests, extends, or builds theory.

# Journal of Multidisciplinary Research

---

**Vol. 16, No. 2**

**Fall 2024**

---

## Contents

Editorial Details...inside front cover  
Mission Statement...inside front cover  
Editorial Review Board...inside back cover

Editorial

By Hagai Gringarten...3

## Articles

Dispute Resolution in Class: How Can Dispute Resolution Pedagogies  
Inform Doctrinal Law Classes?

By Nellie Munin and Yael Efron...5

Paring the Power of Institutional Time over Residents' and Dementia Time  
in North American Nursing Homes: "You have to wait!"

By Margret Oldfield...23

The Asynchronous Online Discussion Forum Dilemma

By Katherine Bandy...39

A Contribution to Improving Clarity in Transdisciplinary Creation,  
Sharing, and Application of Knowledge

By S. Spuzic, Ramadas Narayanan, Hannah Gooding, and  
Kazem Abhary...45

Alternatives and their Role in Modern Portfolio Management

By David Kelly and Tamar Psuturi...57

## **Student Corner**

COVID-19 Mental Health Decrease Factors

By Parker Twiss...75

High School Adolescents' Perceptions of Gap Years as an Alternative Enrollment Option Post Graduation

By Oscar DeGus and David Friedman...85

## **Review**

Review of *Deaf rhetoric: An ecology of health communication*,  
by M. Yabe...

By Leah R. Oakes...105

## **Index to Volume 16**

Journal of Multidisciplinary Research: Index to Volume 16 (2024)

By Raúl Fernández-Calienes...109

About the Journal...113

## Editorial

Benjamin Franklin once said, “When you’re finished changing, you’re finished.” This serves as a reminder for us all to continue to evolve, improve, and create new discoveries. Here at the JMR, we are doing our part by providing a platform for researchers and practitioners to publish current and significant empirical and conceptual research in their field.

This V16-N2 edition of the JMR features interesting research articles, student articles, and book reviews. Scholars from Zefat Academic College in Israel discuss dispute resolution in class, and how can dispute resolution pedagogies inform Doctrinal Law classes. A social scientist formerly from University of Toronto in Canada discusses dementia, care delivery, and institutional impact. A researcher from St. Thomas University in Florida researched discussion forums in a learning management system, and ways to improve engagement and learner satisfaction in asynchronous online discussions. A collaborative study from the University of South Australia, Central Queensland University, and Surrey Business School in the United Kingdom aimed to identify “what prevents transdisciplinary knowledge production processes from being conducted.” Practitioners from Bank of America explored the evolution and increasing significance of alternative investments such as private equity, hedge funds, and real estate, and their integration into traditional portfolio structures.

In our “Student Corner,” we feature student article from Arkansas State University, analyzing mental health factors and influence of COVID-19. We also feature a student article from Douglas MacArthur in New York, researching high school adolescents’ perceptions of gap years as an alternative enrollment option post-graduation. In addition, we reviewed the book *Deaf rhetoric: An ecology of health communication* by Yabe.

As we begin a new year, I wish you new discoveries, and a very productive and meaningful 2025!

Always forward,

Hagai Gringarten, Ph.D.  
*Publisher & Editor-in-Chief*





“Turquoise Treasure”  
Río Celeste, Costa Rica  
2018

Photography by Heather Crawford.

Image Copyright © 2018 by Heather Crawford.  
All rights reserved. Used with permission.

# **Dispute Resolution in Class: How can Dispute Resolution Pedagogies Inform Doctrinal Law Classes?**

**Nellie Munin**

*Zefat Academic College, Israel*

**Yael Efron**

*Zefat Academic College, Israel*

## Abstract

Empirical evidence shows that most disputes are settled out of courts. However, the traditional law school curriculum rarely includes mandatory courses in dispute resolution skills. In line with the contemporary search for innovative teaching methods, the authors introduced law students to dispute resolution skills in tax law and international trade law. These doctrinal courses invoke questions of relationships, systems design and policy. They involve local and international conflicting economic, business and other interests for individuals and states. Roleplays allow students to apply doctrinal knowledge while practicing lawyering skills that are complementary to those featured in the traditional curriculum to solve these conflicts. This method has particularly interesting pedagogic value in multi-cultural classes.

The article introduces the theoretical background and the authors' experience in applying roleplays, illustrating their value for learning dispute resolution.

## Keywords

legal education, pedagogy, conflict resolution, legal practice, legal doctrine, tax law, international trade

## **Introduction**

Disputes are part of our daily lives. Consequently, dispute resolution is of paramount importance in various aspects of life, ranging from personal relationships to business dealings and even international diplomacy. Its significance lies in its ability to facilitate the peaceful, fair, and efficient resolution of conflicts, disagreements, and disputes that inevitably arise in various situations. Its importance involves different aspects, such as:

**Maintaining Relationships:** In personal, professional, and social contexts, disputes can strain relationships. Effective dispute resolution methods, such as negotiation and mediation, allow parties to address their issues while preserving their rapport and communication channels.

**Avoiding Escalation:** Unresolved disputes have the potential to escalate into more serious conflicts, leading to further harm, disruption, and even violence. Early intervention through dispute resolution can prevent these situations from escalating to a point of no return.

**Preserving Resources:** Litigation and legal battles can be time-consuming, expensive, and emotionally draining. Alternative dispute resolution methods, like mediation and arbitration, can be more cost-effective and efficient, allowing parties to save time and resources.<sup>1</sup>

**Promoting Fairness:** A well-structured dispute resolution process ensures that each party's interests and concerns are taken into account.<sup>2</sup> This promotes fairness and helps parties arrive at solutions that are acceptable to all involved.

**Confidence in Systems:** An effective dispute resolution mechanism, whether it is within a company, a community, or on an international scale,<sup>3</sup> builds confidence in the overall system. When people believe they have access to a fair and just means of resolving disputes, they are more likely to engage in productive interactions.<sup>4</sup>

**Business and Economic Implications:** In the business world, disputes can lead to disruptions in operations, damage to reputation, and financial losses. Efficient dispute resolution mechanisms can help businesses maintain stability, reduce risks, and ensure the continuity of operations.

**Preserving Privacy:** Litigation often involves public court proceedings, which can expose sensitive information to public scrutiny. In contrast, many alternative dispute resolution methods offer a level of confidentiality that allows parties to address their issues without public exposure.<sup>5</sup>

---

<sup>1</sup> For example, in international trade law, where many bilateral trade agreements provide for the use of softer dispute resolution techniques, such as negotiation, mediation, reconciliation etc., before opting for 'court-like' procedures (e.g., Munin, 2010).

<sup>2</sup> Since taxation decreases personal property, it is inevitable that constitutional rights will limit states' ability to do so, to enhance the taxpayers' sense of balanced and justified tax policy (see, e.g., Edrey, 2010).

<sup>3</sup> In the context of international trade and the World Trade Organization, one dilemma underlining the dispute settlement mechanism is whether preference of a 'rule oriented' or rather 'power oriented' approach may lead best to this result (see, e.g., Weiler, 2001).

<sup>4</sup> For example, confidence in system fairness can enhance taxpayers' willingness to pay taxes, and vice versa (Munin & Malka-Tiv, 2022).

<sup>5</sup> In trade disputes among states, representing implied interests of businesses operating in them, dealt by WTO panels, only the disputing countries and acknowledged third parties can be present in the panel's procedure, to ensure confidentiality of the trade information discussed in the procedure (WTO Dispute Settlement Understanding; Weiler, 2001, articles 14 and 18).



**Customized Solutions:** Dispute resolution allows parties to create solutions that are tailored to their unique circumstances, rather than relying on standard legal remedies that might not fully address their needs.

**Cultural and Social Considerations:** Different cultures and societies have diverse ways of approaching conflicts. Dispute resolution methods that take these cultural and social aspects into account can lead to more culturally sensitive and appropriate outcomes (Mautner, 2010–2011; Bryant & Koh Peters, 2004; Earley & Ang, 2003; Salisbury, 2011).<sup>6</sup>

**Promoting Innovation:** Dispute resolution can encourage creative problem-solving and innovative solutions. By engaging in open discussions and negotiations, parties may uncover new ways to address their disagreements.

**Speedier Resolutions:** Traditional court proceedings can take years to conclude, whereas many dispute resolution methods provide quicker outcomes.<sup>7</sup> This is especially beneficial when time-sensitive matters are at stake.

Court procedures have additional disadvantages: they are sophisticated, in most cases necessitate the involvement of lawyers that charge their fees, they suggest a win/lose model that may discourage the parties from reaching a mutually satisfactory compromise and may leave them, at the end of the process, frustrated and sometimes even spoil their future relations.

Due to all these reasons, in recent years there is a growing tendency to look for alternative mechanisms to the traditional court procedures. Such mechanisms may offer quicker solutions, based on negotiation, mediation or reconciliation. The process may be less strict and formal, less bound by procedural demands. The atmosphere may enable an amicable dialogue that can lead to more balanced compromises. Law schools do not dedicate enough attention to such mechanisms.

Moreover, the traditional legal education seems to focus on the legal rules, overlooking the art of litigation, negotiation, mediation, and reconciliation processes.

Successful dispute resolution leaders possess a combination of interpersonal, communication, negotiation, and problem-solving skills, along with a commitment to fairness and the ability to manage complex dynamics. Law schools seldom dedicate time to increase the awareness of their students of the importance of developing and using such skills.

Role plays may be an instrumental way to close this didactic loophole. This chapter shares the authors' use of role plays in class, giving law students at the law school of Zefat Academic College (ZAC) in Israel an opportunity to exercise such professional skills, increasing their awareness to their importance and due use through illustration, participation and experience.

Over the years, the authors have used these role plays to simulate dispute resolution through court procedures, as well as through alternative methods. Experiencing these alternatives sharpens the students' ability to understand the advantages and disadvantages of each path and their professional judgment as to the preferred path in given circumstances.

The chapter analyzes the skills necessary for leading dispute resolution processes, illustrating how role plays can help to develop them for law students and future practitioners.

---

<sup>6</sup> Globalization enhances this aspect of business and disputes (Silver, 2013).

<sup>7</sup> Technology developments can enhance this process (e.g., Ebner (2017)).

## **Legal Education: Contemporary Evolution**

### **Langdell's Socratic Method**

Legal education has undergone significant changes in the last century. Christopher Columbus Langdell, the iconic Dean of Harvard Law School (1870–1895) revolutionized legal studies. His educational legacy shifted law school from its traditional apprentice model into a rationalized scientific inquiry, where students focus on legal reasoning of appellate cases (mostly from the U.S. Supreme Court) in particular areas of law, identifying their principles, critique their rationales and draw analogies or distinctions between cases (Stuckey et al., 2007).

The Langdellian method ignored several basic facts about the real-life practice of law: first, that only a few law school graduates will ever argue appellate cases, and certainly before the Supreme Court; and second, that legal practice entails much more than just appellate argumentations skill. Although Langdell contributed to the prestige and legitimacy of legal studies, the shortcomings of his method widened the gap between the academy and the practice of law (Edwards, 1992). Critics called on law schools to enhance curricular attention to skills acquisition and social values instead of focusing solely on legal reasoning (Sacks, 1984).

### **Experiential Learning as an Accreditation Requirement**

Law schools in the U.S. are accredited by the American Bar Association, which requires them to offer student a specific set of skills and areas of knowledge for graduates to be eligible to join the Bar (American Bar Association Section of Legal Education and Admissions to the Bar, 2022–2023). A series of reports pointed out the urgent need for curricular reform in law schools (Thomson, 2009). These have led law schools to include experiential learning in the curriculum, in the form of legal clinics, externships, moot-court competitions, conflict resolution classes and other unique workshops (Amsterdam, 1984).

From the 1980s American Law schools embraced these demands as stand-alone classes but not as an integral part of the legal curriculum (Engler, 2001). It is only in these unique classes that law students are expected to perform legal skills which are inevitable for dispute resolution, such as interviewing, fact gathering, drafting, negotiating, problem-solving, etc. rather than articulate disciplinary legal knowledge. However, a clear divide was drawn between these skills-based classes and what was considered “real law” classes. In Legal Writing workshops, in Clinical Legal Education and – most importantly for the purpose of this chapter – in Dispute Resolution courses, experiential pedagogy was the main method of teaching. It was not so in all other doctrinal courses.

### **NextGen Bar Exams**

Recently, the ABA updated the rules for accreditation and published a new format for the Federal Bar exam (The National Conference of Bar Examiners, 2023). What stands out in this “NextGen” Bar exam (as it was coined), which will be taken for the first time in 2026, is that the graduates are not expected to exhibit legal knowledge but also to preform legal skill. This new approach to the threshold to the practice of law requires law schools to adjust their pedagogy and adapt it to the new expectation from their graduates (The National Conference of Bar Examiners, 2023). Command of legal theory is not enough anymore. Law graduates must know how to extract

and categorize information from their clients, negotiate, problem-solve, draft contracts and many more applicable skills that traditional legal education does not introduce in doctrinal courses.

We have been doing just that for fifteen years in a law school in Israel. Doctrinal legal courses, such as Tax Law, International Trade Law, Civil Procedure and more include regularly at least one module in which students are required to practice legal skills related to the resolution of a dispute focusing on the legal subject matter. They are assessed not only on their command of legal principles but also on how they identify their client's interests; how they collect and analyze relevant facts; how they negotiate with their counterparts; and how they draft agreements, or suggest an amendment of a policy decision, a law or an international treaty, or reach a business compromise, to solve a dispute. All of these skills are practiced regularly in ADR classes and the activities in our doctrinal law classes are drawn from them.

### **Dispute Resolution Education: Contemporary Evolution**

#### **Experiential Learning – from the Sidelines to Center-Stage**

Such skills, as described above, are the heart and soul of conflict resolution pedagogy. Classes in negotiation, mediation and other alternative dispute resolution have always been taught using roleplays and simulation games.<sup>8</sup> In fact, it is the main method of teaching in these courses, not merely a summative exercise or an icebreaker. Because of the reputation of ADR as not being “real law,” such pedagogical methods rarely penetrated doctrinal courses (Lande & Sternlight, 2010). The NextGen exams will force law schools to embrace this pedagogy as an integral part of the curriculum to prepare graduates to the demand for theory informed practice and practice informed theory.

We believe that even without the accreditation constraints in the U.S., the application of legal principles onto quasi-real scenarios is an excellent method, not only for acquiring lawyering skills, but also for a deeper, more meaningful and more retainable understanding of these legal principles. Problem-based learning, and particularly role-playing, has been proved to enhance learning motivation and assist in integration and retention of knowledge (Druckman & Ebner, 2008). We experience these benefits in our doctrinal courses whenever ADR pedagogy is introduced in class.

#### **Unique Characteristics of the ADR Pedagogy**

There are several unique characteristics that are present in abundance in ADR pedagogy that are rare to find in doctrinal legal courses, despite their importance to the professional and personal development of our students. A first example of the many traits of this pedagogy is its *multidisciplinarity* (the effect of knowledge from one discipline on the other) and its *interdisciplinarity* (the new knowledge that emerges from combination of two or more disciplines).

In his address at a seminal National Conference on The Causes of Popular Dissatisfaction with The Administration of Justice, convened in St. Paul, Minnesota, on April 8, 1976, Frank E. A. Sander, one of the forefathers of the field of ADR, pointed out the need for skill sets wider and

---

<sup>8</sup> The four volumes of the Rethinking Negotiation Teaching series, published by DRI Press from 2008 to 2011, collect the wisdom and experience of more than 50 of the world's leading negotiation scholars and trainers. These volumes critically examine what is currently taught in negotiation courses and how they teach it (see [https://digitalcommons.hamline.edu/dri\\_press/](https://digitalcommons.hamline.edu/dri_press/)).

more diverse than the ones required for adjudication (Sander, 2021). Listening skills, empathy, and other constructive *interpersonal* communication skills, used in teaching dispute resolution, are regularly integrated into ADR classes from psychology (Sternlight & Robbennolt, 2010); *assessments of settlement options* are taught using tools, such as decision trees, from economics and business administration (Aaron & Hoffer, 1996); and more. There is significant importance in teaching lawyers to humbly *collaborate with other professionals*, and ADR professors tend to highlight this collaboration (Efron, 2021).

Another unique characteristic of DR pedagogy is the *congelation of theory and practice*. Dispute resolution theory directly informs its practice and at the same time, empirical research of DR practices informs its theory (Schneider, 2002). DR courses rely extensively on simulation games and roleplaying, which are used to demonstrate the theoretical basis for DR (Menkel-Meadow, 1999). This pedagogy was developed, we suppose, to enhance legitimacy and credibility of ADR, as many students (and faculty) view the doctrinal legal courses as “real law,” unlike other courses (Lande & Sternlight, 2010).

Last, the experiential pedagogy in DR classes includes a heavy emphasis on *extensive feedback* (Deason et al., 2013) and promotes reflective practice (Hardy, 2009). In fact, the lion share of the learning in DR classes takes place within the debrief, where the students are required to analyze their actions in the experience in light of the theory and take stock of what they wish to improve or sustain in their future experiences.

### **Why should DR Pedagogies inform Doctrinal Law Classes?**

#### **The Vanishing Trial**

Evidence shows that since the 1960s less and less cases that are brought before the court are resolved by a judicial decision (Galanter, 2004). This phenomenon, coined “The Vanishing Trial” challenges the Langdellian case method. If fewer cases end in a verdict, less cases are brought before the Supreme Court, rendering the “formulas” even less useful for everyday practice. Also, the art of litigation is becoming scarce, with less active expert lawyers to learn it from. Furthermore, the Vanishing Trial is explained, among other explanations, by the growing field of Alternative Dispute Resolution. Therefore, the art of negotiation, mediation, arbitration and other problem-solving mechanisms must compliment the theoretical and litigations skill learned in law school. Lastly, the Vanishing Trial requires adjustment in client expectations, which in turn requires graduates to gain better *interviewing, consultation and representations* skills. Being an expert in the doctrine alone is an insufficient set of expertise for lawyers.

#### **Client’s Expectation from their Lawyers**

Even without the Vanishing Trial Phenomenon, negotiation and dispute resolution skills are relevant to lawyers’ work. Lawyers, by definition, represent others. They are expected to act as agents to reach the goals and expectations of their principals. This means that a successful lawyer is one that fulfills their principals’ expectations. The IAALS (Institute for the Advancement of the American Legal System in the University of Denver) proposed that legal education should consider these expectations when designing its curriculum. Their empirical study reviewed 2,232 clients’ expectations from their lawyers and found that they value much more than their legal

knowledge. More specifically, they value many skills that dispute resolution professionals are trained to employ in their practice.

The study's results were grouped into five categories (Cornett, 2019):

**Communication** – clients value prompt responses, proactive status updates, clear and effective explanations of the case and the process, and availability to the client. These are also necessary skills for effectively leading a dispute resolution process. Such skills require mastery in active listening, inclusion, and facilitation. When dispute resolution professionals are trained, great emphasis is put on communication skills. Since disputes can involve individuals from diverse cultural backgrounds, cultural sensitivity and awareness of how cultural factors might influence perceptions and solutions, is useful for lawyers and other dispute resolution professionals.

**Demeanor** – Lawyers are expected to behave professionally, ethically, with integrity and honesty. They are expected to be kind, empathetic, courteous, and respectful. These skills assist in building trust and rapport. Since many dispute resolution processes rely on parties' consent, such trust and rapport are crucial and therefore are inherent to dispute resolution training. Lawyers and dispute resolution professionals alike operate within ethical boundaries, ensuring confidentiality, fairness, and transparency throughout the process.

**Business Model** – Clients expect their lawyers to produce the best outcomes and provide value for them. This is where problem solving skills are useful. Dispute resolution professionals are trained in analyzing issues, breaking them down into manageable parts, and identifying creative solutions. Reframing, summarizing, and exploring interests are some dispute resolution techniques that can help guide conversations and keep discussions productive. Effective time management skills, required in collaborative practices to ensure that discussions are productive and that the process moves forward without unnecessary delays, are also an integral part of dispute resolution training. Clients also value honest and flexible billing, but this is not unique to this field of work. However, *flexibility*, as a state of mind is inherent to dispute resolution practices. Every dispute is unique and requires adaptation of approach to suit the specific circumstances of the case.

**Tenacity** – Lawyers are expected to see the case through. They are expected to be detail-oriented and to demonstrate diligence and a strong work ethic. Similarly, dispute resolution processes can take time, especially when dealing with emotionally charged situations. Patience, diligence and perseverance are necessary to work through challenges and allow parties to express their concerns fully. Resolving disputes, whether collaboratively or in adversarial processes, can be challenging, especially when faced with resistance or unexpected developments. *Resilience* helps navigate obstacles and stay focused on the goal of resolution. *Maintaining accurate records* of discussions, agreements, and decisions is important for accountability and future reference for all professionals. Such dispute resolution skills can help lawyers to fulfill their clients' expectations.

**Lawyering** – Obviously, a lawyer is expected to know the law. In light of dispute resolution theories, so do negotiators (Cooter, Marks, & Mnookin, 1982). To provide quality legal advice, a lawyer is expected to effectively negotiate and advocate for its client. A solid understanding of conflict dynamics, negotiation principles, and dispute resolution methods is essential for both dispute resolution professionals and lawyers.

Unlike lawyers, who are expected to be dedicated to the case and their client, and zealously advocate for them, mediators are trained to apply impartiality and neutrality. However, effective lawyers and mediators alike *empower parties to take ownership of the resolution process*. This involves guiding discussions without imposing solutions and encouraging parties to collaborate.

### **Next Steps in Legal Education Evolution**

The NextGen bar exams will require an additional focus in doctrinal courses, from teaching the doctrine alone to teaching the skills for its application. It is not enough to teach the law on its own, it is necessary to teach lawyering as well. The previous sub-chapter detailed what good lawyering looks like from the perspective of the client. Very few of those skills are introduced in the traditional legal curriculum but are prevalent in dispute resolution training.

For law schools to maintain their accreditation and to stay relevant to the evolution of the legal profession, they must adjust their curriculum to include more experiential learning. They must introduce law students to more than legal knowledge and legal analysis. They must educate the lawyer as a whole person and not only nurture their cognition but also emphasize relationships and communication skills, creativity, curiosity, well-being etc.<sup>9</sup>

Since these skills are already integral to dispute resolution pedagogy, doctrinal courses can easily benefit from them if integrated. This pedagogy relies heavily on experiential learning, role plays and simulations. The use of such pedagogy requires students to identify legal principles, legal standards and relevant facts and to assess the weaknesses and strengths of their position.<sup>10</sup> Furthermore, the NextGen Bar exam explicitly expects proficiency in identifying client's interests, in identifying potential terms of agreement that would help the client fulfill those interests and in assessing varieties of dispute resolution processes that would serve the client's needs. These are all dispute resolution skills that are covered in ADR courses.

### **How can DR Pedagogies inform Doctrinal Law Classes?**

#### **Conflict as Basis for Problem-Based Learning**

Problem-based learning (PBL) is a student-centered learning method that engages students in solving real-world problems. The problems are typically structured so that there is no single correct answer. This forces students to think critically and creatively to find solutions. Roleplays that introduce a conflict that students are instructed to resolve in their assigned roles, such as the ones we describe in this chapter, form one example of PBL.

---

<sup>9</sup> See more on these issues on the Integrative Law Movement at Quinnipiac University School of Law website at: <https://www.integrativelaw.com/>

<sup>10</sup> Such skills are now required under Foundational Skills Group A of the NextGen Bar exam.



Conflict can be a catalyst for PBL in several ways. First, it can provide a motivating context for learning. When students are faced with a conflict, they are naturally motivated to find a solution. This motivation can help to keep students engaged in the learning process (Druckman & Ebner, 2008). Second, conflict can help to promote critical thinking. When students are faced with different perspectives on a conflict, they are forced to think about the issue from multiple angles. This can help them to develop critical thinking skills, which are essential for solving problems. Third, conflict can help to develop teamwork skills. When students work together to solve a conflict, they learn how to communicate effectively, persuade, compromise, and build consensus. These are all essential skills for working in a team environment. All of these advantages are crucial not only for their academic development but also as professional, who will deal with conflicts in their daily jobs as lawyers.

Of course, conflict also can be a destructive force in learning. If not managed properly, it can lead to frustration, anger, and resentment (Alexander & LeBaron, 2010; Munin & Efron, 2017). Therefore, it is important for educators employing roleplays in their classes to create a safe and supportive environment for PBL. This means setting clear expectations for behavior, teaching students how to manage conflict constructively, and providing them with the tools they need to resolve conflicts peacefully.

Role plays are a valuable and effective tool for law students to develop their conflict resolution skills. They provide a practical and experiential learning opportunity that goes beyond theoretical knowledge.

## **Experience**

Our experience in class illustrates how role plays are a valuable and effective tool for law students to develop their dispute resolution skills. They provide a practical and experiential learning opportunity that goes beyond theoretical knowledge, potentially developing the following skills and experiences:

**Empathy and Perspective-Taking:** Through role plays, students take on different roles and perspectives assimilating real disputes, which promotes empathy and helps them understand the motivations and emotions of different parties involved in a dispute.

The classes at the ZAC include students from all religions and ethnic groups living in the North of Israel: Jews, Muslims, Druze, Circassians, etc. One of our role-plays, Little Golano,<sup>11</sup> simulates an alleged dispute on a territory between the U.S. and Mexico. According to the story, the Mexicans hold the land, subject to an agreement between the parties, for a 100-year period, expiring soon. They have national and economic interests in it and refuse to return it to the US at the end of that period, risking a breach of the agreement. The Israeli (Jewish and Arab) students could easily identify with this situation and empathize with the respective parties to the imaginary plot (Munin & Efron, 2016).

**Decision-Making:** Similar to real dispute resolution processes, role plays require students to make decisions and choose appropriate strategies based on the scenario. This enhances their critical thinking and decision-making skills.

---

<sup>11</sup> Originally written by Noam Abner and Yael Efron, it won the E-PRACC competition held by Syracuse University in 2010. Later, the authors adapted it and played it successfully with ZAC students.

In a role play in tax law (*A Tax Resident or Not?*),<sup>12</sup> the students addressed the problematics of determining the tax residency of an individual who lives all his life on oil rigs in the seas (being an engineer expertizing on oil rigs), who has no ‘center of life’ on any shore. Some of them represented the individual, claiming that due to the circumstances he does not have to pay taxes anywhere. Others represented the tax authorities which claim the tax and the policymakers, who have to decide whether such cases are taxable and adjust the rules to meet their policy decisions.

**Feedback and Reflection:** Dispute resolution role plays provide an opportunity for immediate feedback from instructors, peers, or evaluators. Constructive feedback helps students identify their strengths and areas for improvement, enabling them to reflect and adjust their approach.

To achieve this end, every role play we conduct at class involves three layers of feedback:<sup>13</sup>

- (1) *Feedback to the students’ written submissions* – before the class exercise, the students prepare their arguments and submit them in writing to the instructors. The instructors may give them preliminary feedback. After the oral exercise in class, and its oral feedback, the students may correct their written submission and re-submit it for final grade.
- (2) *Ongoing feedback during the game* – the instructors listen to the players, and answer their questions in terms of clarifications to instructions, explanations about the rules of the game, etc.
- (3) *Concluding oral feedback* – at the end of the oral part in class, the instructors give the students oral feedback, referring to their arguments, their strategy, the manner in which they negotiated, the resolution of the dispute which they obtained, etc.

**Complex Problem-Solving:** Role plays – like real disputes - often involve intricate scenarios with multiple layers of conflict. Dealing with these complexities helps students develop problem-solving skills that are applicable in a wide range of contexts.

Our role-play *The Wailing Waller*<sup>14</sup> imitated a real dilemma the Israeli tax authorities faced. A loophole in the Israeli Income Tax Ordinance allowed taxpayers to escape tax payment on profits that their ‘wallet companies’ yielded, by avoiding dividend distribution. The tax authorities initiated a law amendment to close this loophole, providing for an authority to tax these profits in the future and retroactively.

This case contained multiple layers of conflict: one – between the tax authorities and the taxpayers, who insisted on their right to enjoy the loophole by abstaining dividend distribution. Another layer of conflict occurred between these taxpayers, which mostly belonged to the richer groups in the society, who were self-employed and could afford planning their tax payment with the help of lawyers and accountants, with poorer groups which protested against this alleged inequality. A third layer of conflict referred to the right of the tax authorities to tax retroactively, conflicting with the taxpayers’ constitutional right for property and the basic legal principle of certainty.

---

<sup>12</sup> This role play was developed by Nellie Munin and Yael Efron and played successfully at ZAC in 2020.

<sup>13</sup> For more on the theory of debriefing in DR classes, see Deason, Efron, Howell, Kaufman, Lee, & Press (2013).

<sup>14</sup> This role play was developed by Nellie Munin and Yael Efron, and successfully played at ZAC in 2020.

**Teamwork and Collaboration:** Role plays imitating dispute resolution processes involve group dynamics, allowing students to learn how to collaborate effectively with colleagues while resolving disputes.

One of the challenges of ZAC students in role-playing dispute resolution is to collaborate successfully with a group that the instructors combine. In a recent role-play in tax law, two out of ten groups could not reach a final result, namely: an agreed written submission. The group communication did not work and some of its members felt that other members do not contribute to the joined effort. They asked the instructors to allow a written submission indicating who wrote which part, to ensure that all group members do their share. The result was incoherent and the group's grade reflected it. The students learned the importance of teamwork and collaboration.

**Confidence Building:** As students successfully navigate dispute resolution processes through role play scenarios, they gain confidence in their abilities. This confidence carries over to real-life situations and interactions.

At ZAC classes, this is particularly evident for students who originate from cultural groups that do not build their confidence. One such group consists of young Arab women, educated in a very traditional society that does not encourage them to speak their minds. Participation in role plays does not leave them any choice. To enhance this result, in recent years we modified the groups composition between the written and oral parts. In the latter, the groups are re-composed so that in every new group each participant is the only "representative" of his or her original group and must orally argue for the interest this group represents in the dispute.

**Ethical Considerations:** Like real disputes, role plays can present ethical dilemmas that require students to make ethical decisions. This promotes ethical awareness and sensitivity. For example, during the COVID-19 pandemic, we initiated a role-play that reflected a public mood of groups in society that refused to pay their taxes. The role play focused on three "representatives" of these groups: one who had a small business that collapsed due to constant lock-downs, who had no income and could not afford paying the taxes; one that had a grocery that earned more than usual during the lockdowns, but refused to pay taxes due to frustration of the government's under-support; and a third case of a well-established and rich businessman, an owner of a chain-store, who 'blackmailed' the government threatening to avoid opening the stores, preventing his workers from earning their salaries, unless the government will offer him (and others like him) substantial tax benefits to compensate for their losses during the pandemic.

This role play invoked substantial ethical and moral questions which the playing students had to confront: can a citizen in a democratic country refuse to pay taxes? At what circumstances? What would be the consequences to the society? To the state? Should the government's reaction depend on the personal circumstances? To what extent? What is the range of optional government reaction to such refusal? How should the government choose the most suitable reaction to meet the given circumstances? And whether and how should a lawyer represent a person trying to escape its civil duty to pay taxes?

**Cultural Competence:** In a global world, cultural awareness and sensitivity may be inevitable to solve a domestic or international dispute (Martini & Susler, 2011; Jacobowitz, 2009). Role plays with diverse scenarios and characters promote cultural competence as students engage with perspectives different from their own.

The role play *Tea (or Coffee) from China*<sup>15</sup> assimilated a dispute between an Israeli company and a Chinese company that established a joint venture in China, to produce coffee while declaring to the Chinese authorities that they produce tea, to enjoy governmental benefit associated with this production. That aspect of the role play also illustrates an ethical dilemma. The establishment of this joint venture meets many challenges such as finding and recruiting the right employees, meeting contract and governmental deadlines. Consequently, it runs into difficulties to start production. This situation triggers a dispute between the two partners, blaming each other for the acts and omissions leading to it. As the role play reveals, many of the drawbacks are emanating from the gap in the parties' negotiation and business culture. Learning these differences through online consultation with a Chinese expert, the students have to navigate their way out of the dispute with a commonly agreed solution. This process raises their awareness to the importance of cultural differences to dispute resolution.<sup>16</sup>

**Time Management:** Role plays often have time constraints, helping students improve their time management skills and adapt to fast-paced environments, that may assimilate real dispute circumstances.

From the didactic point of view, role plays suggest several benefits:

**Active Learning:** Role plays engage students actively in the learning process. They are more likely to remember and internalize lessons learned through hands-on experience compared to passive learning methods.

**Application of Theory:** Role plays allow students to apply the theoretical concepts they have learned in class to real-life scenarios. This bridges the gap between theory and practice, helping students understand how concepts work in practical situations.

**Exercising in a Controlled Environment:** Role plays offer a controlled environment where students can practice and refine various dispute resolution skills, such as communication, negotiation, mediation, and problem-solving.

**Simulation of Real-World Situations:** Role plays simulate actual situations that lawyers and professionals might encounter in practice. This prepares law students for the challenges they might face in their future careers.

**Versatility:** Role plays can be adapted to different dispute resolution methods, such as negotiation, mediation, arbitration, or courtroom advocacy, allowing students to explore various approaches.

**Lifelong Learning:** The skills acquired through role plays are transferable to other areas of law and life. They promote lifelong learning and professional development.

### **Challenges of Experiential Education in Doctrinal Courses**

The use of role plays as a didactic instrument for the development of dispute resolution skills among law students is not clean of criticism. Its main mentioned disadvantages are:

**Artificiality:** Role plays are simulations, and as such, they might not fully capture the complexity and authenticity of real-life disputes. Students might struggle to replicate the genuine emotions and dynamics that arise in actual conflicts.

---

<sup>15</sup> Developed by Nellie Munin and Yael Efron, successfully played at ZAC in 2015 during a dispute resolution workshop directed by Professor Michelle Lebaron from UBC and with an online contribution by Professor Andrew Wei-Min Lee from China.

<sup>16</sup> See detailed description in Munin and Efron (2016), *ibid.*, footnote 29.

**Lack of Emotional Intensity:** In some cases, role play participants might not fully invest emotionally in the scenario, leading to a lack of genuine emotional intensity. This can impact the realism of the exercise.

**Overemphasis on Performance:** Students might focus more on “performing” well in front of their peers or instructors rather than on genuinely learning and applying dispute resolution skills.

**Skill Transfer:** It is possible for students to struggle with transferring the skills learned in role plays to real-world situations. The controlled environment of the role play might not fully prepare them for the unpredictability of actual disputes.

**Limited Context:** Role plays often isolate specific aspects of disputes, which can be both an advantage and a disadvantage. While this focus allows for targeted skill development, it might not fully replicate the complexity of real disputes that involve multiple issues and factors.

**Inadequate Feedback:** Providing meaningful feedback during role plays can be challenging, especially in larger classes. Without timely and constructive feedback, students might not fully grasp their strengths and areas for improvement.

**Time Constraints:** Role plays are often time-limited, which might not allow for in-depth exploration and resolution of complex disputes. This can lead to a focus on quick solutions rather than thorough analysis.

**Student Comfort Levels:** Some students might feel uncomfortable participating in role plays, especially if they are introverted, have stage fright, or feel self-conscious about acting in front of others.

Yet another challenge in this respect occurred at ZAC when Jewish students found it difficult to accept the leadership of an Arab head of group.<sup>17</sup> That internal group conflict adversely affected the group’s achievements during the game.

**Unpredictable Student Responses:** Role plays involve multiple participants, and the responses and strategies chosen by other participants might be unpredictable. This can make it challenging for instructors to guide the exercise effectively.

**Ethical and Cultural Sensitivity:** Role plays that involve sensitive topics or diverse cultural perspectives must be approached with caution. Insensitive handling of these scenarios could lead to discomfort or misinterpretation.

**Lack of Real Consequences:** Role plays lack the real-world consequences that come with actual disputes, such as legal ramifications or financial impact. This might affect students’ level of engagement and investment.

**Skill Depth:** While role plays can provide a solid foundation, they might not allow for deep skill development due to time constraints and the artificial nature of the scenarios.

**Variability in Participation:** Some students might be more enthusiastic and engaged in role plays than others. This variability in participation levels can affect the overall effectiveness of the exercise.

**Resource Requirements:** Creating effective role play scenarios requires careful planning and preparation. Instructors need to invest time in designing scenarios that are relevant and engaging.

Despite these disadvantages, the authors’ experience reflects that role plays’ advantages prevail. The way to overcome them is by using role plays as one didactic option in a varied toolkit of didactic methods to teach and exercise dispute resolution.

---

<sup>17</sup> Arab citizens are the minority group in Israel.

## Summary

In this chapter, we argued that the evolution of law studies, bar exams and dispute resolution processes implies an inevitable shift of law studies from focusing on theory and case analysis to the teaching and exercising of pragmatic dispute resolution skills.

We shared our positive experience of using role plays in law classes to meet this end, discussing their didactic advantages using examples from ZAC classes.

The growing shift from formal court rooms to more flexible dispute resolution mechanisms in all fields of potential disputes opens the door for the endorsement of a greater variety of approaches and tools to solve disputes. Skill building among law students towards the exercise of varied dispute resolution instruments would encourage them to exhaust their respective merits to achieve the optimal result for their clients.

## References

- Aaron, M., & Hoffer, D. P. (1996). Using decision trees as tools for settlement. *Alternatives to the High Cost of Litigation*, 14, 71–73.
- Alexander, N. M., & LeBaron, M. (2010). Death of the role-play. *Journal of Law and Public Policy*, 31(2), 459.
- American Bar Association, Section of Legal Education and Admissions to the Bar. (2022–2023). *Standards of rules and procedures for approval of law schools 2022–2023*. Author. [https://www.americanbar.org/content/dam/aba/administrative/legal\\_education\\_and\\_admissions\\_to\\_the\\_bar/standards/2022-2023/2022-2023-standards-and-rules-of-procedure.pdf](https://www.americanbar.org/content/dam/aba/administrative/legal_education_and_admissions_to_the_bar/standards/2022-2023/2022-2023-standards-and-rules-of-procedure.pdf)
- Amsterdam, A. G. (1984). Clinical legal education—A 21st-century perspective. *Journal of Legal Education*, 34(4), 612–618. <https://www.jstor.org/stable/42897976>
- Bryant, S., & Koh Peters, J. (2004). The five habits of cross cultural lawyering, in Barrett, K., & George, W. H. (Eds.), *Race, culture, psychology, and law*, 47–62. Sage Publications.
- Cooter, R., Marks, S. G., & Mnookin, R. (1982). Bargaining in the shadow of the law: A testable model of strategic behavior. *Journal of Legal Studies*, 11(2), 225–252.
- Cornett, L. (2019). *Think like a client*. Institute for the Advancement of the American Legal System, University of Denver. [https://iaals.du.edu/sites/default/files/documents/publications/think\\_like\\_a\\_client.pdf](https://iaals.du.edu/sites/default/files/documents/publications/think_like_a_client.pdf)
- Deason, E. E., Efron, Y., Howell, R., Kaufman, S., Lee, J., & Press, S. (2013). Debriefing the debrief, in Christopher Honeyman, James Coben, & Andrew Wei-Min Lee (Eds.), *Educating negotiators for a connected world*, pp. 301–332, *Rethinking Negotiation Teaching Series*, Vol. 4. DRI Press. [https://digitalcommons.hamline.edu/dri\\_press/5/](https://digitalcommons.hamline.edu/dri_press/5/)
- Druckman, D., & Ebner, N. (2008). Onstage or behind the scenes? Relative learning benefits of simulation role-play and design. *Simulation & Gaming*, 39(4), 465–497.
- Earley, C., & Ang, S. (2003). *Cultural intelligence: Individual interactions across cultures*. Stanford University Press.
- Ebner, N. (2017). Negotiation is changing. *Missouri Journal of Dispute Resolution*, 2017(1), 99–143. <https://ssrn.com/abstract=2915204>
- Edrey, Y. M. (2010). Constitutional limitations on tax legislation, pp. 205–240. In Edrey, Y., & Gregg, M. (Eds.), *Bridging a sea: Constitutional and supranational limitations to taxing power of the states across the Mediterranean*. Aracne Editrice S.R.L. <https://doi.org/10.4399/978885482999210>



- Edwards, H. T. (1992). The growing disjunction between legal education and the legal profession. *Michigan Law Review*, 91(1), 34–78. [https://repository.law.umich.edu/cgi/viewcontent.cgi?params=/context/mlr/article/2377/&path\\_info=](https://repository.law.umich.edu/cgi/viewcontent.cgi?params=/context/mlr/article/2377/&path_info=)
- Efron, Y. (2021). Varieties of dispute processing: The implications on legal education, in Art Hinshaw, Andrea Kupfer Schneider, & Sarah Cole (Eds.), *Discussions in dispute resolution: The foundational articles*, 344–346. Oxford Academic. <https://doi.org/10.1093/oso/9780197513248.003.0070>
- Engler, R. (2001). The MacCrate Report turns 10: Assessing its impact and identifying gaps we should seek to narrow. *Clinical Law Review*, 8, 109–169. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=835584](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=835584)
- Galanter, M. (2004). The vanishing trial: An examination of trials and related matters in federal and state courts. *Journal of Empirical Legal Studies*, 1(3), 459–570. <https://doi.org/10.1111/j.1740-1461.2004.00014.x>
- Hardy, S. (2009). Teaching mediation as reflective practice. *Negotiation Journal*, 25(3), 385–400. <https://doi.org/10.1111/j.1571-9979.2009.00232.x>
- Integrative Law Movement. (n.d.). Quinnipiac University School of Law. <https://www.integrativelaw.com/>
- Jacobowitz, J. L. (2009, April). A rose by any other name? Enhancing professionalism through cultural competency. *FAWL Journal*, 7–9. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1509647](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1509647)
- Lande, J. M., & Sternlight, J. R. (2010). The potential contribution of ADR to an integrated curriculum: Preparing law students for real world lawyering. *Ohio State Journal on Dispute Resolution*, 25(1), 247–298. <https://scholarship.law.missouri.edu/cgi/viewcontent.cgi?article=1257&context=facpubs>
- Martini, C., & Susler, D. (2011). Inside out: Going global should be for everyone. *Chicago Lawyer Magazine*. <https://www.youtube.com/watch?v=PNhcJd0g4AM&feature=youtu.be>
- Mautner, M. (2010–2011). Three approaches to law and culture. *Cornell Law Review*, 96(4), 839–867. Symposium: The Future of Legal Theory. <http://scholarship.law.cornell.edu/clr/vol96/iss4/25>
- Menkel-Meadow, C. (1999). Taking problem-solving pedagogy seriously: A response to the attorney general. *Journal of Legal Education*, 49, 14–21. <https://scholarship.law.georgetown.edu/cgi/viewcontent.cgi?article=2781&context=facpub>
- Munin, N. (2010). The evolution of dispute settlement provisions in Israel’s preferential trade agreements: Is there a global lesson? *Journal of World Trade*, 44(2), 385–403.
- Munin, N., & Efron, Y. (2017). Role-playing brings theory to life in a multicultural learning environment. *Journal of Legal Education*, 66(2), 309–331. Special Issue on International Legal Education.
- Munin, N., & Malka-Tiv, K. (2021). Government assistance programs and tax obedience in COVID-19 times. *Journal of Multidisciplinary Research*, 13(2), 5–19. <https://jmrpublication.org/wp-content/uploads/JMR13Fall2021002.pdf>
- National Conference of Bar Examiners. (2023). *Bar exam content scope: First administration July 2026*. <https://nextgenbarexam.ncbex.org/pdfviewer/ncbe-nextgen-content-scope-may-24-2023/>

- Sacks, A. M. (1984). Legal education and the changing role of lawyers in dispute resolution. *Journal of Legal Education*, 34(2), 237–244. <https://www.jstor.org/stable/42892682>
- Salisbury, M. H. (2011). *The effect of study abroad on intercultural competence among undergraduate college students*. Unpublished Ph.D. dissertation [University of Iowa]. <https://iro.uiowa.edu/esploro/outputs/doctoral/9983777141002771>
- Sander, F. E. S. (2021). Varieties of dispute processing, in Art Hinshaw, Andrea Kupfer Schneider, & Sarah Cole (Eds.), *Discussions in dispute resolution: The foundational articles*, 22. Oxford Academic. <https://doi.org/10.1093/oso/9780197513248.003.0066>
- Schneider, A. K. (2002). Shattering negotiation myths: Empirical evidence on the effectiveness of negotiation style. *Harvard Negotiation Law Review*, 7, 143–231. [https://journals.law.harvard.edu/hnlr/wp-content/uploads/sites/91/2012/04/SHATTERING\\_NEGOTIATION\\_MYTHS\\_EMPIRICAL\\_EVIDENCE\\_ON\\_THE\\_EFFECTIVENESS\\_OF\\_NEGOTIATION.doc](https://journals.law.harvard.edu/hnlr/wp-content/uploads/sites/91/2012/04/SHATTERING_NEGOTIATION_MYTHS_EMPIRICAL_EVIDENCE_ON_THE_EFFECTIVENESS_OF_NEGOTIATION.doc)
- Silver, C. (2013). Getting real about globalization and legal education. *Stanford Law and Policy Review*, 24(2), 457–503, 460. <https://law.stanford.edu/publications/getting-real-about-globalization-and-legal-education-potential-and-perspectives-for-the-u-s-symposium-the-future-of-the-legal-profession/>
- Sternlight, J. R., & Robbennolt, J. (2010). Psychology and lawyering: Insights for legal educators. *Journal of Legal Education*, 64(3), 365–384. <https://experts.illinois.edu/en/publications/psychology-and-effective-lawyering-insights-for-legal-educators>
- Stuckey, R., et al. (2007). *Best practices for legal education: A vision and a road map*, pp. 11–37. Clinical Legal Education Association. <https://www.cleaweb.org/Bes>
- Thomson, D. I. C. (2009). *Law school 2.0: Legal education for a digital age*. LexisNexis.
- Weiler, J. H. H. (2001). The rule of lawyers and the ethos of diplomats: Reflections on the internal and external legitimacy of WTO dispute settlement. *Journal of World Trade*, 35(2), 191–207. <https://doi.org/10.54648/337899>
- WTO Dispute Settlement Understanding, articles 14, 18.

### Discussion Questions

1. Describe the evolution of legal education and how the use of role-playing fits into it.
2. Try to guess what is the next step in the evolution of legal education, in view of social, technological and legal developments.
3. In the teaching of which legal areas would you like to see more use of role-playing games?

### About the Authors

Nellie Munin, LL.D., Adv. (nelliemunin@gmail.com), is an Associate Professor at the law school at Zefat Academic College, in Israel. Formerly, she served as Minister of Economic Affairs in the Israeli Mission to the EU and as chief legal advisor of the state revenue administration in the Israeli Ministry of Finance.

Yael Efron, LL.D., Adv. (yael.law@gmail.com), is the Dean of the Zefat Academic College School of Law, in Israel. Her main research interests are conflict resolution and legal education.

### To Cite this Article

Munin, N., & Efron, Y. (2024, Spring). Dispute resolution in class: How can DR Pedagogies inform Doctrinal Law Classes? *Journal of Multidisciplinary Research*, 16(1), 5–21.



“Loyalty”  
Bonete, Brazil  
2024

Photography by Heather Crawford.

Image Copyright © 2024 by Heather Crawford.  
All rights reserved. Used with permission.

# **Paring the Power of Institutional Time over Residents' and Dementia Time in North American Nursing Homes: "You Have to Wait!"**

**Margaret Oldfield**

*Social Scientist and Disability Scholar*

## Abstract

My relative Helen (a pseudonym) received a dementia diagnosis at 80. Wanting to apply Helen's philosophy of aging to my own life, I started interviewing her. At 87, other relatives put her in a nursing home. Being a social scientist and critical-disability-studies scholar, I started watching how power infused relationships between residents and the institution's staff. I also recorded conversations with Helen, with her permission. In this essay, I tell stories drawn from the observations and conversations describe daily life on Helen's floor and to illustrate three types of time: institutional, residents', and dementia. I look at how the three types of time interact and how institutional time becomes an instrument of power over residents. Then I discuss the implications of residents' and dementia time for care delivery and propose practices and structural changes that may lessen institutional time's dominance and power imbalances between residents and staff. The time typology can help professionals understand their institutions' culture, disability scholars study the impact of institutional time's power over residents, evaluation researchers assess nursing-home reforms, and gerontologists compare institutional care with its alternatives. The ultimate goal of these efforts would be improved quality of life for frail elders and people with dementia.

## Keywords

care homes, dementia time, disability, institutional time, long-term care, nursing homes, residents' time

## **Introduction**

My relative Helen<sup>18</sup> received a dementia diagnosis at 80, after which a neighbor subtly cared for her. Wanting to apply Helen's philosophy of aging to my own life, I began interviewing her, with her permission. I noted that the dementia label immediately changed how Helen's other relatives and friends talked about her, and to her (see Oldfield & Hansen, 2020). At 87, she fell at home, and other relatives put her in a nursing home. Being a critical disability studies scholar, I started observing the power-infused relationships between the institution's residents and staff during my bimonthly, week-long visits to Helen's nursing home over four years. She lived in the United States while I lived in Canada. I recorded informal interviews with Helen (with her permission) and kept notes. During two years of COVID-19 restrictions and for two years afterward, I continued visiting Helen by video call, until she died at 93 in 2022. Critical disability studies, which looks at power relations from the perspective of people with impairments and views dementia as a disability (Shakespeare, Zeilig, & Mittler, 2017), framed my personal project. To learn about its context, I read literature about nursing homes, nursing-home reform, and dementia care.

To gain others' perspectives on my conclusions, first I cowrote a publication with another researcher who did not know Helen. Second, I presented the project at conferences. Third, I compared my conclusions to literature on nursing-home reform. Fourth, I received feedback on the draft article from colleagues in critical disability studies and gerontological nursing.

In this essay, I tell stories from my project to describe daily life on Helen's floor and illustrate three types of time: institutional time, residents' time, and dementia time. Although I take the standpoint of Helen and her fellow residents (Eakin, 2010), I observed the institution as a relative a generation younger than Helen. My aim is to show how the three types of time interact and how institutional time thereby becomes an instrument of power over residents. Although this use of power is often unintentional, it comes from unexamined social assumptions about relations between staff and residents. My intent is not to blame the institution's staff but to recognize power imbalances between the two groups of people. After presenting the stories, I discuss alternative practices and structures that may lessen these power imbalances.

### **Three Conceptualizations of Time in Nursing Homes**

By *institutional time*, I mean time as displayed on clocks and calendars, which reduces time from qualitative experience to quantitative space (Hämäläinen et al., 2024). Administrators use clock and calendar time to count staff productivity and then account for it to government regulators and nursing-home owners. Institutional time structures workers' shifts and tasks, resident-care logs, and consequently residents' daily routines. In turn, administrative structures constrain institutional time: staffing levels, workloads, regulatory requirements, and allocation of time among tasks (Mallidou, Cummings, Schalm, & Eastabrooks, 2013), and staff members (McCloskey, Donovan, Stewart, & Donovan, 2015). Institutional time prioritizes "routine practices that manage residents' bodies at any given time based on nursing home policies and schedules" (Mallidou et al., 2013, p. 1234). In corporate-owned nursing homes, profit maximization often produces pressure to cut costs (Harrington, Schnelle, McGregor, & Simmons, 2016), such as institutional time. In non-profit or publicly owned homes, funding constraints have

---

<sup>18</sup> All names are pseudonyms.



a similar effect. In both sectors, physical-care tasks take priority, and employers expect workers to do them faster (Armstrong, 2013).

By *residents' time*, I mean how nursing-home residents would prefer to structure their time if they had a choice. In contrast to institutional time, which prioritizes efficiency, residents' time is rooted in bodily processes: sleeping, eating, and toileting (Hämäläinen et al., 2024). This might include eating only when hungry, going where they want when they want, toileting immediately when they feel the need, and going to bed when sleepy. Residents' time can be much slower than institutional time. Droit-Volet (2016) found that time slows down for people over 75 after they enter institutions, regardless of cognitive functioning:

The retrospective judgment of the passage of time was not linked to individual psychological traits but rather results from the conscious awareness of being in a retirement home and that life has therefore definitively changed, with the best being in the past and not the future. This was consistent with works on the well-being of elderly people and the feeling of resignation they experience when they have to live in a retirement home. (p. 19)

Because dementia-related cognitive impairment can alter time perception, it is important to understand how residents with dementia experience time differently from staff, relatives, and residents without dementia. The concept *dementia time* (Yoshizaki-Gibbons, 2020) describes this fluctuating timescape, which challenges the linearity and quantifiability of institutional and residents' time.

As Yoshizaki-Gibbons (2020) explains, individual moments may be “non-linear, intermittent, irrational, and idiosyncratic” (p. 8). We can conceptualize dementia time as flat—past, present, and future occurring in the same plane. As Mitchell, Dupuis, and Kontos (2013) explain,

The person before you is a unity of everyone they have been over a life span. Past, present and future are experienced together...Older people also describe a greater connection with the cosmos; connecting and reconnecting with loved ones and memories; and redefinitions of time, space, life, and death...the disappearing boundaries of time, place, person [that are] currently designated as symptoms of brain disease and dementia, may in fact be markers of a natural transformation that occurs with aging. (p. 10)

### **A Day in Life on Helen's Floor: Conflicts between Institutional Time, and Residents' and Dementia Time**

In this section, I use stories from my project to illustrate conflicts between the three types of time. These conflicts illuminate how institutional time becomes an instrument of power over residents. The stories combine my observations on multiple days and times, and I organize the stories to chronologically to follow daily life on Helen's floor. Between stories, I discuss practices that could lessen conflicts between institutional, residents,' and dementia time.

#### **Setting the Scene**

I arrived one day on the 2<sup>nd</sup> floor of the 16-storey building. To the left was the nursing station, with the nurse manager's office and staff room behind a counter. On it sat two computers. Behind it was a bookcase full of thick binders, one for each floor resident. The nursing station was

in the bottom wing of the U-shaped floor, which housed 40–50 residents on three wings. Staff wore hospital-style uniforms (scrubs for care workers and white coats for professionals), with hard-to-read name badges.

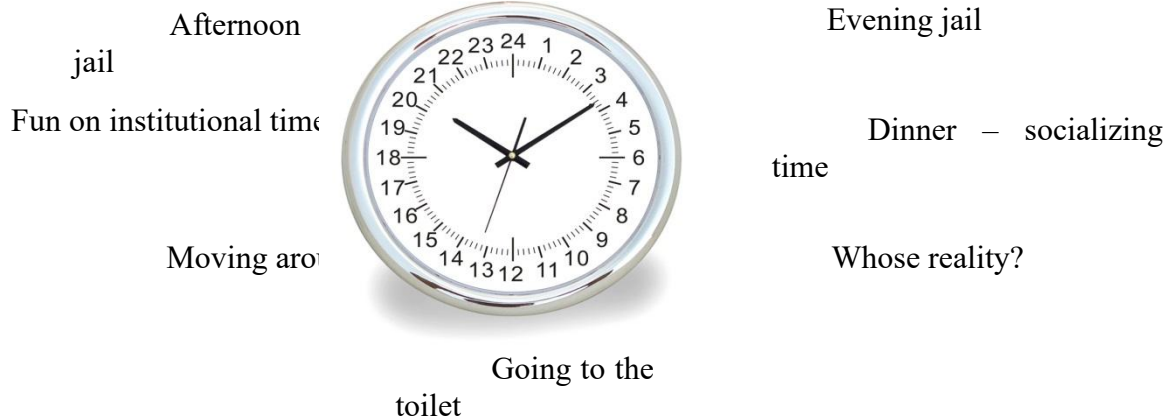
The bedrooms were identical: each had two hospital beds, separated by curtains surrounding each bed. Each room contained one sink/mirror combination, two small closets, two night tables, two wall-mounted TVs, and two small dressers. Between each double room was a shared room with toilet and sink. There were one or two bath/shower rooms on the floor. Each bedroom’s entrance had a number and the names of both residents. Some bedrooms had a visitor chair. To Helen, the setup looked like a hospital. As she asked me every so often, “Why am I still in the hospital? I’m not sick.”

I checked to see if Helen was in her room. She was not. It was after lunch, so I guessed she was in the dining room. I walked to the end of the hall. On the way, I waved hello to two men sitting in wheelchairs outside their rooms. Other residents maneuvered their wheelchairs through the hallway—negotiating the narrow space with the cleaner and his cart, care workers, and other staff. Some exchanged hellos, nods, or waves.

The massive medication cart blocked one of the dining room’s doorways, while the licensed practical nurse (LPN) dispensed medications. I went in the other door. I looked to my right and noticed Helen, sitting quietly alone in her wheelchair behind a table in front of the window. Helen’s roommate, Rosa, snoozed in her wheelchair at another table in the large room. This was the afternoon routine every time I visited Helen. It exemplified institutional time, which prioritizes the needs of the institution, not the residents. Figure 1 encapsulates a day in life on Helen’s floor.

**Figure 1**

*A day in life on Helen’s floor*



**Afternoon Jail**

Opposite the dining-room entrance sat a silent care worker, who watched the dozen or so residents in the room. While in this role, care workers did not talk to residents, except to order them from afar to “Sit down!” when they rose from their chairs. This was likely an effort to prevent falls, which administrators had to report to regulators. Residents “at risk of wandering” were forbidden from leaving the dining room after lunch, unless someone accompanied them. The TV was on—too loud to allow conversation. Most residents sat silent and alone. The scene closely resembled the nursing home that Mallidou et al. (2013) studied: “Residents were quietly sitting,

passively waiting, watching television that (most of the times) was on all day long, or sleeping, showing no interest of [sic] what was happening around them” (p. 1234).

Although the afternoon dining room did not look like a jail, it worked like one. The silent care worker’s job was to guard residents and enforce institutional rules. Other researchers have used the jail analogy to describe life in nursing homes. Heggstad, Nortvedt, and Slettebø (2013) reported that residents in their studies described their nursing home as “a prison without bars” (n.p.) Lazaris and Nazareno (2020) found similar experiences of confinement among male prisoners and nursing-home residents. This control infantilizes nursing-home residents (Oldfield & Hansen, 2020).

I went over to Helen, who looked up with a big smile, surprised to see me. I asked her whether she would like to visit other parts of the building. Once we left Helen’s floor, we could enjoy the afternoon on residents’ time: ogling the spectacular views from the recreation and physical-therapy rooms, snacking in the cafeteria, relaxing in the family room, or having Helen’s hair cut at the home’s salon. But for Helen to leave the dining room, I had to accompany her and tell staff at the nursing station that we were leaving the floor. If we wanted to leave the building, we had to find the LPN and ask her to sign a pass. The pass required me to return Helen to the floor by a certain time or lose the privilege of taking her out. Without a signed pass, the security guard at the building’s exit would not let Helen leave.

Although part of the institution’s risk-management strategy, requiring passes evinces the institution’s power to determine residents’ movements according to institutional time, not their own. The pass system also makes clear that the building is not the residents’ home. As Tufford, Lowndes, Struthers, and Chivers (2018) remark, “Who holds power to determine access and exiting through doors, locks and codes was crucial to the tension between home and institution” (p. 38).

Before Helen and I left the dining room, Suzie, another resident, asked me if there was somewhere quiet that she and her neighbor Esther could go. I told them about the cafeteria and suggested we all go together. Esther said she needed to get her money from the nursing station. We all went over there, and I explained that I wanted to take Helen, Suzie, and Esther to the cafeteria. “You can’t do that! How can you take more than one person?” the LPN said to me. She turned and yelled at Esther, “Go back to the dining room!” I apologized to Suzie and Esther, and Suzie wearily thanked me for trying.

According to the LPN, I could not take responsibility for three residents, only my relative. She may have rapidly assessed risk, which clearly takes priority in institutional time over the exercise and mental-health benefits Suzie and Esther might have gained (Tufford et al., 2018) in leaving the afternoon jail under residents’ time. So, Suzie and Esther had to switch back to institutional time, as enforced by the LPN.

Underpinning the afternoon jail and pass requirements were the institution’s overriding concern with resident safety. Social structures shape institutional time spent on issuing passes, fall prevention, and other risk-mitigation practices: protective legislation, societal attitudes about risks for elderly people, media scandals (Tufford et al., 2018), and relatives’ assumption that institutions are safer for their relatives than living at home.

One perceived risk in traditional North American nursing homes is allowing residents (especially those with dementia) to go wherever they like, whenever they like—on residents’ time. Instead, they are locked in, prioritizing control over liberty (Lai, 2022). Yet, in Europe and in some North American nursing homes, there are no locked floors. The Re-imagining Long-term Residential Care project (<http://reltc.apps01.yorku.ca>) describes nursing homes that allow

residents, including those with dementia, to roam around the building when they want. Examples include unlocked kitchen and laundry rooms, unlocked doors to fenced-in gardens, and doors locked only at night when there are fewer staff to keep track of residents (Armstrong & Braedley, 2016). The project notes that, where residents can freely move about, they are less agitated. The researchers advocate balancing risk reduction with stimulation and autonomy:

LTRC homes with open living areas that allow residents with advanced dementias and those with other chronic conditions and frailties to meet, mingle and enter various home areas may be considered by some to be less safe than homes in which they are locked into separate, secure home areas. However, this assessment does not consider the benefits gained for residents who remain physically active and socially integrated. (Armstrong & Braedley, 2016, p. 78)

In addition, diminishing agitation among residents by incorporating residents' time will likely reduce the need to spend institutional time calming residents.

### **Fun on Institutional Time**

Sometimes, when I arrived after lunch, Helen was at an event in the 16<sup>th</sup>-floor recreation room. After announcing each event on the building's loudspeaker, recreation therapists went to each floor asking who wanted to attend. It took an hour to bring residents to and from each 1-hour event. When I attended with Helen, she and other residents smiled and sang along when invited. Although this opportunity for fun on institutional time benefited residents, only those who felt up to going to staff-scheduled events, who could communicate that they wanted to go, and fit into the room, partook.

There were opportunities for fun that did not require residents to leave their floor. Some mornings, recreation therapists delivered programs there. However, like recreation-room activities, programs operated on institutional time. If residents did not feel like partaking, they missed the fun. Although a cupboard in the dining room contained arts-and-crafts materials, I did not see residents accessing them on residents' time. Nor did I observe residents organizing activities that held meaning for them now as they did in the past (Harding et al., 2024), such as card games. Fun appeared to occur only on institutional time.

One way of enabling fun on residents' time would be to make arts-and-crafts materials, playing cards, books, and free newspapers visible and easily accessible in the dining room. For residents unable to move on their own, staff could put an assortment of recreational materials on each table. Instead of hiding these materials in a cupboard, accessible only during scheduled activities, staff could encourage residents to take the materials to their rooms. Particularly during afternoon jail, opportunities for spontaneous fun might alleviate residents' boredom. Activities residents used to enjoy could be modified to suit their current abilities, preserving their sense of identity (Harding, 2024). If a supervisor assigned more than one care worker to guard residents, one could facilitate fun.

### **Moving Around**

Although some nonambulatory residents moved their wheelchairs using their feet or hands, others could not move whenever they liked. Instead, they had to wait until care workers could assist them on institutional time. Heggstad et al. (2013) report that, when staff "don't have the

time,” as several of their participants remarked, immobility reinforces residents’ feeling of being in a “prison without bars” (n.p.).

Mobility benefits residents by lowering depression rates, increasing independence, and quality of life (Mallidou et al., 2013). Residents’ time—walking slowly with support from a care worker’s arm or a walker—consumes institutional time. Although having residents use wheelchairs makes it quicker for staff to move them under the constraints of institutional time, wheelchair use disables residents by removing opportunities to maintain strength and agility. In these ways, institutional time becomes an instrument of power over residents’ mobility. As relayed in my story of getting Helen out of afternoon jail, institutional time controls visitors’ mobility as well. Tufford et al. (2018) point out that institutional time’s power over residents’ mobility distinguishes institutions from private homes, where residents can go where they want when they want, as they would on residents’ time.

Occasionally physiotherapists took residents outside to practise “walking in the community,” as Helen’s therapist said. One sunny spring day, he invited me along. We had a wonderful time in the park next door. Because accompanying residents as they moved around was part of physiotherapists’ jobs, here institutional and residents’ time occasionally aligned. As for care workers, though, the two types of time rarely appeared to align. Perhaps it was because care workers served more residents on their shifts than therapists.

Conflicts between institutional and residents’ time can seriously affect residents’ health. Immobility is associated with pressure ulcers and skin tears (Song et al., 2020). Being left in wheelchairs for long periods increases incontinence (Tufford et al., 2018), as does being unable to void when needed (Salsbury Lyons, 2010). Government nursing-home standards recognize this problem: “Loss of bladder (and bowel) control was a significant problem for nursing home residents that often results from poor or inadequate care” (Molott, 2018, p. 32).

For Helen, the conflict between residents’ and institutional time led to painful skin damage, because she had to wait for assistance to the toilet and, being incontinent, care workers did not change her incontinence protection as often as she needed. Although the nurse tried to ensure that care workers checked Helen every 2 hours, as government standards recommended, they may not have had the institutional time. They had other duties and other residents to care for, and the institution was short staffed. For example, one evening care worker told me she served 8–10 residents during her shift. At a Family Council meeting, attendees noted the high number of residents assigned to each care worker. The nurse manager on Helen’s floor spent much of her institutional time doing administrative tasks, leaving less time to monitor care workers.

Helen’s roommate Rosa asked an LPN behind the nursing-station counter to take her to the bathroom. The LPN replied, “That’s not my job. You have to wait until your care worker comes.” She did not explain why she could not take Rosa to the toilet. Rosa asked again, repeatedly. The LPN got annoyed, telling Rosa, “You have to wait!” It seemed that the division of labor among staff, and the consequent power differential, impeded institutional time from accommodating residents’ time.

Salsbury Lyons (2010) reports many reasons for poor nursing-home continence care. Cited most often are “inadequate knowledge and staffing, employee attitudes, and ineffective leadership” (p. 336). Although other researchers propose solutions such as clinical guidelines, regulatory enforcement, and quality-assurance programs, Salsbury Lyons finds external efforts to change care worker behavior insufficient. Understanding the social, cultural, and organizational contexts affecting care, and their relationship to time, must come first.

## **Whose Reality?**

Helen's description of her daily life reflected dementia time. As Mitchell et al. (2013) describe, in Helen's mind, past merged with present. She often told me about going outside, saying, "I walk every day. I go to my church." A few moments later, she talked about living with her family in a city far away. Between visits, when we talked on the phone about my next visit, Helen often remarked, "I won't be here. I'm going home tomorrow." While Helen's dementia time may have been a way of coping with a painful present (Yoshiaki-Gibbons, 2020), I believe it was as real to Helen as calendar time was to me. I tried to honor Helen's dementia time, telling her "OK. I'll find you."

Helen's dementia time also melded a lifespan into one flat plane (Mitchell et al., 2013). Although she recognized me, Helen was not sure about my relationship to her. Sometimes, she talked about being a generation younger than me, her parents still alive. I saw no point in forcing Helen into calendar time by "correcting" her, as other relatives and staff did, since dementia time was her reality. On one visit an LPN, turning away from Helen, asked me, "Is she confused?" I heard other staff use this term, disrespecting Helen's "parallel subjectivity" (Carter, 2020). We were the only people on Helen's floor who conversed in dementia time, challenging the dominant reality of institutional time.

Engaging with residents in dementia time affirms their parallel subjectivity. Being present without correcting (Mitchell et al., 2013) can improve residents' health and may be more important than workers' physical-care skills (Mallidou et al., 2013). It also may relieve the prevalence of depression among nursing-home residents (Crick, 2019).

Because dementia time may fluctuate frequently, incorporating it into physical care on institutional time requires flexibility as needs shift (Yoshizaki-Gibbons, 2020). For example, a care worker who appreciates dementia time, instead of saying "But a minute ago you said you wanted this," might say "Right, I'll do that." The government standards in Helen's area exemplify how to incorporate dementia time:

A resident with dementia may be attempting to exit the building with the intent to meet her/his children at the school bus. Walking with the resident without challenging or disputing the resident's intent and conversing with the resident about the desire (tell me about your children) may reassure the resident. (Molott, 2018, p. 19)

Incorporating dementia time into institutional time requires creativity (Yoshizaki-Gibbons, 2020)—not only changing attitudes but also changing structures. Changes in work organization, institutional ownership, and care philosophy are examples of creativity.

## **Dinner: Residents' Time for Socializing**

Toward the end of the afternoon, Helen asked me for the clock time. She wanted to ensure that we returned to the dining room by 5:00, well before care workers served dinner at 6:00. I realized why Helen wanted to get there early: residents gathered to chat. Sitting at Helen's table felt like attending a casual dinner party.

As residents began to enter the dining room, care workers put paper bibs on them and tried to resolve disagreements about who sat where. A couple of relatives arrived to help some residents eat. This institutional-time-consuming preparation enabled residents to socialize. Mealtimes



seemed to be beacons on Helen's floor, as they are in many nursing homes (Lowndes, Daly, & Armstrong, 2018). Socializing is important to the dignity of belonging (Heggestad et al., 2013). Meals also provide opportunities for care workers and residents to build relationships (Keller et al., 2014).

Once the food trays arrived on carts from the institution's central kitchen, care workers put each person's tray in front of them. They spoke little to residents, sometimes encouraging them but more often directing them to eat. Although I observed care workers socializing together during dinner, I did not see them socializing with residents. Institutional time and residents' time seemed to operate separately in the same room: care workers focused on getting everyone to finish their food, and residents focused on socializing. Later in the meal, care workers asked each resident if they had finished eating, then removed their tray. Once all had finished, care workers cleared the room so that the cleaner could come do his work. Institutional time quickly snuffed out residents' time for socializing.

More than half of nursing-home residents are malnourished for a variety of preventable reasons (Keller et al., 2014). One is the practice of closing dining rooms soon after meals, which can result in rushing residents to finish eating (Keller et al., 2014). It also favors institutional time over residents' time. This power imbalance not only shortens the time residents have to eat but also shortens time staff to help residents eat. According to Lowndes et al. (2018), this help takes at least 20–30 minutes of institutional time per resident. Both adequate residents' time and adequate institutional time at meals are crucial to lowering high nursing-home malnutrition rates (Slaughter et al., 2017).

On Helen's floor, a sign on the small kitchen's door said, "Staff Only." Residents wanting food outside of mealtimes had to ask staff to bring it to them. This took institutional time and limited residents from eating on their own time when hungry. Although allowing residents into kitchens may seem risky, other cultures assess risk differently. For example, in a German care home, residents can access all kitchen equipment. They help prepare meals, enabling physical activity and socializing (Tufford et al., 2018). Lowndes et al. (2018) suggest having kitchens open for snacks and drinks between meals, so residents can help themselves. Giving access to kitchens incorporates residents' time into institutional operations, so that residents can eat whenever they are hungry.

Changing food-service practices not only can increase food consumption and reduce malnutrition but also can increase opportunities for residents to socialize. Lowndes, Armstrong, and Daly (2015) found that buffet-style meals, an alternative to care workers serving food on trays to each seated resident, encourage residents to eat more. This format also could allow residents to chat while waiting and serving themselves. Helen told me she found the pre-portioned food on her plate intimidating. It also went cold before she finished eating, making it unappetizing. Being able to decide how much food she put on her plate might have encouraged her to eat more of it. In the dining room on Helen's floor, the TV was usually on during meals. Turning down the volume, or turning the TV off, would enable residents to socialize during mealtimes.

## **Evening Jail**

In the next part of the daily routine, care workers wheeled some residents, including Helen and Rosa, to their room and placed them beside its door, facing the nursing station. From there, a staff member watched them and other residents until a care worker was ready to put them to bed.

Although staff allowed Helen to get up when she was ready—or to stay in bed if she did not feel well—going to bed was determined by institutional, not residents,' time.

Residents confined to the evening jail were forbidden from going into their rooms. Rosa asked me several times to take her into her room, but the nursing-station guard told me, “No, she has to stay outside.” Helen told me she would like to lie down in bed. I helped her use the toilet as she asked, watched while she transferred herself onto her bed, and helped her change into her nightgown. We watched TV together for a while. Then the care worker assigned to put Helen to bed arrived. “Who put her into bed?!” she demanded. I explained that Helen told me she wanted to go to bed, so I helped her get there. It seems, in responding to Helen’s residents’ time, I transgressed institutional-time priorities.

Underlying the surveillance over residents and restraint of their mobility in the evening jail may be an institutional effort to prevent falls; yet fall-prevention practices often lead to loss of mobility (Tufford et al., 2018). The jurisdiction covering Helen’s nursing home used fall frequency to rate nursing-home care quality, publishing these ratings on a government website. Ratings may partly explain fall prevention at Helen’s privately owned nursing home, which competed with others for residents. Risk mitigation may dictate why, in the evening jail as well as the afternoon jail, institutional time overruled residents’ time.

### **Institutional Time as Power in Daily Life on Helen’s Floor**

As explained above, institutional time conflicted with residents’ time when it prevented residents on Helen’s floor from leaving afternoon jail, improvising fun, moving around the floor when they wanted to, going to the toilet when they felt the need, taking as much time as they needed to eat and socialize with fellow residents, and going to bed when they felt sleepy. Other than in conversations between Helen and I, dementia time appeared to have no place on Helen’s floor. These conflicts demonstrate how institutional time becomes an instrument of power over the other two types of time and thereby diminishes residents’ quality of life. Residents who transgressed institutional time were directed—even ordered—to conform.

### **Structural Changes May Pare the Power of Institutional Time**

Here, I discuss structural changes to traditional nursing homes that might pare the power of institutional time over residents’ and dementia time: relational care and its recognition in government regulations, improving care continuity, and giving care workers more flexibility and autonomy. As Helen described, these structural changes involve “Holding someone else’s time.” They complement alternative practices discussed in the previous section.

### **Relational Care Can Incorporate Residents’ and Dementia Time into Institutional Time**

Relational care comprises “relationship-centered approaches that emphasize interpersonal connections and strong, mutually beneficial relationships between and among persons in need of care, their relatives and friends, and paid workers” (Barken & Lowndes, 2017, p. 62). This care philosophy holds promise for incorporating residents’ time into institutional time. Helen gave an example. When I asked her what comprised good care, she answered:

They take themselves to you in a nice way...the really good ones are with you from beginning to end...it's putting two female bodies together...And some people are just so open to you...they're gathering you, and if you need another moment, they will join you in that...Especially the ones who've had a lot of experience, they know if you know that there's something that you could do, that they don't have to do for you...they find out a lot about the people, how they can manage stuff that you don't—[So, it's knowing what each person can do, what they can manage, and what they need help with?] Yeah...And some people have long conversations all through the thing...Because maybe you do something that they don't really want you to be doing, and they want something else. [It's working together.] Yes, it is.

Helen's phrases "they take themselves to you" and "two female bodies together" express institutional time slowing down to allow her to proceed at her own pace. This slowing down allowed her to be not just a care object, but a care participant, on her residents' time.

Relational care particularly benefits residents with dementia. For them, the process of care is more meaningful than the outcome (Harding et al., 2024). Efforts to change nursing-home culture<sup>19</sup> encourage care workers to spend more institutional time with residents who have dementia, in turn attuning them to residents' embodied lifeworlds (Hämäläinen et al., 2024). Relational care not only enables more compassion for residents but also reduces turnover because staff are more satisfied with their jobs (Welsh, 2018). This, in turn, lessens the need to use institutional time to hire and train new care workers.

I observed relational care in action a few times on Helen's floor. Once, when I was in Helen's room, a care worker from francophone Africa arrived. Both Helen and I spoke to her in French. All of us enjoyed the encounter, and I hope it began a mutually beneficial relationship (McCleary et al., 2018) between Helen and the care worker.

In another example of relational care that creatively incorporated dementia time, a researcher told of how she observed an LPN dispensing medication in a hallway. A resident approached her, angrily shouting. The LPN scooped the resident in her arms and danced with her down the hallway. The resident was no longer angry, and the LPN went back to her work on institutional time. "It took all of a minute," said the researcher (Struthers, 2019, n.p.).

Although relational care may lessen conflicts between institutional, residents,' and dementia time, allowing time to build and enhance relationships between residents and care workers, regulators need to recognize relational care as part of institutional time.

### **Recognizing Relational Care in Regulations and Funding**

Relational care requires extra institutional time from care workers: to know residents intimately (McCleary et al., 2018), learn their preferences, and for people with dementia, how they communicate without words. Building mutually beneficial relationships requires time for care workers and residents to know each other as individuals, not just roles.

The difficulty of counting—and thereby accounting for—institutional time spent in relational care is key. Government nursing-home-care standards evolved from hospital-care standards, which are based on set amounts of time to perform physical tasks, excluding relational

---

<sup>19</sup> For an example, see [uwaterloo.ca/partnerships-in-dementia-care/our-philosophy](http://uwaterloo.ca/partnerships-in-dementia-care/our-philosophy)

care.<sup>20</sup> Documenting physical tasks consumes institutional time that could be used for relational care (Lowndes et al., 2015). For example, when care workers build relationships with residents by gathering biographical information (Banerjee & Armstrong, 2015), this relational care does not count in documentation. A colleague told me, “As a health-services researcher, I find the key problem has to do with how quality care is poorly defined by governing bodies. Sadly, it is all about bed sores and quantifiable items at this point. A smile does not count” (C. Lee, personal communication, January 2, 2018).

Another factor impeding relational care is inadequate government funding (Banerjee & Armstrong, 2015). To cut costs, institutions often cut care staff. Although family advocates promote minimum staff-resident ratios, as the family council at Helen’s institution did, these minimums are enforced poorly (Harrington et al., 2016). Also, staffing needs vary according to the acuity of residents’ needs and institutional design (e.g., single-occupancy rooms require staff to spend more institutional time walking). Therefore, minimum-staffing standards need to take these differences into account (McCloskey et al., 2015). Attending to how tasks are allocated among levels of staff (RNs, LPNs, and care workers)—and the time each level spends directly caring for residents—is important, too (McCloskey et al., 2015).

Nursing homes can increase relational care without hiring more staff. For example, a German care home trains apprentices, who double the paid-staff complement (Tufford et al., 2018). A U.S. nursing home next to a religious college requires students to volunteer. In return, residents teach students about spirituality (Roth, 2005). Similarly, nursing homes could host student practicums in collaboration with postsecondary programs in nursing, social work, and occupational and physiotherapy.

### **Continuity of Care that Incorporates Residents’ Time**

Staff scheduling on Helen’s floor impeded incorporating residents’ time into daily life. The nurse manager was highly skilled in relating emotionally to residents, a skill essential to relational care on residents’ time. Some care workers had this skill, and others did not. However, administrative duties often took the nurse manager off the floor. This minimized the institutional time available for care workers to learn from watching her relate emotionally to residents. The nurse manager did not work evening, night, and weekend shifts. Although an LPN covering three floors was on call for emergencies, she did not model emotional care.

Staff scheduling also impeded care continuity: care workers did not consistently work with the same residents, allowing these pairs to form relationships. Also, regular full-time, unionized care workers likely got first pick at shifts. Other workers floating among floors and temporary-agency workers filled shifts that regular workers did not want or during their sick leaves. These floaters and casuals were less likely than full-time staff to know residents’ preferences because they saw them irregularly, so care continuity suffered (Armstrong, Armstrong, & Choiniere, 2015). Without relationships with residents, floaters and casuals were more likely to follow institutional time than residents’ time.

Changes in staff scheduling (e.g., hiring nurse managers for evening, night, weekend shifts; consistently pairing care workers and residents) not only may incorporate residents’ time into more continuous care but also may increase job satisfaction among care workers. Mallidou et al. (2013) note that care workers permanently assigned to serve specific residents are more likely to be

---

<sup>20</sup> Nonetheless, it is possible to track relational care. GRASP software allows nurses to document psychosocial and emotional support (Personal communication, C. Lee, February 18, 2019).

satisfied with their jobs. This structural change could benefit not only care workers but also administrators. As with relational care, more job satisfaction lowers institutional time spent on hiring and training new hires. Enabling care workers to spend more time with residents builds mutual trust and empathy (Mallidou et al., 2013). Staff who consistently serve specific residents can attune themselves to residents' time (Hämäläinen et al., 2024) and, in turn, perform physical care tasks only when residents want them to. By accommodating residents' time in this way, care workers may encounter less resistance from residents—reducing the need to spend institutional time overcoming residents' resistance to care.

### **Flexible Institutional Time and More Autonomy for Care Workers**

Giving care workers time flexibility and more autonomy in organizing their tasks enables them to incorporate residents' time into institutional time. An example is delaying physical-care tasks until residents are ready, rather than physically forcing them to fit into institutional time (Øye, Fadnes Jacobsen, & Elin Mekki, 2016). Slower institutional time could increase residents' agency – for example, in choosing what clothes to wear. More time flexibility could help residents maintain their strength and agility by dressing and grooming themselves.

If institutional time allowed care workers more autonomy, they could apply their capacities for communication, presence, humor, and empathy (Banerjee & Armstrong, 2015). More autonomy also could allow snippets of time to socialize with residents—during physical care and mealtimes, for example—thereby enhancing relational care. In Song et al.'s (2020) study, 33% of care workers reported that they missed relational care (talking to residents), and 49% reported rushing this task. However, in institutions with more perceived organizational slack in time use,<sup>21</sup> care workers were half as likely to miss any care tasks.

### **Where Do We Go from Here?**

In this essay, I developed a typology of time in the daily life of a nursing home: institutional time, residents' time, and dementia time. I showed how the three types of time conflict and thereby how institutional time becomes an instrument of power over nursing-home residents. Then I discussed the implications of residents' and dementia time for care delivery and proposed changes in practice and structure that may lessen the dominance of institutional time.

The typology of time contributes to understanding nursing-home daily life by offering a conceptual framework that can help administrators and professionals understand their institutions' culture. The time typology offers a lens to researchers evaluating the effectiveness of changes in nursing-home practice and structure. For example, they can assess whether staff incorporate residents' and dementia time in daily practice. Gerontologists studying culture change in elder care can use the typology to compare nursing homes with noninstitutional alternatives. Scholars in critical disability studies can study the impact of institutional time's power over residents.<sup>22</sup> Any of the above types of research could improve quality of life for frail elders and people living with dementia.

---

<sup>21</sup> The cushion of time that allows an organization or unit to adapt successfully to internal pressures.

<sup>22</sup> Oldfield (2021) provides guidance on involving people with dementia in qualitative research.

References

- Armstrong, P. (2013). Time, race, gender, and care: Communicative and strategic action in ancillary care commentary on Carol Levine's "Caring for money." *International Journal of Feminist Approaches to Bioethics*, 6(2), 118–121. <https://doi.org/10.3138/ijfab.6.2.118>
- Armstrong, P., & Braedley, S. (Eds.). (2016). *Physical environments for long-term care: Ideas worth sharing*. Canadian Centre for Policy Alternatives.
- Armstrong, P., Armstrong, H., & Choiniere, J. (2015). *Before it's too late: A national plan for safe seniors' care*. The Canadian Federation of Nurses Unions.
- Banerjee, A., & Armstrong, P. (2015). Centring care: Explaining regulatory tensions in residential care for older persons. *Studies in Political Economy*, 95(1), 7–28. <https://doi.org/10.1080/19187033.2015.11674944>
- Barken, R., & Lowndes, R. (2017). Supporting family involvement in long-term residential care: Promising practices for relational care. *Qualitative Health Research*, 28(1), 60–72.
- Carter, M. (2020, Summer). Ethical deception? Responding to parallel subjectivities in people living with dementia. *Disability Studies Quarterly* (online), 40(3). <https://doi.org/10.18061/dsq.v40i3.6444>
- Crick, M. (2019). *The role of regulation in the care of older people with depression living in long-term care in Ontario*. Unpublished doctoral dissertation, University of Ottawa, Ottawa, Canada.
- Droit-Volet, S. (2016). Time does not fly but slow down in old age. *Time & Society*, 28, 1–23. <https://doi.org/10.1177/0961463X16656852>
- Eakin, J. (2010). Towards a 'standpoint' perspective: Health and safety in small workplaces from the perspective of the workers. *Policy and Practice in Health and Safety*, 8(2), 113–127. <https://doi.org/10.1080/14774003.2010.11667751>
- Harding, E., Sullivan, M. P., Camic, P. M., Yong, K. X. X., Stott, J., & Crutch, S. J. (2024). "I want to do something": Exploring what makes activities meaningful for community-dwelling people living with dementia: A focused ethnographic study. *Qualitative Health Research*, 34(13), 1286–1302. <https://doi.org/10.1177/1049732324123948>
- Hämäläinen, A., Leinonen, E., & Era, S. (2024). Attunement as a practice of encountering dementia time in long-term eldercare work. *Time & Society*, 33(2), 170–190. <https://doi.org/10.1177/0961463X231215945>
- Harrington, C., Schnelle, J. F., McGregor, M., & Simmons, S. F. (2016). The need for higher minimum staffing standards in U.S. nursing homes. *Health Services Insights*, 9, 13–19. <https://doi.org/10.4137/HSI.S38994>
- Heggestad, A. K. T., Nortvedt, P., & Slettebø, Å. (2013). 'Like a prison without bars': Dementia and experiences of dignity. *Nursing Ethics*, 20(8), 881–892. <https://doi.org/10.1177/0969733013484484>
- Keller, H., Carrier, N., Duizer, L., Lengyet, C., Slaughter, S., & Steele, C. (2014). Making the Most of Mealtimes (M3): Grounding mealtime interventions with a conceptual model. *JAMDA: The Journal of Post-Acute and Long-Term Care Medicine*, 15(3), 158–161. <https://doi.org/10.1016/j.jamda.2013.12.001>
- Lai, P. (2022). A longer view: Human rights and safeguards for long-term care residents. *Windsor Review of Legal and Social Issues*, 43, 36–75. <https://doi.org/10.1017/cls.2024.4>
- Lazaris, A. S., & Nazareno, J. (2020, June). Trans-incarceration: Reimagining confinement and the criminality of aging. *Journal of Aging Studies*, 53, 100854. <https://doi.org/10.1016/j.jaging.2020.100854>

- Lowndes, R., Armstrong, P., & Daly, T. (2015). The meaning of dining: The social organization of food in long-term care. *Food Studies: An Interdisciplinary Journal*, 4, 19–34.
- Lowndes, R., Daly, T., & Armstrong, P. (2018). “Leisurely dining”: Exploring how work organization, informal care and dining spaces shape residents’ experiences of eating in long-term residential care. *Qualitative Health Research*, 28(1), 126–144. <https://doi.org/10.1177/1049732317737979>
- Mallidou, A., Cummings, G., Schalm, C., & Eastabrooks, C. A. (2013). Health care aides use of time in a residential long-term care unit: A time and motion study. *International Journal of Nursing Studies*, 50(9), 1229–1239. <https://doi.org/10.1016/j.ijnurstu.2012.12.009>
- McCleary, L., Thompson, G., Venturato, L., Wickson-Griffiths, A., Hunter, P., Sussman, T., & Kaasalainen, S. (2018). Meaningful connections in dementia end of life care in long term care homes. *BMC Psychiatry*, 18, 307. <https://doi.org/10.1186/s12888-018-1882-9>
- McCloskey, R., Donovan, C., Stewart, C., & Donovan, A. (2015). How registered nurses, licensed practical nurses, and resident aides spend time in nursing homes: An observational study. *International Journal of Nursing Studies*, 52(9), 1475–1483. <https://doi.org/10.1016/j.ijnurstu.2015.05.007>
- Mitchell, G. J., Dupuis, S. L., & Kontos, P. C. (2013). Dementia discourse: From imposed suffering to knowing other-wise. *Journal of Applied Hermeneutics*, Art. 5, 1–19. <https://doi.org/10.11575/jah.v0i2.53220>
- Molloy, R. J. (2018). *Nursing home quality standards: A primer for residents, families, ombudsmen, and advocates*. The Long-Term Care Community Coalition.
- Oldfield, M. (2021). “Nothing about us without us”: Involving people with dementia in qualitative research. *Review of Disability Studies International*, 17(2). [rdsjournal.org/index.php/journal/article/view/1034](https://rdsjournal.org/index.php/journal/article/view/1034)
- Oldfield, M., & Hansen, N. (2020). Travels with two women: A reflection on power and agency while aging with and into cognitive impairment. In K. Aubrecht, C. Kelly, & C. Rice (Eds.), *The Aging/Disability Nexus*. UBC Press.
- Øye, C., Fadnes Jacobsen, F., & Elin Mekki, T. (2016). Do organisational constraints explain the use of restraint: A comparative ethnographic study from three nursing homes in Norway. *Journal of Clinical Nursing*, 26(13–14), 1906–1916. <https://doi.org/10.1111/jocn.13504>
- Roth, D. (2005). Culture change in long-term care: Educating the next generation. *Journal of Gerontological Social Work*, 45(1/2), 233–248. [https://doi.org/10.1300/J083v45n01\\_14](https://doi.org/10.1300/J083v45n01_14)
- Salsbury Lyons, S. (2010). How do people make continence care happen? An analysis of organizational culture in two nursing homes. *The Gerontologist*, 50(3), 327–339. <https://doi.org/10.1093/geront/gnp157>
- Shakespeare, T., Zeilig, H., & Mittler, P. (2017). Rights in mind: Thinking differently about dementia and disability. *Dementia*, 18(3), 1–14. <https://doi.org/10.1177/1471301217701506>
- Slaughter, S., Ickert, C., Carrier, N., Lengyel, C., & Keller, H. (2017). Identifying priority areas for improving food and fluid intake in long-term care: Multi-professional views. *Journal of Nursing Home Research Sciences*, 3, 43–45. <https://doi.org/10.14283/jnhrs.2017.10>
- Song, Y., Hoben, M., Norton, P., & Estabrooks, C. A. (2020). Association of work environment with missed and rushed care tasks among care aides in nursing homes. *JAMA Network Open*, 3(1), 1–13. <https://doi.org/10.1001/jamanetworkopen.2019.20092>

- Struthers, J. (2019, January 07). Critical reflexivity in rapid site-switching ethnography. *January 16th: Seminar & Social*. Centre for Critical Qualitative Health Research. <https://ccqhr.utoronto.ca/2019/01/07/january-16-seminar-social/>
- Tufford, F., Lowndes, R., Struthers, J., & Chivers, S. (2018). 'Call security': Locks, risk, privacy, and autonomy in long-term residential care. *Ageing International*, 43, 34–52. <https://doi.org/10.1007/s12126-017-9289-3>
- Welsh, M. (2018, December 15). Seniors group makes push to transform long-term care. *Toronto Star* [newspaper], A1, A6.
- Yoshizaki-Gibbons, H. M. (2020). *Old women and care workers navigating time, relationality, and power in dementia units*. Unpublished doctoral dissertation, University of Illinois at Chicago, Chicago, Illinois.

#### About the Author

Margaret Oldfield, Ph.D. (margaret.oldfield@outlook.com), is a social scientist and disability scholar. Dr. Oldfield's scholarship covers changing workplaces and public policy so people with chronic illnesses can remain employed; the experiences of nursing home residents and power structures surrounding them; collaboration among nursing home staff, family members, and residents; MAiD (medical assistance in dying), which targets disabled people; challenging dementia stereotypes; and non-institutional alternatives to nursing homes. Dr. Oldfield's publications and presentations are available on ResearchGate. ORCID 0000-0002-9271-446X.

#### Discussion Questions

1. Think of a nursing home where you live, work, or visit. How would you describe daily life for residents? Use the time typology in this article and Figure 1 to guide your answer.
2. What kinds of interactions and conflicts have you observed between institutional time, and residents' and dementia time in that nursing home?
3. How did interactions and conflicts between institutional time, and residents' and dementia time affect residents of that nursing home?
4. What changes in that nursing home could pare the power of institutional time over residents?

#### To Cite this Article

Oldfield, M. (2025, Fall). Paring the power of institutional time over residents' and dementia time in North American Nursing Homes: "You have to wait!" *Journal of Multidisciplinary Research*, 16(2), 23–38.



# **The Asynchronous Online Discussion Forum Dilemma**

**Katherine Bandy**  
*St. Thomas University*

## Abstract

Discussion forums in a learning management system (LMS) can be of use in many ways. The most common way, using them as peer reviewed assignments, limits true discourse. Prescriptive prompts and strict formatting guidelines detract from the natural flow of conversation resulting in minimal engagement and low learner satisfaction. When designing content for an asynchronous online course, designers should consider computer-mediated communication styles. Current research in engagement and learner satisfaction in asynchronous online discussions shows a need for a shift in the approach to online discussions. This article will delineate best practices to follow to ensure online discussions capture the essence of traditional classroom discussions, the pitfalls to avoid, and why. Students need to feel they are part of a community of inquiry (CoI) for them to feel connected to what they are learning. Fostering a CoI in which learners feel confident and safe to discuss what they need to discuss is important for student retention.

## Keywords

asynchronous online learning, online discussion forums, learner satisfaction, learner engagement, retention, and community of inquiry (CoI), high context communication (HCC), low context communication (LCC), and computer-mediated communication (CMC)

## **Introduction to the Dilemma**

Online discussion forums designed as a peer review assignment do not garner natural dialectic. Imagine a face-to-face traditional classroom. The instructor poses a question to the class, and before any actual conversation commences, each student must speak their thoughts regarding the question. Not only that, the instructor also requires the students to speak in an academic voice and reference what they read in the assigned lecture materials to support their opinions. Most of the students likely will have the same response and the same references to the lecture materials. Also, telling the students not to interact with one another initially, skews their perception of the other students being people with opinions with whom they can now engage (Zhang, Mohamed, & Liu, 2024, p. 55).

When professors discuss topics with their class, do they require students to speak in an academic voice and reference their opinion with research? Not often. No, class discussions encourage students to engage with the lecture materials in a collaborative way. Requiring students to write academically with formatted citations and references in discussion forums online shifts the focus to the formatting and away from deepening their understanding of the subject. Writing mechanics and formatting as the focal point pressures students to be perfect and correct, rather than offer ideas. Plagiarism checking software is not available to screen discussion forums in most Learning Management Systems (LMSs) for that reason. Centering attention on the writing leads to discussion post screenings and policing the authenticity and accuracy of the students' post. These methods build a wall between the professor and the students, minimizing the importance of human connection and upsetting the community of inquiry (CoI). Leave the academic writing for essays and papers. Not only is this approach a waste of time, it erodes the pathways leading to natural discourse.

### **Research and Findings**

Tao's research in the dynamics of community engagement in distance education found that a minority of students will at any one time strike up discourse on a topic. All other students will then engage on different levels. Some barely contribute to the conversation while others engage once someone else initiates. Tao (2024) also found that the students who initiate discussion threads change depending on the topic and situation (p. 12). Erilmaz, Thoms, Ahmed, and Lee (2023) developed terminology for clusters of student engagement in online discussion forums. Students engage from the periphery (only sharing information), intermediary (sharing and synthesizing information), and centralized (negotiating meaning). Furthermore, they discovered information overload makes it difficult for students to move from the periphery to a more centralized form of engagement (Erilmaz, Thoms, Ahmed, & Lee, 2023, p. 51). The combination of these two studies show that students will vacillate between being on the periphery and a more centralized engagement level with a topic depending on their understanding of the topic, the difficulty of the amount of information for them to process, and the time constraints of their schedule that week.

Zhang, Mohamed, and Liu (2024) stress the importance of social presence in online courses. They found that as students' awareness of one another increased, so did satisfaction and engagement increase. More importantly, teacher presence had an impact on these results (p., 55). Discussion forums are the best way for social presence and teacher presence to be established in asynchronous online courses. It is essential to develop discussion forums that foster natural conversations about the content being disseminated.

A study by Xiaoquan Pan (2023) established a correlation between learner empowerment and engagement and motivation (p., 10). Students should feel empowered to share their ideas and not only synthesize the information but take it a step further to making meaningful real-world connections.

Leotescu (2023) addresses the importance of context in communication. Discussion forums are computer-mediated communication (CMC). Discussions with a high context communication (HCC) culture tend to focus on the group. Low-context communication occurs in CMC when instructors ask students to cite their work and reference it with the appropriate style. "People are expected to overtly state their point of view so that communication is straightforward, leaving no room for misinterpretation" (p. 7). Without flexibility to explore the possibility of meaning, students will be reticent to give their actual opinion and overly rely on the opinions of the authors

of their references, resulting in a lack of synthesis and application of information. The importance of creating an HCC culture in a discussion forum is key. HCC cultures have a shared basis of understanding that does not necessarily need to be spoken about directly, meaning can be inferred and is open to interpretation (Leotescu, 2023, p. 11). This style of communication allows students and instructor to focus on the areas where understanding is incomplete.

### **Discussion**

Based on the findings in recent research, there needs to be a shift in the way instructors use discussion forums in asynchronous online courses. Consider not requiring an initial response to the prompt if the goal of the discussion is discourse. Similarly, determine whether the main objective is to require students to write academically or share their thoughts. The latter should not require academic voice and reference materials in a strict formatted style. Encourage an HCC culture and provide flexibility when grading.

When the focus of online discussions shifts, a community of inquiry (CoI) forms. The CoI Framework consists of three types of presence with ten categories. A 2024 study of the CoI Framework concluded the framework works when applied correctly and could not find significant reason to update it or change it (Wilson & Berge, 2024, p. 170). The table shows how each of the categories can be applied to online discussion forums.

**Table 1**  
*Application of the CoI Framework in Online Discussion Forums*

<b>Presence</b>	<b>Category</b>	<b>Application</b>
Cognitive	Triggering event	Someone begins a discussion.
	Exploration	Students and instructor engage in discourse.
	Integration	The students make meaning from the ideas presented.
	Resolution	The knowledge is applied to educational contexts or workplace settings.
Social	Affective communication	Students are encouraged to share personal experiences to help develop social connections.
	Open communication	Students are not given strict guidelines for how to respond so they feel secure in their interactions. It needs to be a safe place where they can speak their mind.
	Group cohesion	Encourage posts that help develop a sense of camaraderie while still being focused on what they are learning.
Teaching	Instructional design and organization	Plan discussions to be more flexible and open. Plan ways to develop an HCC culture.
	Facilitating discourse	The instructor needs to help students agree and disagree with one another, steering them to a place of consensus and understanding.
	Direct instruction	Instructors should chime in on the conversation, presenting content when appropriate and feedback to help guide the students.

Adapted from Table 1 Summary of Categories within the CoI Framework (Wilson & Berge, 2023, p. 166).

When the CoI Framework is applied, a solution to the problem arises. Students engage in the discussion until they make meaning and apply the information. Threads emerge with ideas about the content. Communication flows freely in an exploratory manner. Grading criteria for this type of discussion includes engagement in the community (they are responsive and offer insight into the discussion) and application of concepts (they are able to go beyond sharing information and can apply it). In the Instructional design and organization category, the instructor can plan strategies to give the discussion a more gamified feel. For example, an instructor can post a leaderboard each day in the announcements and award a token when a student is able to properly apply information to encourage friendly competition.

### **Areas for Further Research**

Retention is an important factor when designing asynchronous online courses. Further research should consider this key component. A study that incorporates Universal Design for Learning (UDL) in online studies shows an attrition rate of 7.09% in post-UDL cohorts (Garrad & Nolan, 2023, p. 6). The pre-UDL cohort had an attrition rate of 15.73% (2023, 6). The study did not include the use of online discussion forums in the data collection process. Online discussion forums are another means of engagement, which is part of the UDL framework. They allow students to share their point of view and comprehension of the subject matter, which is representation under the UDL framework, and when used in the way the author proposes in this reflection, can help reduce barriers to learning (2023, p. 2).

### **Conclusion**

A CoI approach to asynchronous online discussion forums increases learner satisfaction, engagement, and persistence. Forums that allow students to freely discuss the subjects each week in a HCC culture help develop communities of inquiry by allowing the students to engage in natural conversation, mimicking traditional classroom discourse. Studies show students respond well to having a component in the course where they can freely discuss the topics with each other and the instructor. While this approach has not been directly tied to retention and program completion, an area for further study, the author concludes that satisfied and engaged students will continue their programs through to completion.

### **Acknowledgments**

The author would like to acknowledge Dr. John “Jack” Rudnick, Jr. for contribution through discourse about high- and low- context cultures. The author also would like to acknowledge Michael Back for contribution through discourse on Universal Design for Learning.

## References

- Eryilmaz, E., Thoms, B., Ahmed, Z., & Lee, H. (2023). Formation and action of a learning community with collaborative learning software. *Journal of Management Information Systems*, 40(1), 38–55. <https://doi.org/10.1080/07421222.2023.2172774>
- Garrad, T., & Nolan, H. (2023). Rethinking higher education unit design: Embedding universal design for learning in online studies. *Student Success Journal*, 14(1), 1–8. <https://doi.org/10.5204/ssj.2300>
- Leotescu, G. S. (2023). Communicating meaning across high- and low- context cultures – a comparative analysis. *Scientific Bulletin of the Politehnica University of Timișoara Transactions on Modern Languages*, 22(1), 5–13.
- Pan, X. (2023). Online learning environments, learners' empowerment, and learning behavioral engagement: The mediating role of learning motivation. *SAGE Open*, 1–16. <https://doi.org/10.1177/21582440231205098>
- Tao, A. (2024). The dynamics of community engagement in distance education: A sociological analysis based on online learning platforms. *International Journal of Interactive Mobile Technologies*, 18(7), 4–18. <https://doi.org/10.3991/ijim.v18i07.48599>
- Wilson, E. C., & Berge, Z. L. (2023). Educational experience and instructional design effectiveness within the community of inquiry framework. *International Review of Research in Open and Distributed Learning*, 24(1), 159–174. <https://doi.org/10.19173/irrodl.v24i1.6751>
- Zhang, Y., Mohamed, H. B., & Liu, D. (2024). A systematic literature review on the relationships between social presence, learning satisfaction and persistence in online learning. *International Journal of Interactive Mobile Technologies*, 18(5), 44–61. <https://doi.org/10.3991/ijim.v18i05.47799>

## About the Author

Katherine Bandy is the Instructional Design Manager at St. Thomas University in Miami Gardens, Florida. She received a Master of Science in Instructional Design and Technology in May of 2020. Her areas of interest include distance learner engagement, improving faculty-instructional designer relations, establishing clear guidelines for the use of Artificial Intelligence in higher education, and research in methods to increase undergraduate students' social competencies while obtaining their degree. ORCID 0009-0008-6726-9633.

## Discussion Questions

1. What is the main objective of a discussion forum in an asynchronous online course?
2. How is a community of inquiry (CoI) established in an asynchronous online course?
3. What is the connection between student retention and establishing a CoI in an asynchronous online course?

## To Cite this Article

Bandy, K. (2024). The asynchronous online discussion forum dilemma. *Journal of Multidisciplinary Research*, 16(2), 39-43.



“Pacific Chorus Frog”  
Lasqueti Island, Canada  
2020

Photography by Heather Crawford.

Image Copyright © 2020 by Heather Crawford.  
All rights reserved. Used with permission.

# **A Contribution to Improving Clarity in Transdisciplinary Creation, Sharing and Application of Knowledge**

**S. Spuzic**

*University of South Australia, Australia*

**Ramadas Narayanan**

*Central Queensland University, Australia*

**Hannah Gooding**

*Surrey Business School, United Kingdom*

**Kazem Abhary**

*University of South Australia, Australia*

## Abstract

This article aims to identify what prevents transdisciplinary knowledge production processes from being conducted. Misalignments in the defining of important concepts have become evident; ambiguities arise when a word or phrase has multiple meanings. Depending on the context in which it is used, the meaning of a singular word can differ across various disciplines. This article highlights how misalignment between definitions and ambiguity of terminology can hinder the potential of a transdisciplinary approach to solving problems and transdisciplinary knowledge creation. In this article, the researcher analyzed the terms ‘technology’ and ‘torsion’ to illustrate issues arising from excessive synonymy, highlighting the need for terminological consistency. This article proposes that active institutional collaboration between researchers working on the transdisciplinary team can enable differences in terminologies. We aim to show how a common language in academic spheres can facilitate the adoption of a transdisciplinary approach.

## Keywords

transdisciplinary knowledge, terminology, disambiguation, digital technology

## Introduction

This article aims to foster clarity and understanding by highlighting how nomenclature can hinder the adoption of transdisciplinary approaches. As digital mediums eclipse conventional printed resources, a misalignment in defining principal concepts has become more obvious. In transdisciplinary contexts, which involve the integration of natural, technical, and social disciplines, communication between experts can be a challenge (Wognum et al., 2019; Crockett et al., 2013). Each discipline uses its own unique language that experts from other fields may not understand (Crockett et al., 2013; McGregor & Donnelly, 2014). Such incongruities can significantly impede the efficacy of an integrative, transdisciplinary methodology aimed at problem resolution and the augmentation and dissemination of knowledge.

In general, ambiguity associated with the creation, sharing, and application of knowledge is categorised as follows:

- Misalignment in scientific concepts and nomenclature (e.g., synonymy and homonymy).
- Excessive use of jargon, acronyms, and abbreviations.
- Either overly concise explanations (lacking important detail) or excessive verbosity.
- Failure to use audiovisual supporting explanatory aids (e.g., pictures, animations, etc.).
- Discrepancies between the intentions of the information producer and the needs or expectations of the information recipient.
- Lack of leveraging curiosity and other motivational drivers, particularly in the realm of education.

This agenda is becoming increasingly relevant with advancements in knowledge communication and information processing technology. On one side, the capability of digital devices to display diagrams, schemes, animations, and other records has surpassed the potential of textbooks, manuals, and other traditional printed materials.

On the other side, this same information technology has made the presence of ambiguities used to define theories and concepts in the expanding knowledge base more visible.

While attempts such as creating specialized Languages for Special Purposes (LSP) are strategic, the absence of universal scientific and engineering terminology turns LSP into another barrier to multidisciplinary knowledge generation and sharing. Using the same term with different meanings in different LSPs increases the information entropy (disorder) and hinders the potential of transdisciplinarity.

Given the increasing expansions of knowledge, addressing the ambiguities burdening transdisciplinary understanding is a pertinent point. A number of ambiguous concepts (such as ‘definition,’ ‘vector,’ ‘frequency,’ ‘tangent,’ ‘phase,’ ‘metal,’ ‘morphology,’ and ‘ontology’) have already been discussed in publications (Abhary et al., 2009a,b, 2012; Almár & Both, 2002; Ananiadou, 2013; Fetzer et al., 1991; Hajek, 2019; Hildreth & Kimble, 2002; Linton, 2009; Miller, 2001; Navigli, 2009; Polsani, 2003; Spuzic, 2020, 2023). In this manuscript, we will examine two prominent cases of ambiguity: ‘technology’ and ‘torsion.’



## **Ambiguity Examples**

### **Technology**

Numerous academic institutions, scientific publications (both books and journals), as well as educational, engineering, and other sources that disseminate knowledge, use the term 'technology' to refer to a 'technique' along with its associated assets and materials.

Giancaspro (2009) states that, “The pier caps exhibited severe spalling and cracking and were considered for strengthening using FRP (fiber-reinforced polymer) technology” (n.p.).

The *Lucintel Newsletter* (2008) states, “...ThermoPlastic flowforming technology allows for part production with very little trim and waste....” (p. 27).

The ambiguity arising from the homonymous use of the word ‘technology’ is clearly evident in the context of ‘information technology.’ There’s a substantial distinction between providing tangible assets like communication tools, computer hardware, or other equipment with their operating guidelines and simply supplying specific knowledge such as definitions, intelligence, software codes, or other directives.

Some of the widely accepted media have the following definition: “Information technology (IT) is the use of computers to create, process, store, retrieve and exchange all kinds of data and information. IT forms part of information and communications technology (ICT). An information technology system (IT system) is generally an information system, a communications system, or, more specifically speaking, a computer system — including all hardware, software, and peripheral equipment.

Furthermore, ‘digital technology’ is defined follows:

- Application of digital electronics
- Any significant piece of knowledge from information technology.

The above sources support the definition in the encyclopaedia *Britannica* (2020) that technology is “the application of scientific knowledge to the practical aims of human life or, as it is sometimes phrased, to the change and manipulation of the human environment” (n.p.). Considering the aforementioned definitions, the term ‘engineering’ equates to the concept of ‘technology.’ *Britannica* (2024) defines engineering as follows:

Engineering (is) the application of science to the optimum conversion of the resources of nature to the uses of humankind. In 1941, the Engineers Council for Professional Development, now the Accreditation Board for Engineering and Technology in the United States defined the field as the creative application of ‘scientific principles to design or develop structures, machines, apparatus, or manufacturing processes, or works utilizing them singly or in combination; or to construct or operate the same with full cognizance of their design, or to forecast their behaviour under specific operating conditions; all as respects an intended function, economics of operation and safety to life and property’ (n.p.).

Princeton University (2024) provides the following definition: “Technology (is) the discipline dealing with the art or science of applying scientific knowledge to practical problems.” This definition stands apart from the rest by viewing technology as a science that examines overarching aspects, like the principles of applying scientific knowledge to tackle practical issues.

It excludes direct engineering tasks like designing machines, tools, apparatus, or production processes.

Reydon (2020) presents a detailed account of the different interpretations of the concept of technology and states that the nature of technology is “even less clear than the nature of science.” Reydon quotes Marx Wartofsky (1979), who wrote:

“Technology” is unfortunately too vague a term to define a domain; or else, so broad in its scope that what it does define includes too much. For example, one may talk about technology as including all artefacts, that is, all things made by human beings. Since we ‘make’ language, literature, art, social organizations, beliefs, laws, and theories as well as tools and machines, and their products, such an approach covers too much. (Wartofsky, 1979, pp. 176)

Günter Ropohl (1990; 2009) defined ‘technology’ as the “science of technics” (“Wissenschaft von der Technik,” where ‘Technik’ denotes the domain of crafts and other areas of actual conduct of manufacturing, making, etc.). The important aspect of Ropohl’s definition is that ‘technology’ does not denote a human activity, such as making or designing, or a domain of technological innovations, such as inventing (and making) solar panels, but a scientific discipline.

Li-Hua’s (2009) examination of the definitions of ‘technology’ reveals that numerous definitions perceive technology in the way Ropohl (2009) does, as a specific domain of knowledge. However, there is no consensus on the exact nature of this knowledge. In certain definitions, technology is viewed as specialized knowledge related to design and production processes. In contrast, other definitions regard technology as the understanding of natural occurrences and the laws of nature that address human needs and challenges.

Bunge (1966) presented a view that “technology is science for the purpose of application” i.e., it is the study of ‘natural laws’ and man-made phenomena that are useful for solving real-life problems. For example, in this interpretation, the actual conduct of applying the process of manufacturing by welding (solid state joining) is not a technology per se, but studying this process is one of the themes technology is concerned with (Ropohl, 2009).

Different definitions reflect varying conceptions of technology. For instance, the definition endorsed by the United Nations Conference on Trade and Development (UNCTAD) suggests that technology encapsulates not only specific knowledge but also machinery, production systems, and a skilled human labour force. Aligning with the UNCTAD perspective, Li-Hua (2009) puts forth a comprehensive four-element definition of ‘technology.’ It includes technique (a specific method for manufacturing a certain product), specific knowledge (needed for producing that product, which he dubs ‘technology’ in the strict sense), the organization of production, and the end product itself. Conversely, Friedrich Rapp (1989) postulates a more expansive definition of ‘technology.’ He characterizes it as a realm of human activity, summarizing it as ‘the reshaping of the physical world for human purposes.’

Nordmann (2008) went even further by arguing that it is challenging to clearly define the term ‘technology.’ According to Nordmann (2008), we should accept that technology is a diverse domain and therefore difficult to define clearly. Accordingly, instead of conceiving of ‘technology’ as a term for a particular fixed collection of phenomena, Nordmann posited that ‘technology’ is a ‘reflective concept’ (Grunwald & Julliard, 2005).

According to Nordmann (2008), because individuals ascribe their own meaning to the term ‘technology’ different definitions of technology exist.

Reydon (2020) provides a detailed account reviewing the history of the concept of technology, starting with the ancient Greek philosophers. Reydon concluded that while the concept of ‘technology’ provides an adequate definition, it can still serve as a basis for reflections on technology. He proposes that using ‘technology’ in this loosely defined manner allows for the connection of reflections on very different issues and phenomena as being about, in the broadest sense, the same thing (Reydon, 2020).

The difference in usage and interpretation of the acronym IT raises further issues. Let us consider another example. When deciphering the acronym ‘IT’ with reference to (Acronym Finder, 2023; Abbreviations, 2023), we find the following potential interpretations:

- IT - Industrial Technology
- IT - Information Technology
- IT - Intervallence Transition
- IT - Italy
- IT - Innovative tests
- IT - Information Transport
- IT - Interoperability Testing
- IT - Individual Therapy
- IT - Intensive Therapy
- IT - Inhalation Therapy

Interestingly, an individual practicing or studying Medical Physiology may associate the term IT with the final three acronyms, individual therapy, intensive therapy, and inhalation therapy. In the following example, we show how the analysis of different distinctions between concepts enables reduction of ambiguity.

- (a) Technology
  - (b) Technique
  - (c) *Ingeniería\**
  - (d) Engineering
- \* adopted from Spanish

The term (a), which describes the science that investigates a particular system, should be differentiated from term (b), representing the system itself (the subject of the study). It also should be set apart from term (c), which refers to the documents presenting knowledge about that system, and from term (d), indicating the application of that knowledge.

‘Technology’ is a scientific discipline that studies techniques, the tools associated with these techniques, and the phenomena and utilization of associated tools and techniques. Its hypernym is “science.”

The term ‘technique’ describes an organized action intended to cause a specific change in a phenomenon, either directly or indirectly. This broad concept can encompass simple actions such as wood chopping or swimming or more complex performances such as welding, interviewing, teaching, bone transplanting, or landing a space probe on Mars (2024).

The term ‘technique’ falls under the broader categories of ‘manner,’ ‘method,’ and ‘ability.’

## **Torsion**

In mechanical engineering, clarity is paramount for understanding complex concepts. The discussion surrounding the torsional moment ( $T$ ) and the polar moment of inertia ( $J$ ) is a prime example of this necessity. Vague definitions of such basic concepts introduce an unwarranted level of ambiguity, even before addressing the complex aspects of dynamic scenarios.

For example, sources (Bolton, 1994; Govindjee, 2013; Hibbeler, 2014; Pytel & Kiusalaas, 2017; Alkadhimi, 2020; University of Cambridge, 2023; Cambridge Dictionary, 2024; Collins English Dictionary, 2024; Merriam-Webster, 2024) use interchangeably the terms ‘torque,’ ‘moment of torsion,’ ‘twisting moment,’ ‘torsional moment,’ ‘moment of force,’ ‘twist force,’ and ‘turning moment.’ That synonymy makes the whole concept of torsion unnecessarily ambiguous already at the level of statics, even before progressing to the more complex topics of rotational dynamics (not to mention the gyroscopic effects).

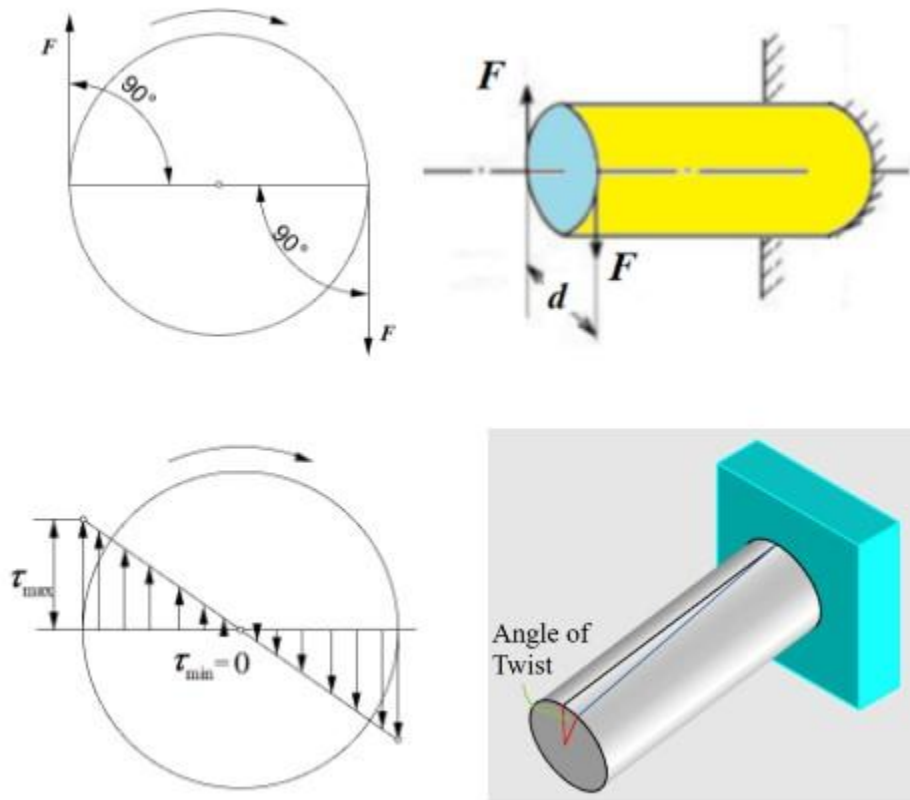
A tendency by different authors to use symbols other than  $T$  and  $J$  is not helpful either. This is not to suggest that the use of symbols in this manuscript are the best choices, but there is clearly a need to standardize the use of these symbols as well.

It is vital to note that clarifying these concepts without referencing the underlying assumptions can create ambiguity. Omitting schematic representations from definitions found in commonly used dictionaries certain dictionaries (Cambridge Dictionary, 2024; Collins English Dictionary, 2024; Merriam-Webster, 2024), typically exemplifies such unclear presentations.

To make the explanation of these concepts clearer and more digestible, we have constructed an example. Figure 1 and accompanying Equation 1 depict the twisting of a solid cylinder (a shaft); the following texts analyse how definition voids may impact the interpretation of the figure.

**Figure 1**

One way of causing twist (torsion); the shaft is fixed at one end and the force couple is applied to its other end.



Note: Images by S. Spuzic, based on broadly disseminated knowledge in theory of elasticity. Images used with permission.

The assumptions are the following:

- The angle of the twist is small.
- The length of the shaft, its radius, and the cross-section circles remain unchanged.
- Twisting turns the longitudinal grid line into a helix geometry.
- Each longitudinal line intersects the circles at equal angles.
- The cross sections (the circles), including the ends of the shaft, remain flat — that is, they neither warp nor bulge in or out.
- Radial lines remain straight during the deformation.
- All calculations are valid starting from about  $1.5d$  from the shaft end where the forces  $F$  acts, in accordance with Saint-Venant's Principle. The short segment where the forces  $F$  is acting is subject to more complex stresses and strains.

The equation for torsional moment can then be written as follows:

$$T = 2Fr \tag{1}$$

Where:

$T$  is the torsional moment,

$r = d/2$ ,

$r$  is the lever arm or moment arm, which is the perpendicular distance from the axis of rotation to the line of action of the force.

$F$  is the force applied perpendicular to  $r$ , and lies in the plane perpendicular to the longitudinal axis of the twisted solid.

The maximum torsional stress  $\tau$  is related to the applied torsional moment as per Figure 1 and Equation (2).

$$\tau_{\max} = \frac{Tr}{J} \tag{2}$$

$J$  represents the second polar moment of area for the cross section as outlined in Equation (3). Other names of this variable are the second moment of inertia and polar moment of inertia — this brings in further misalignment in the whole explanation.

$$J = \frac{1}{2}\pi r^4 \tag{3}$$

$T$  is the Torsional moment in N·m and the parameters for its calculation are cross-section radius  $r$  in (m), Force  $F$  in (N), torsional stress  $\tau$  in (N/m<sup>2</sup>) and the polar moment of inertia  $J$  in (m<sup>4</sup>).

### **Conclusions**

The central purpose of this manuscript is to contribute to improving the clarity and interpretation of knowledge across various disciplines, by highlighting how nomenclature can hinder the adoption of transdisciplinary approaches.

This article analyzed and classified different types of ambiguity and examples of ambiguous concepts in detail; in particular, the definitions of the fundamental concept of ‘technology’ and ‘torsion’, and discrepancies remain unaddressed. To address misalignment in definitions and subsequent confusion this may cause between those working in an ID or TD way, there is a need to mobilize the institutions organized to enhance transdisciplinary applications of knowledge. By facilitating cross-disciplinary communication researchers can identify where and how they ascribe different meanings to the same term (Petrie, 1976; Petrie, 1992).

Maintaining terminological consistency is imperative. Excessive use of synonyms can be detrimental, complicating knowledge creation, communication, and application. Rectifying these ambiguities is essential to benefit learners at all levels, ensuring effective transdisciplinary communication and promoting clarity in concepts that rely on precise definitions.

It is vital to recognize the significant impact of publishing this agenda. As the global community continues to lean heavily on the English language in academia and beyond, setting a clear, unambiguous standard becomes paramount. By addressing and rectifying these challenges, we pave the way for a more cohesive understanding across disciplines, fostering richer collaboration and elevating the efficiency and quality of transdisciplinary discourse.

### References

- Abhary, K., Adriansen, H. K., Begovac, F., Kovacic, Z., Shpigelman, C. N., Stevens, C., Spuzić, S., Uzunovic, F., & Xing, K. (2009a). A contribution to transparency of scientific and engineering concepts. *The International Journal of Knowledge, Culture, and Change Management*, 9(5), 93–106.
- Abhary, K., Adriansen, H. K., Begovac, F., Djukic, D., Qin, B., Spuzic, S., Wood, D., & Xing, K. (2009b). Some basic aspects of knowledge. *Procedia–Social and Behavioural Sciences*, 1(1), 1753–1758. <https://doi.org/10.1016/j.sbspro.2009.01.310>
- Abhary, K., Adriansen, H. K., Hsu, H.-Y., Kovacic, Z., Mulcahy, D., & Spuzic, S. (2012). A contribution to disambiguation of interdisciplinary knowledge. In *Proceedings of the Australasian Association for Engineering Education (AAEE) annual conference*, 3–5 December 2012, Swinburne University of Technology, Melbourne, Australia.
- Abbreviations. (2003). The source for acronyms and abbreviation. *The STANDS4 Network*. <http://www.stands4.com/browsesearch.asp>
- Acronym Finder. (n.d.). What does IT stand for? In *AF Acronym Finder*. <https://www.acronymfinder.com/IT.html>
- Alkadhimi, A. (2020). A novel and simple technique for correcting localised rotations in the early alignment stage. *Journal of Orthodontics*, 47(4), 338–344. <https://doi.org/10.1177/1465312520949553>
- Almár, I., & Both, E. (2002). The delimitation problem—Selecting the basic list of terms for an astronomical dictionary. *Acta Astronautica*, 50(2), 83–87. [https://doi.org/10.1016/S0094-5765\(01\)00195-3](https://doi.org/10.1016/S0094-5765(01)00195-3)
- Ananiadou, S. (2013). Term disambiguation, text mining. In W. Dubitzky, O. Wolkenhauer, K. H. Cho, & H. Yokota (Eds.), *Encyclopedia of systems biology*. Springer. [https://doi.org/10.1007/978-1-4419-9863-7\\_1521](https://doi.org/10.1007/978-1-4419-9863-7_1521)
- Bolton, W. (1994). *Engineering science* (2nd ed.). Butterworth-Heinemann Newness.
- Britannica. (n.d.). Technology. Science & Tech. In *Britannica*. <https://www.britannica.com/technology/technology>
- Britannica. (n.d.). Engineering. Science & Tech. In *Britannica*. <https://www.britannica.com/technology/engineering>
- Bunge, M. (1966). Technology as applied science. *Technology and Culture*, 7, 329–347.
- Cambridge Dictionary. (n.d.). Torsion. In *Cambridge Dictionary Online*. <https://dictionary.cambridge.org/dictionary/english/torsion>
- Collins English Dictionary. (n.d.). Torsion. *Collins English Dictionary*. <https://www.collinsdictionary.com/dictionary/english/torsion>
- Crockett, D., Downey, H., Firat, A. F., Ozanne, J. L., & Pettigrew, S. (2013). Conceptualizing a transformative research agenda. *Journal of Business Research*, 66(8), 1171–1178. <https://doi.org/10.1016/j.jbusres.2012.08.009>

- Fetzer, J. H., Shatz, D., & Schlesinger, N. G. (Eds.). (1991). *Definitions and definability: Philosophical perspectives*. Kluwer Academic Publishers.
- Giancaspro, J., Papakonstantinou, C., Nazier, M., & Balaguru, P. (2009). Aerospace technology for strengthening of bridges. *Construction and Building Materials*, 23(2), 748–757. <https://doi.org/10.1016/j.conbuildmat.2008.02.021>
- Govindjee, S. (2013). *Engineering mechanics of deformable solids: A presentation with exercises*. Oxford University Press.
- Grunwald, A., & Julliard, Y. (2005). Technik als Reflexionsbegriff: Zur semantischen Struktur des Redens über Technik. *Philosophia Naturalis*, 42, 127–157.
- Hájek, A. (2019). Interpretations of probability. In *Stanford encyclopedia of philosophy*. <http://plato.stanford.edu/entries/probability-interpret/>
- Hibbeler, R. C. (2014). *Mechanics of materials*. Prentice Hall.
- Hildreth, P. M., & Kimble, C. (2002). The duality of knowledge. *Information Research*, 8(1), 1–23. <https://doi.org/10.1087/IR02-1132-142>
- Li-Hua, R. (2009). Definitions of technology. In J. K. B. Olsen, S. A. Pedersen, & V. F. Hendricks (Eds.), in *A companion to the philosophy of technology* (pp. 18–22). Wiley-Blackwell.
- Linton, J. D. (2009). De-babelizing the language of innovation. *Technovation*, 29, 729–737. <https://doi.org/10.1016/j.technovation.2009.04.006>
- Lucintel. (2008). Composites week. *Lucintel Newsletter*, 50(10). <http://www.lucintel.com/newspage.aspx?sno=5582>
- Merriam-Webster. (n.d.). Torsion. In *Merriam-Webster.com dictionary*. <https://www.merriam-webster.com/dictionary/torsion>
- McGregor, S. L., & Donnelly, G. (2014). Transleadership for transdisciplinary initiatives. *World Futures*, 70(3–4), 164–185. <https://doi.org/10.1080/02604027.2014.934625>
- Miller, G. A. (2001). Ambiguous words. *Impacts Magazine*. <http://www.kurzweilai.net/meme/frame.html?main=/articles/art0186.html>
- Narayanan, R., Lemes, S., Spuzic, S., Mulcahy, D., Pignata, S., Uzunovic, F., & Fraser, K. (2014). Knowledge transfer in postgraduate research and education. *Asian Journal of Education and E-Learning*, 2(6), 490–498. <https://www.ajouronline.com/index.php/AJEEL/article/view/2009>
- Navigli, R. (2009). Word sense disambiguation: A survey. *ACM Computing Surveys*, 41(2), Article 10. <https://doi.org/10.1145/1459352.1459355>
- Nordmann, A. (2008). *Technikphilosophie: Zur einföhrung*. Junius.
- Polsani, P. R. (2003). Use and abuse of reusable learning objects. *Journal of Digital Information*, 3(4), Article No. 164. <http://jodi.ecs.soton.ac.uk/Articles/v03/i04/Polsani/>
- Petrie, H.G., 1976. Do you see what I see? The epistemology of interdisciplinary inquiry. *Educational Researcher*, 5(2), pp.9-15.
- Petrie, H.G., 1992. Chapter 7: Interdisciplinary education: Are we faced with insurmountable opportunities? *Review of Research in Education*, 18(1), 299–333.
- Princeton University. (2024). WordNet: A lexical database for the English language. <http://wordnet.princeton.edu/>
- Pytel, A., & Kiusalaas, J. (2017). *Engineering mechanics: Statics* (2nd ed.). Cengage Learning.
- Rapp, F. (1989). Introduction: General perspectives on the complexity of philosophy of technology. In P. T. Durbin (Ed.), *Philosophy of technology: Practical, historical, and other dimensions* (pp. ix–xxiv). Kluwer.



- Reydon, T. A. C. (n.d.). *Internet Encyclopedia of Philosophy*. Leibniz University of Hannover. <https://www.iep.utm.edu/technolo/>
- Ropohl, G. (1990). Technisches problemlösen und soziales Umfeld. In F. Rapp (Ed.), *Technik und Philosophie* (pp. 111–167). VDI.
- Ropohl, G. (2009). *Allgemeine technologie: Eine systemtheorie der technik* (3rd überarbeitete Auflage). Universitätsverlag Karlsruhe.
- Spuzic, S. (2020). *Some aspects of knowledge*. Carpe Diem.
- Spuzic, S. (2023). *A contribution to disambiguation of scientific terms*. Kindle edition. Amazon.
- University of Cambridge. (n.d.) Twisting moments (torques) and torsional stiffness. *Dissemination of IT for the Promotion of Materials Science (DoITPoMS)*. [https://www.doitpoms.ac.uk/tlplib/beam\\_bending/twisting.php](https://www.doitpoms.ac.uk/tlplib/beam_bending/twisting.php)
- Wartofsky, M. W. (1979). Philosophy of technology. In P. D. Asquith & H. E. Kyburg (Eds.), *Current Research in Philosophy of Science* (pp. 171–184). Philosophy of Science Association.
- Wognum, N., Bil, C., Elgh, F., Peruzzini, M., Stjepandić, J., & Verhagen, W. J. (2019). Transdisciplinary systems engineering: Implications, challenges, and research agenda. *International Journal of Agile Systems and Management*, 12(1), 58–89. <https://doi.org/10.1504/IJASM.2019.098728>

#### About the Authors

Dr. Spuzic's industrial experience in design, technology, and management has developed across several states in both Europe and Australia. He completed his studies at the VSB-Technical University of Ostrava and the University of Sarajevo, earning a B.Eng. Hons. and an M.Sc., and he obtained his Ph.D. from the University of South Australia. Additionally, he has been appointed to teach courses related to engineering, science, and management at several universities in Europe, the Middle East, and Australasia. His multi-disciplinary background has evolved into an interest in transparent and cross-disciplinary knowledge management. ORCID 0000-0003-3744-3836.

Dr. Ramadas Narayanan is the Mechanical Engineering Discipline Leader at the School of Engineering and Technology, Central Queensland University, Australia. He is an acclaimed researcher and educator and has won several awards, including the Australian Award for University Teaching – Citation for 2021. He is a Senior Fellow of the Higher Education Academy of the UK. Dr Narayanan has over 25 years of diverse experience in Mechanical Engineering, including industrial experience as a Mechanical Engineer, innovative research pursuits and several academic endeavours in various roles over different universities and programs. ORCID 0000-0002-5111-322X.

Hannah Gooding is a post-graduate researcher from the Surrey Business School, her work focuses on if transdisciplinary working is necessary and how to facilitate it. ORCID n/a.

Dr. Kazem Abhary is an Adjunct Associate Professor at the University of South Australia. ORCID 0000-0003-2535-406X.

### Discussion Questions

1. How can the education system best prepare future generations of researchers and scientists to interact effectively with those from other disciplines? Each discipline has its own body of fundamental knowledge, theories, principles, practices, and research methods. Therefore, it's essential to train future researchers and students to transcend their own discipline when working in multidisciplinary, interdisciplinary, or transdisciplinary teams.
2. Institutions should provide and support the academic community in building their capabilities for transdisciplinary research. Scientific nomenclature can cause confusion, where two researchers use the same term but mean different things. It's worth exploring in practice how and at what points nomenclature arises during the transdisciplinary approach.
3. Transdisciplinary teams consist of diverse world views, academic perspectives, schools of thought, theories, values, principles, methods, cultures, data, and ways of working. In practice, how can the team establish a common working language and style to work as a cohesive whole instead of individual silos?

### To Cite this Article

Spuzic, S., Narayanan, R., Gooding, H., & Abhary, K. (2024, Fall). A contribution to improving clarity in transdisciplinary creation, sharing, and application of knowledge. *Journal of Multidisciplinary Research*, 16(2), 45–56.

## **Alternatives and their Role in Modern Portfolio Management**

**Daniel Kelly**  
*Private Wealth*

**Tamar Psuturi**  
*Bank of America Private Bank*

### **Abstract**

This article explores the evolution and increasing significance of alternative investments – such as private equity, hedge funds, real estate, and private credit – and their integration into traditional portfolio structures. It examines the historical context of alternative assets, which date back centuries, and the post-World War II shifts that catalyzed their formalization. The analysis outlines the unique attributes of each major alternative investment class and their benefits for portfolio diversification, risk management, and yield enhancement.

A focal point is the role of alternative assets in modern portfolio theory, particularly as complements to the traditional 60/40 stock-bond allocation. With notable investment examples like the Yale Endowment and new allocation models, this article highlights alternative investments' potential to stabilize and enhance returns amid market volatility. Concluding with the potential benefits and challenges, it emphasizes the role of liquidity, due diligence, and strategic selection in leveraging alternatives effectively within diversified portfolios.

### **Keywords**

alternative investments, Alpha, 60/40 portfolio, private equity, private credit, hedge fund, real estate

## **Introduction**

Alternative investments have significantly risen in popularity over the last 20 years as more market participants gain access to private market investments via Private Banks and Wealth Management Firms. Although Alternatives are now commonplace in both institutional and family portfolios, the history of the category stretches back over 170 years.

The first example of private capital investment was made in 1852 with America's First Transcontinental Railroad, a 1,911-mile stretch that connected the existing eastern United States rail networks with the Pacific coast. Three private companies built the rail over public lands and represented the first global example of private infrastructure (Prequin, 2024).

In 1901, J. P. Morgan completed the first leveraged buyout when it acquired the Carnegie Steel Company, and in 1946, the American Research and Development Corporation and J. H. Whitney & Co. formed the first Venture Capital funds. The year 1949 brought about the formation of the world's first Hedge Fund, which Alfred Winslow Jones developed, whose strategy was to create a market-neutral portfolio by separating out the risk factors in the market and specific equities. Jones achieved market neutrality by buying assets he believed would rise in value relative to the overall performance of the market and selling-short assets whose price he expected to decrease. Whilst these were the first examples of more formalized private market investments, there are historical records that stretch as far back as 4500 BC for commodity trading (precious metals and spices) and the notorious Tulip Bulb phenomenon of the 1600's in which bulbs sold for as much as six times the average annual salary of the time (Clarke, 2022). Real Estate, which does classify as an alternative investment, stretches back to the dawn of humanity making the category far from "new."

The post World War II era created a significant catalyst for private capital investment as nations began to rebuild from the devastation the war caused. As private capital began to join government capital in various parts of the economy, new asset classes were born such as Private Equity, Venture Capital, Infrastructure, and Private Credit. Following the stock market crash of 1974, regulatory changes allowed pension funds to invest in "riskier" options, and a reduction in the capital gains tax to aid the recovery caused a significant amount of inflow in private equity investments. The 1980's saw a boom in leveraged buyouts causing private equity holdings to begin to appear in the portfolios of mainstream investors. In 1966, *Fortune Magazine* revealed the strategy that Alfred Winslow Jones had used with his market-neutral fund, commenting on the strategy's significant outperformance over the best mutual fund over the prior five years. This caused the hedge fund industry to boom, and by the early 1980s, an array of new funds and strategies were available on the market (Prequin, 2024).

Over the past 45 years, we have seen a continually evolving marketplace for alternatives with both the depth and breadth of product offerings continuing to deepen. The adoption of alternatives by both the Harvard and Yale endowments has pioneered modern thinking about allocation to the asset class and has guided more involvement from family offices and private investors who look to gain access to the attractive risk–return opportunities available.

The phrase "alternative investments" refers to a wide variety of investments that differ from traditional investments like stocks, bonds, and cash. It is important to note that the terms "traditional" and "alternative" do not imply that alternative investments are uncommon or recently introduced to the investment world. Assets such as real estate and commodities are included in alternative investments and are considered to be some of the oldest forms of investments. Non-traditional strategies like private equity, private credit, real estate, and hedge funds also are

alternative investment options. These funds allow the manager to have flexibility in utilizing derivatives and leverage, investing in illiquid assets, and taking short positions. These vehicles can invest in traditional assets like stocks, bonds, and cash, along with more unconventional assets. Typically, alternative investments are managed actively (CFA Institute, 2023).

The primary aim of integrating alternative investments into a portfolio is typically to enhance the portfolio's risk and returns profile, such as boosting the portfolio's Sharpe ratio. This is achievable by investing in assets that offer higher expected returns, possess lower risk, or have minimal correlations with other assets in the portfolio, thereby diversifying across asset classes to reduce portfolio risk without compromising returns. Furthermore, investors might look for alternative investments that offer income, potential for capital appreciation, or safety in preserving value (Bowman, Filbeck, & Kelly, 2022).

Typically, observers view private equity and private credit as investments that boost returns but also increase risk in a portfolio. In contrast, they consider that real assets lower risk and, thus, offer lower returns. Hedge funds' position on this spectrum varies based on the strategies their managers employ.

Private capital has gained significant appeal for early-stage, innovative, and expanding companies. Additionally, because private capital is insulated from the immediate fluctuations of public markets, it allows investors to capitalize on market dislocations, information imbalances, and opportunities that others may overlook or that may be countercyclical. Excluding private capital from a portfolio restricts clients from accessing a growing segment of the global economy. However, private markets are by no means a perfect solution, considering their lack of transparency, high costs, the requirement for patience, and varied risk-return profiles, necessitating careful evaluation based on client liquidity, income requirements, and risk appetite. Thorough due diligence and careful selection of managers are essential (Bowman, 2022).

### **Overview of Private Equity**

Investment partnerships that purchase and oversee companies before selling them are known as private equity. Private equity firms manage these investment funds on behalf of institutional and accredited investors. Private equity funds may acquire entire private or public companies, or they may participate in buyouts as part of a consortium. Generally, they do not hold stakes in companies that remain publicly listed. Often, investors consider private equity to be an alternative investment and group it with venture capital and hedge funds. Typically, investors in this asset class must commit significant capital for extended periods, limiting access to institutions and high-net-worth individuals.

Modern private equity is generally thought to have originated in the early 1960s, marked by several key developments: the financing of Fairchild Semiconductor, the establishment of the limited partnership (LP) fund, and the creation of Greylock Partners. For more than 70 years, the sector that claims to generate enterprise value through innovation and enhancements in operating models has remained relatively consistent. Firms acquire private companies, restructure balance sheets, strengthen leadership, and drive growth to prepare the organization for its eventual sale. The fundamental assumption behind this process is that the strategic event signifies the exit for the private equity or venture capital (VC) firm, with the proceeds earmarked either for returning to LPs or for reinvestment in the subsequent fund. The primary operating principle posits that private and public equity managers function in distinct spheres (Filbeck, 2022).

Unlike venture capital, the majority of private equity firms and funds focus on investing in established companies, rather than startups. They oversee their portfolio companies to boost their value or to capture value before selling the investment several years later.

The private equity sector has experienced significant growth due to higher investments in alternative assets and the strong performance of private equity funds since the year 2000. Private equity buyouts reached \$654 billion in 2022, marking the second-highest level in history. During times of bullish stock markets and low interest rates, private equity investments tend to become more attractive and popular, but their appeal diminishes when these cyclical factors become less favorable (Chen, 2024).

The function of private equity in a company's growth path has changed over time, beginning with the funding model during the early phases. In 2010, the average venture-backed portfolio company could anticipate one funding round prior to going public through an initial public offering (IPO). A decade later, that same average company could expect three rounds of funding, backed by significantly larger investments. Private funding has transformed from merely serving as a launchpad for value generation; it has become a credible long-term strategy. In fact, for several years, most venture-backed companies have chosen to remain private through a strategic sale or merger, instead of pursuing opportunities in the public markets (Filbeck, 2022).

Portfolio companies have shifted their preferences, favoring private markets over public ones, while public market investors are seeking ways to gain access to private equity. In 2020, 276 special purpose acquisition companies (SPACs), entities specifically established to invest in privately held firms, completed their initial public offerings (IPOs). For context, this figure matches the total SPAC IPOs from 2011 to 2019 combined. SPACs, similar to private equity funds, present opportunities for exceptional returns but still exhibit a wide range of outcomes, particularly when comparing those that operators lead against those that investors lead (Filbeck, 2022).

Private equity investments offer access to sectors and companies that are typically less represented in public equity markets, thereby enhancing the diversification of a portfolio. By investing in this manner, portfolios potentially can benefit from an illiquidity premium and the opportunity to generate manager alpha. This strategy appeals to investors with a long-term perspective who are willing to sacrifice some liquidity associated with more readily tradable assets.

Individual preferences and constraints – such as the desire for liquidity, the investment timeline, and short to medium-term cash flow requirements in relation to overall wealth – largely influence the allocation amount to private equity. Investors need to ensure that they can cover potential capital calls and that they will not require access to the funds committed to illiquid private markets, even if their personal situations change or if financial markets experience a downturn.

Such investments, though, present their own set of challenges. Private equity investments necessitate prolonged capital commitments. With fund durations extending up to 10 to 15 years, an even more extended time frame may be necessary to achieve diversification across vintages. The limited flexibility to divest from investments when required, such as during a rebalancing act or in times of crisis, adds a new liquidity risk dimension. Additionally, fund managers do not require all capital upfront but instead call for it incrementally as they execute new investments. Timing these capital calls can be tricky, requiring investors to plan their budgets accordingly; otherwise, they risk being underfunded. In the following sections, we will elucidate these challenges. Private equity investing also comes with elevated fees and transaction costs, compared to public investments. When assessing risks, investors must note that the indicated volatility might be less than that of public markets. Nevertheless, the concealed volatility may result in greater losses, which is evident in the significant dispersion of manager returns, and risk should be

analyzed beyond the short-term fluctuations reflected in reported volatility. It is also essential for investors to consider their personal legal and tax implications (Gruenewald, 2020).

### **Overview of Hedge Funds**

Hedge funds can be traced back to the 1940s, when Alfred Winslow Jones established an investment model that enabled him to profit from both rising and falling prices while also charging a performance fee. The industry gained notoriety (some might argue infamy) in the 1990s when George Soros's speculation against the pound forced sterling to exit the Exchange Rate Mechanism; he was subsequently known as "the man who broke the Bank of England." Other so-called "macro" investors like Julian Robertson and Michael Steinhardt similarly have achieved legendary status in the markets. More recently, John Paulson's wager against subprime mortgage-backed securities made him a billionaire. However, the lightly-regulated sector also has seen instances of fraud, most notably with Bernie Madoff, whose investment fund was revealed to be a Ponzi scheme.

The hedge fund industry initially emerged with the goal of managing the portfolio risk associated with long positions. Industry's beginnings were based on the concept of market neutrality, but many current funds strive to exceed market performance (i.e., "outperform the market"), or at the very least feel the pressure to achieve this. Hedge funds are investment vehicles that use diverse investment strategies aimed at achieving substantial returns. Managers of hedge funds may focus on different expertise to implement their strategies, including long-short equity, market neutral, multi-strategy, etc.

Utilizing long-short strategies allows hedge funds to navigate the fluctuations of market cycles, enabling them to profit whether the market is rising or falling. Such strategies can offer potential protection against significant market declines and may demonstrate improved performance during periods of downturn. Hedge funds can serve as a complement to traditional assets such as equities and bonds in a portfolio, aiming for a more consistent return. With a diverse variety of investment instruments and techniques, as well as more flexible investment regulations, hedge funds have a lower correlation with traditional assets and give returns, regardless of market moves, resulting in lower total portfolio volatility (Greiner, 2024).

The strategic construction of a hedge fund's portfolio aims to minimize the relationship between the fund's returns and fluctuations in the general market, ultimately seeking a zero-beta portfolio. Hedge fund managers prioritize the steady generation of risk-adjusted returns that are not correlated with the wider market, although some companies have strayed considerably from traditional industry practices. However, the contemporary hedge fund business model functions with much greater flexibility and options regarding the investment strategies employed, as well as the asset classes in which capital is allocated.

More than 30,000 hedge funds are active globally, managing approximately \$5.13 trillion in total assets, as of the second quarter of 2024. About 70% of these funds are located in the United States.

While volatility has remained fairly low during the first half of 2024, the swift rise of generative artificial intelligence is anticipated to continue influencing volatility across various market sectors in the near future. Additionally, geopolitical uncertainties—including the conflict between Russia and Ukraine, ongoing strife in the Middle East, and tensions between the U.S. and China—also may result in increased market turbulence.

What is particularly noteworthy is that, historically, hedge funds have performed well in times of increased volatility. This is due to the fact that heightened volatility tends to create a wider range of returns among individual securities and across asset classes, often leading to projected highs exceeding expectations and projected lows dropping lower than anticipated.

As the market discerns winners and losers and companies vie for investment, numerous alpha opportunities emerge for attentive hedge fund managers. Agile asset managers also can take advantage of the clearer discrepancies between a company's fundamentals and its security price, resulting in more trading chances. It is also crucial to recognize that hedge fund allocations can provide portfolios with a buffer against unforeseen market challenges, especially those strategies designed to be less connected to conventional sources of return.

Today's investors in hedge funds have access to opportunities that they could only dream of a decade ago, thanks to greater transparency and innovation within the sector. Additionally, shifts in regulation have enhanced the clarity surrounding hedge fund operations. Furthermore, advances in technology have made it simpler to obtain and assess information about hedge funds to identify strategies that align with specific portfolio requirements. Given the diverse range of hedge fund strategies on offer, it is essential to establish clear objectives and expectations regarding their role in a portfolio and to find managers who fit this profile. Historically, hedge funds have been expected to produce returns that fall between those of bonds and equities, with a corresponding expectation of lower volatility than equities.

In the current investment landscape, a well-diversified portfolio necessitates looking beyond the conventional 60/40 distribution between stocks and bonds. Investors ought to contemplate raising their allocations to alternative assets, which can offer unique and valuable returns, protection against downturns, and liquidity when markets are under stress. While private equity and venture capital are worth exploring, they tend to be quite illiquid and are not suitable for regular rebalancing or immediate cash needs. Hedge funds, in contrast, present a balanced option. They offer more liquidity than private investments and, due to the diverse range of strategies available, potentially can deliver strong returns across different market conditions.

When executed properly, hedge funds can serve as a versatile component within a portfolio. For example, in 2022, while both stocks and bonds faced significant losses, many hedge fund managers were able to achieve positive returns for the year (Greiner, 2024).

## **Overview of Real Estate**

Investing in real estate encompasses much more than simply flipping houses. There are various methods to invest in real estate that can help persons reach their objectives. This investment approach might be suitable if they are looking to diversify their portfolio while minimizing its overall risk-return profile.

Over the past five decades, real estate has emerged as a favored option for investment. Traditionally, people have viewed real estate as a reliable investment, and there are valid reasons for this perspective. Prior to 2007, historical data on housing suggested that prices might keep rising without limit. With only a few exceptions, the average sale prices of homes in the United States rose annually from 1963 until 2007, which marked the onset of the Great Recession. Housing prices experienced a slight decline at the beginning of the COVID-19 pandemic in Spring 2020. Nevertheless, as vaccines became available and worries about the pandemic decreased, home prices surged to record levels by 2022 (Velasquez, 2024).

Ways to invest in real estate include the following:



- **Purchasing and Selling Properties** (Direct Real Estate Investing): Acquiring homes to renovate and sell for a profit, or to lease out to others while managing for a consistent income stream.
- **Real Estate Investment Trusts (REITs)**: REITs are organizations that own or manage income-producing real estate properties, consolidated in a trust. They pool funds from investors in a manner similar to mutual funds. Investors receive dividends from these investments while engaging in real estate transactions without the need to buy or supervise properties.
- **Real Estate Investment Groups (REIGs)**: In standard REIGs, a firm purchases or develops a cluster of buildings such as apartments or condominiums using combined funds from investors. This collective capital enables the company to secure more favorable deals and gives individuals the opportunity to invest in real estate without having to manage the properties themselves.
- **Real Estate ETFs**: These are collections of real estate stocks that are traded like regular stocks. Investors in real estate ETFs can enjoy the advantages of owning real estate without the complications of property management. Moreover, ETFs offer diversification, helping investors mitigate some of the risks linked to real estate investing.
- **Online Real Estate Platforms**: This investment approach is often referred to as “real estate crowdfunding” because it enables investors to team up with others to pool their resources and engage in larger commercial or residential developments.

Many investors interested in the real estate market often weigh REITs against actual, physical properties. REITs, or real estate investment trusts, function like mutual funds, specifically for investing in real estate. With a REIT, an individual can invest in real estate without the responsibilities of owning or managing property. Alternatively, an individual may choose to invest directly in real estate by purchasing residential or commercial properties. REITs enable individual investors to profit from real estate without taking on the responsibility of managing physical properties. Direct real estate investment typically provides more tax advantages, compared to REIT investments, and offers investors greater control over their decisions. Because many REITs are traded publicly, they generally are more straightforward to buy and sell, compared to traditional real estate. One advantage of owning physical properties is the potential for significant cash flow and the opportunity to leverage various tax deductions against that income. For instance, an individual can deduct typical and necessary expenses for managing, conserving, and maintaining the property. A significant tax benefit is depreciation, allowing a person to deduct the costs of acquiring and improving a property over its useful lifespan, thereby reducing a person’s taxable income. Of course, there is also the possibility of appreciation in property value. Although the real estate market can fluctuate similarly to the stock market, property values tend to rise over the long term, potentially allowing an individual to sell at a higher price later.

Another advantage of direct real estate is the enhanced autonomy over decision-making, compared to investing in REITs. For instance, an individual can choose properties that align with that individual’s preferences concerning location, type, and financing options. Individuals have the authority to set rental rates, select tenants, and determine the number of properties to acquire. Individuals also have the option to refinance their mortgage when interest rates are lower or utilize their home equity through loans or credit lines for other financial needs (Folger, 2024).

Perhaps the most significant benefit of REITs is that they provide individual investors with the opportunity to earn from real estate without needing to own, operate, or directly finance properties. They present an affordable method for entering the real estate market, with investment options starting as low as \$500—significantly lower than investing directly in real estate. Additionally, REITs provide attractive potential for total returns. By regulation, REITs must distribute a minimum of 90% of their taxable income to shareholders, and it is not unusual for them to yield dividends of 5% or more. Furthermore, REITs have the possibility for capital appreciation as the underlying asset values increase. Another crucial advantage is liquidity. Similar to stocks, REIT shares can be bought and sold on an exchange. Generally, REITs experience substantial trading volume, allowing individuals to enter or exit a position whenever they choose (Folger, 2024).

The advantages of investing in real estate are many. When investors choose their assets wisely, they can benefit from reliable cash flow, impressive returns, tax benefits, and diversification—and real estate can be leveraged to accumulate wealth. The ability of real estate to hedge against inflation arises from the strong connection between GDP growth and the need for real estate. As economies grow, the increased demand for real estate leads to higher rents. This subsequently results in increased capital values. Consequently, real estate tends to preserve the purchasing power of capital by transferring some inflationary effects to tenants and experiencing some inflation in the form of capital appreciation. Real estate is a unique asset class that is easy to grasp and can improve the risk-and-return balance of an investor's portfolio. Furthermore, real estate can reduce volatility within a portfolio through diversification, whether an individual chooses to invest in tangible properties or real estate investment trusts (REITs) (Barclay, 2022).

### **Overview of Private Credit**

Traditionally, the financing needs of corporations have been catered for by the public bond markets. A company would issue debt in the form of a bond that investors would purchase and in exchange received a fixed coupon rate. Not all businesses however are at the size or scale of larger corporations that can issue bonds and receive sufficient investor demand. For these companies, banks have historically acted as the borrower to lend capital on a cash flow or secured assets basis. (SW4, 2023).

Over the last few decades, there has been a significant increase in regulation on the banking sector, particularly post GFC and the resulting Dodd-Frank act, that has resulted in more stringent lending conditions. As banks reduced their lending activities, and focused more on core customer segments, private capital has stepped in to fill the gap. This has been the key accelerant of private credit as an asset class and has created an attractive opportunity for investors seeking income streams. Private Equity groups, Hedge Funds and specialized investment managers have structured products that high net worth investors and institutions are able to access that offer flexible lending terms to businesses that banks consider too small or out of segment to access their balance sheet support (De Silva, Kraus, Steiner, & Gandhi, 2023).

The customized terms, more flexible credit conditions and timely approval processes mean private credit lenders are able to charge a premium for their services over and above what traditional debt markets would demand. For this reason, private credit generally offers a return premium and higher spreads than public bonds which also assists to compensate investors for less liquidity. It is typically the case that on aggregate, private credit will offer a 200 to 400 basis point premium over publicly traded high yield debt but can vary greatly depending on the nature and

security position. Over the past decade (as of 2024) private credit has produced annualized returns of 10% p.a. (Calcaterra & McCurdy, 2023).

Of crucial importance to the value of private credit in investors' portfolios is not just the absolute return potential, but the risk adjusted returns. The Sharpe ratio is a measure of risk adjusted returns which takes the return an investment produces in the numerator and divides it by its annualized volatility. As private credit is not subject to sentiment driven volatility (as the bond market can be) it typically exhibits much lower levels of volatility and thus, a much higher risk adjusted return (Sharpe ratio). Currently, the asset class exhibits annualized volatility of approximately 5%, compared with 9–12% for high yield bonds and that of public equities which is typically between 15–20% p.a. (T. Rowe Price, 2023).

Private credit instruments are typically managed as a pool of floating rate loans to provide investors with both borrower, sector and geographic diversification. Depending on the particular strategy within the asset class (Direct lending, real estate credit, distressed credit, opportunistic credit etc.) can depend on its overall correlation to the economic cycle. Typical for direct lending, interest rates have the greatest effect on its return as the loans are structured as a fixed premium above LIBOR.

Attractive returns and low levels of volatility have driven the asset class to grow more than six times its size since the GFC. Today, the global private credit market stands at \$1.2 trillion USD and there continues to be strong demand for the sophistication, flexibility, certainty of execution private lenders are able to offer (Goldman Sachs, 2024).

### **The Role of Alternatives in Portfolio Management and the 60/40 Portfolio**

In Modern Portfolio Theory (MPT), a 60/40 portfolio is one that is represented by an allocation of 60% to listed stocks and 40% to bonds. The 60/40 asset allocation model became a balanced approach to diversification, as stocks (equities) generally offer higher returns with higher risk, while bonds (fixed-income) provide stability with lower returns. Harry Markowitz in his 1952 paper 'portfolio selection' introduced the idea of diversification to minimize risk while optimizing returns which was then adopted in the decades following WWII by institutional and individual investors alike (Markowitz, 1952).

The 60/40 split represents a middle ground between more aggressive equity-heavy portfolios and conservative bond-dominated ones. Historically, it has provided a balance that, over the long term, captured the growth potential of equities while the bond allocation acted as a buffer during bear markets or recessions. As stocks and bonds typically exhibit a negative correlation to one another, this relationship helps to reduce the overall volatility of the portfolio to produce more consistent annualized returns. This has been the foundational cornerstone in portfolio management for more than 50 years (Blackrock, 2023b).

With the significant increase in adoption and depth of alternative investment markets, there are efforts to revise and enhance the 60/40 model to include an allocation to alternative investments. Calls for a revision to the model have been intensified in recent times with the correlation between equities and bonds turning positive during the central bank tightening cycle of 2022–2024. In a higher inflation environment, the diversification benefits are lost as fixed income may no longer serve as a shock absorber, or diversifier, when paired with other asset classes in a diversified portfolio.

A pioneer in an evolved version of this model has been the Yale University and the Yale Endowment Model. Over the period between 1990 and 2020, Yale has increased its allocation

progressively to alternative investment funded by reducing allocation to publicly traded securities. By including asset classes such as Private Credit, Hedge Funds, Private Equity, and Infrastructure, David Swensen (Chief Investment Officer of Yale University) guided the endowment to achieve a 12.50% annualized return over his 25 year tenure and outperformed the S&P 500 by 280 bps annually. As of 2020, Yale allocates almost 70% of its total endowment into alternative investments (Bridgeport, 2022).

Not all investors have a perpetual investment horizon such as Yale, nor do all have the flexibility to allocate such a large amount to more illiquid markets. KKR suggests an alternative with a 40/30/30 model that includes a 40% allocation to public equities, 30% to bonds and the remaining 30% allocated equally across Private Credit, Real Estate and Infrastructure. This more private wealth friendly portfolio sees the investor give up some liquidity for yield and inflation protection in the alternatives sleeve. Not only this, the includes of a greater allocation to private markets may also assist in reducing overall portfolio volatility and boosting the Sharpe ratio. Through KKR's modeling, they have provided evidence that this "Private Wealth" portfolio would have outperformed the traditional 60/40 allocation across both high and low inflationary periods (10.60% vs. 9.30%), lower levels of volatility (10.60% vs. 12.70%) and a higher overall cash yield (3.60% vs. 2.60%) (McVey, Allouani, Le, & Zhao, 2023).

There is a strong case to consider an alternative investment allocation in modern portfolio construction however the guiding principle to the asset class continues to be the investors requirements for liquidity. Those investors who are able to give up the benefit immediate access to the funds can be handsomely rewarded.

### **Alternative Investments**

In finance, volatility is the industry standard to measure investment risk. From a statistical standpoint, volatility (measured as units of standard deviation) indicates what the potential range of outcomes are around an expected return. An asset or security that exhibits a high degree of volatility will see more extreme movements in its price, both positive and negative, which generates uncertainty for the investor. For public market securities, as capital and market access is particularly fluid, there is often sentiment driven buying and selling (rather than based on fundamental valuations) as a range of market participants speculate, hedge, investor or trade positions on a daily basis. These securities then tend to exhibit high degrees of volatility. By way of example, The long-term average of the CBOE Volatility Index (VIX), which reflects the market's expectations of near-term volatility for the S&P 500, is approximately 19.35%. This figure represents the anticipated annualized standard deviation of the S&P 500's returns or in practical terms, that investors expect the S&P 500 to fluctuate by about 19.35% over the next year. During periods of market stress, such as the 2008 financial crisis or the COVID-19 pandemic in 2020, the VIX has spiked well above its average. Data from 1994 to 2019 indicates that U.S. private equity returns (as a direct comparison of public vs private) had a volatility comparable to that of U.S. 10-year bonds and roughly half that of the S&P 500.

These lower levels of volatility are one of the primary benefits of alternatives. As alts are not publicly traded, there is not the same degree of volume based price movement as their public market counterparts. Typically, the unit price or valuation of private market assets only changes when there is a catalyst that gives rise to a re-valuation which is done on a fundamental basis rather than speculation. This results in significantly less measured volatility. Consider for a moment, a family which has purchased a home (which does count as an alternative under the Chartered

Financial Analyst's definition). Theoretically, the value of this property fluctuates on a daily basis, with comparable sales, interest rates, economic outlook for the region, and a raft of other input variables having an influence. If the family's property was marked to market like stocks are, it would likely cause them a high degree of concern as it could fluctuate by potentially hundreds of thousands of dollars a day. In practice, the family may only get the property valued once every few years and thus, the volatility they experienced and the volatility that is recorded is lower making them feel more comfortable holding the asset for longer periods of time allowing compounding to take effect. The infrequent valuation of private assets can result in "smoothed" returns, which understate true volatility. This practice can mask the actual fluctuations in asset values, leading to an underestimation of risk.

The Sharpe Ratio (which William Sharpe created) is a measure of risk adjusted return that divides the asset or portfolios excess return above the risk free rate (Typically T-Bills) by its volatility. The higher the Sharpe Ratio the more the portfolio is compensating the investor for the risk they incur to achieve it. All else equal, as volatility rises, the Sharpe Ratio falls. Thus, the inclusion of alternatives into a well-constructed portfolio can reduce overall risk by not only reducing the denominator (volatility) but also helping to boost the numerator (excess return).

Morgan Stanley conducted research into the risk vs return trade-off of a traditional asset only portfolio vs one with an allocation to alternatives in an attempt to dispel some of the misconceptions about alternatives being more "risky" investments. They found that over the last 25 years, having an allocation to alternatives enhanced return and reduced risk for investors.

Correlation is another area of benefit with alternative investments. It is often the case that the return factors that drive investment performance in private markets can be uncorrelated or have low correlation to the economic cycle or listed securities. Under a strategic asset allocation that combines both traditional assets and alternative assets, this low correlation can be particularly beneficial during periods of market stress. In the calendar year of 2022, when central banks were raising interest rates to tame inflation, the performance of both public stocks and public bonds was disappointing as they became positively correlated. It was during this period that many clients' allocations to private markets stood as a resilient ballast for their portfolios and assisted to improve total returns. Litigation lending is a more bespoke category of alternatives provides a good example of this. A study published in the *Journal of Alternative Investments* (Healey, McDonald, & Haley, 2020) found that litigation finance investments have historically achieved annual returns exceeding 20%, with minimal correlation to other asset classes. The authors attribute these returns to information asymmetry and barriers to entry within the litigation finance market. Inclusion within a well-diversified portfolio can protect from downside volatility during periods of market dislocation or stress.

Whilst there are risk reduction properties with alternatives, it is important to highlight that there can be issues with transparency, reporting standardization and in some cases, limited regulatory oversight. This can make due-diligence into managers and assets more opaque and increase the potential for unforeseen investment risks to arise. Hedge funds as an example use complex investment strategies, including derivatives and leverage, which are not always fully disclosed to investors due to concerns about protecting intellectual property and maintaining a competitive edge. This information barrier makes it difficult for a firm or an investor to fully ascertain where certain tail risks may exist. For this reason, is it important for individual investors who do not have the skills required to diligence a fund or asset to seek the expertise of investment professionals.

## **Access to Alternative Investments**

Access to private markets and alternative investments has significantly improved over the last 50 years. Asset classes that once allowed participation only by large institutional investors now has become a relatively democratized market. As private market depth and opportunity has evolved, so too have the range of investment managers, funds, and structures available aimed at broadening access to allow individual and family groups to invest alongside their corporate counterparts (Moss & Steinberg, 2024; Morgan Stanley, 2021).

Whilst access has improved, it is still the case that in most well-regulated markets, an individual investor is required to be “accredited” before being able to invest in such products. This accreditation is typically assessed through an income or assets means test which deems that the investor is of a sufficient level of sophistication in order to be able to understand the risks and benefits of the potentially more complicated products. For example, the Australian regulator ‘ASIC,’ deems an investor “Wholesale” once they have earned A\$250,000 or more over the last two financial years or are in possession of A\$2,500,000 or more in net (of debt) assets. The investor’s accountant will need to certify this status before they are able to invest or open an account with most wealth management firms (ASIC, 2014).

While regulatory access is one hurdle, so too is financial capital. Unlike public markets where a minimum investment amount may be as low as a few hundred dollars (such as purchasing stocks), private market opportunities typically require much higher amounts. It is common for a well sort after hedge fund or private equity group to require amounts of US \$5,000,000 or greater in order for the client to be able to invest directly. This naturally excludes a vast number of individual investors who do not possess the financial capital required to meet these conditions. To solve this issue, Private Banks and Wealth Management firms often aggregate investments across their client base allowing them to offer significantly reduced minimum investments that can help their clients build a well-diversified private market portfolio. This can be as low as \$50,000 per fund (Ross, 2021).

Well known asset managers (such as KKR, Blackstone, Apollo, and Hamilton Lane) are beginning to make a concerted effort on designing and distributing alternative investment products whose structure, liquidity profile, minimum investment amounts and terms are suitable for the private wealth market. They have identified that as individual investors continue to become more educated on the benefits of private markets, and look to integrate them into their portfolios, capital inflows have significantly increased. Liquid alternatives, often referred to as “liquid alts,” are a category of investment products that seek to provide access to alternative investment strategies that hedge funds, private equity, and other traditional alternative investment vehicles typically employ, but with greater liquidity and accessibility. These structures are typically open-ended vehicles (rather than close ended that has a finite maturity date) and, unlike traditional alternatives, which may lock up capital for years, liquid alts offer periodic liquidity, often quarterly or monthly. These terms are significantly more suitable to the private wealth and individual investor markets who often prioritize accessibility to their funds (Chen, 2023).

Historically, institutional capital constituted the majority of assets under management (AUM) for these firms. However, the private wealth segment is becoming a more substantial component of their AUM and revenue. For example, from the first quarter of 2021 to 2022, there was a 115% increase in hiring professionals focused on raising capital from the private wealth channel, with firms like Apollo, KKR, Blackstone, EQT, and Ares collectively hiring 122 professionals in this area (Wirz, 2024).

This increased access has benefited investors by providing more opportunity to diversify their portfolios and generate uncorrelated sources of alpha, but with this comes the increased importance of proper due diligence. As there are now more managers providing more access, the potential to invest with groups who do not have sufficient expertise in complex markets can be higher. For this reason, the role that Private Banks and Wealth Managers play in selecting groups on which they have high conviction increases in importance.

### **Conclusion**

Alternative investments provide enhanced portfolio diversification and reduced overall risk while offering the chance for higher returns. With alternative investments playing a bigger role in the investing environment and becoming more accessible to various investor types, understanding them is increasingly crucial for both investors and current or future investment professionals looking to advance their careers. In the research paper by the CAIA association, Bill Kelly states: “The opportunity for alpha is not gone, but the low-hanging fruit has long been harvested, and the path toward higher absolute returns has gotten far more nuanced” (Bowman, Filbeck, & Kelly, 2022, n.p.).

The opportunity set in public markets is shrinking, while private companies are increasingly prominent in economic growth. Economic conditions and financial markets are highly uncertain. Even with the equity bull market of 2023 continuing into early 2024, investor situations can shift at any moment. For pensions, insurance companies, and other investors focused on liabilities, being prepared for volatility is a vital aspect of effective portfolio management. While some remain skeptical, alternative investments can present a compelling choice for improving portfolio diversification and returns, particularly in a time of fluctuating interest rates and heightened volatility.

Starting as a simple acquisition tactic referred to as ‘boot strapping,’ the Alternatives industry is anticipated to increase from \$15 trillion in 2022 to over \$24 trillion in assets by 2028. Although these figures may seem substantial in their entirety, the existing Alternatives market accounts for less than 11% of the total global GDP and represents only 2.4% of all global financial assets.

Every asset class possesses distinct traits regarding anticipated return, risk, yield, liquidity, and capital requirements, necessitating a deeper examination to appreciate the various advantages each class can offer to an investment portfolio. Certain asset classes may focus more on growth and capital appreciation, while others may shield portfolios from inflation and/or provide consistent income. Some strategies may combine these benefits. Furthermore, the range of characteristics is extensive and continues to expand, as the industry discovers innovative methods to create value for its users, many of whom seek ways to enhance their retirement security. However, before delving deeper into the future concerning the function of this unique segment within the global investment management sector, it is essential to comprehend both the past and the present in order to develop an appropriate “Alternative Perspective.”

The Private Alternatives sector typically demands patient capital but has often been compensated with some form of ‘illiquidity premium,’ which represents additional returns compared to related public benchmarks. This premium or additional value has usually been achieved through careful asset selection, enhancements in operations, and strategic timing regarding entry and exit relative to public markets. As numerous countries worldwide report a shortage of savings for retirees, the necessity for excess returns generated by private capital from

the illiquidity premium is likely to rise rather than decrease. In fact, declining birth rates, stagnant populations of working-age individuals, and longer life expectancies have put pressure on global pension systems and personal savings, leading to retirement insecurity for many. Supporting this perspective, a recent analysis by the World Economic Forum indicates that the current global retirement savings deficit stands at US\$70 trillion; more significantly, it is projected to grow to US\$400 trillion by 2050. The United States accounts for a substantial 40% of this overall gap, suggesting a savings shortfall of \$28 trillion.

Family offices and individual investors are increasingly recognizing the returns and diversification advantages various segments of the Private Alternatives sector offer. Strong returns, reduced volatility that helps mitigate public market fluctuations, and access to diverse thematic opportunities further strengthen the appeal of this sector. For instance, in several emerging markets, public indexes fail to capture the advantages of increasing GDP-per-capita. This disparity is particularly evident in Indonesia, where, despite having almost 70 million millennials and a GDP-per-capita nearing US\$5,000, the public market index is dominated by nearly 60% local banks and features no technology firms.

Thus, our overall perspective is one of enthusiasm for the future of the Alternatives industry. Nevertheless, we fully recognize that the narrative will have various twists and turns, as the requirements for one market segment may differ from those of another group of capital allocators. Furthermore, as this journey progresses, we are increasingly of the view that not all private investment vehicles are created equal; the capabilities in sourcing, operational enhancements, and portfolio construction – particularly concerning pacing – will become more significant, especially as more capital enters this space. Furthermore, the consistency of performance across market cycles will be more important, given that the illiquid nature of these investments necessitates a substantial private market return premium over public markets for the typical investment duration of 5 to 10 years. This duration is particularly relevant for taxable investors, who must pay capital gains tax as soon as an investment is sold. This situation contrasts sharply with public market investors, who can frequently employ a buy-and-hold strategy to mitigate capital gains.

Investors should undertake specific actions, including clearly defining the role of alternatives in the portfolio, identifying top-tier managers, ensuring diversification, and adopting a strategic approach to navigate the inherent challenges. By diligently following these steps, investors can effectively make use of alternative investments to meet their investment goals, balancing risk and return in a constantly evolving investment environment.

## **References**

- BlackRock. (2023a). Building an alternative portfolio. <https://www.blackrock.com/americas-offshore/en/education/constructing-an-alternative-portfolio>
- BlackRock. (2023b). Systematic-Investing. Rebuilding 60/40 portfolios with alternatives. <https://www.blackrock.com/us/individual/insights/60-40-portfolios-and-alternatives>
- Bowman, J. L., Filbeck, A., & Kelly, B. (2022). Portfolio for the future. [https://caia.org/portfolio-for-the-future?gad\\_source=1&gclid=Cj0KCQjwm5e5BhCWARIsANwm06jdDtnYJT6HHtctKPqjyG-IxSnVVT9aAgF5yhAQue-YeI2DdeMSmh8aAnanEALw\\_wcB](https://caia.org/portfolio-for-the-future?gad_source=1&gclid=Cj0KCQjwm5e5BhCWARIsANwm06jdDtnYJT6HHtctKPqjyG-IxSnVVT9aAgF5yhAQue-YeI2DdeMSmh8aAnanEALw_wcB)



- Bridgeport Asset Management. (2022, May 19). David Swensen (1954–2021) and the endowment model. <https://bridgeportasset.com/our-insights/david-swensen-1954-2021-and-the-endowment-model/>
- Calcaterra, C., & McCurdy, B. (2024, June 3). Private debt dominance: What drives private credit's outsized yield and lower risk, and is it sustainable? Ares Wealth Management Solutions. <https://www.aresmgmt.com.au/private-debt-dominance-what-drives-private-credits-outsized-yield-and-lower-risk-and-is-it-sustainable/>
- CFA Institute. (n.d.). Introduction to alternative investments. <https://www.cfainstitute.org/en/membership/professional-development/refresher-readings/introduction-alternative-investments>
- Clark, B. (2022, November 30). History of alternative investments. MicroVentures. <https://microventures.com/history-of-alternative-investments>
- Chen, J. (2024, April 10). Private equity explained with examples and ways to invest. Investopedia. <https://www.investopedia.com/terms/p/privateequity.asp>
- De Andrade, C., & Godbersen, S. G. (2023, December 21). The 60/40 portfolio needs an alts infusion. CFA Institute Enterprising Investor. <https://blogs.cfainstitute.org/investor/2023/12/21/the-60-40-portfolio-needs-an-alts-infusion/>
- The Economist Newspaper. (n.d.). How hedge funds work. *The Economist*. <https://www.economist.com/the-economist-explains/2015/03/30/how-hedge-funds-work>
- Folger, J. (n.d.). REITs vs. Real Estate Investments: What's the difference? Investopedia. <https://www.investopedia.com/articles/investing/072314/investing-real-estate-versus-reits.asp>
- Goldman Sachs Asset Management. (n.d.). Understanding private credit. <https://am.gs.com/en-au/advisors/insights/article/2024/understanding-private-credit>
- Greiner, K. (2024, August 1). A liability investors' guide to reassessing hedge funds. Cambridge Associates. [https://www.cambridgeassociates.com/insight/a-liability-investors-guide-to-reassessing-hedge-funds/?utm\\_source=google&utm\\_medium=cpc&utm\\_campaign=google-sem-nonbrand-pensions-us-mtc&utm\\_content=pensions---private-equity&gad\\_source=1&gclid=Cj0KCQjwpvK4BhDUARIsADHt9sTj-FvKvvIsLbIJ4hXwEfu6p8JuVBJ1gQ9yMj8aVQeTz2z3t-zZsScaAuzYEALw\\_wcB](https://www.cambridgeassociates.com/insight/a-liability-investors-guide-to-reassessing-hedge-funds/?utm_source=google&utm_medium=cpc&utm_campaign=google-sem-nonbrand-pensions-us-mtc&utm_content=pensions---private-equity&gad_source=1&gclid=Cj0KCQjwpvK4BhDUARIsADHt9sTj-FvKvvIsLbIJ4hXwEfu6p8JuVBJ1gQ9yMj8aVQeTz2z3t-zZsScaAuzYEALw_wcB)
- Harin Desilva, K. K. (n.d.). Specialty finance: The \$20 trillion next frontier of private credit: PIMCO. Pacific Investment Management Company LLC. [https://www.pimco.com/us/en/insights/specialty-finance-the-\\$20-trillion-next-frontier-of-private-credit](https://www.pimco.com/us/en/insights/specialty-finance-the-$20-trillion-next-frontier-of-private-credit)
- Healey, T., McDonald, M. B., & Haley, T. S. (2020). *Litigation finance investing: Alternative investment returns in the presence of information asymmetry: Portfolio management research*. Litigation Finance Investing: Alternative Investment Returns in the Presence of Information Asymmetry: Portfolio Management Research. [https://www.pm-research.com/highwire\\_display/entity\\_view/node/167885/content\\_tabs#:~:text=We%20find%20that%20in%20sample,to%20entry%20in%20the%20space](https://www.pm-research.com/highwire_display/entity_view/node/167885/content_tabs#:~:text=We%20find%20that%20in%20sample,to%20entry%20in%20the%20space)
- HBS Online: Business Insights Blog. (2020, May 7). The 7 alternative investments you should know. <https://online.hbs.edu/blog/post/types-of-alternative-investments>

- Insights. (n.d.). How to allocate private equity in a multi-asset class portfolio. <https://www.ubs.com/global/en/wealth-management/insights/insights-display-adp/global/en/wealth-management/insights/chief-investment-office/investment-opportunities/2020/how-to>
- Johnson, J., & Wong, M. (2024). Private credit primer. National Association of Insurance Commissioners. <https://content.naic.org/sites/default/files/capital-markets-primer-private-credit.pdf>
- McVey, H. H. (2024, October 1). An alternative perspective: Past, present, and future. KKR. <https://www.kkr.com/insights/alternative-perspective-past-present-future>
- McVey, H. H., Allouani, R., & Monmirel, T. (2024, April 26). Enhancing your investment portfolio in today's macroeconomic regime. KKR. <https://www.kkr.com/insights/regime-change-enhancing-the-traditional-portfolio>
- McVey, H. H., Allouani, R., Zhao, Y., & Le, V. (2024, April 25). Optimizing returns across changing macroeconomic environments. KKR. <https://www.kkr.com/insights/regime-change-role-private-equity-traditional-portfolio>
- Palmer, B. (n.d.). Key reasons to invest in real estate. Investopedia. <https://www.investopedia.com/articles/mortgages-real-estate/11/key-reasons-invest-real-estate.asp>
- Preqin. (n.d.). Alternative assets data, solutions and insights. <https://www.preqin.com/academy/lesson-1-alternative-assets/past-present-future-of-the-alternative-assets-industry>
- Schwager, J. D. (2012). Hedge fund market wizards: How winning traders win. Wiley.
- Tendulkar, R., & Hancock, G. (2014, April). Corporate bond markets: A global perspective. Vol. 1. OICU-IOSCO. <https://www.iosco.org/research/pdf/swp/SW4-Corporate-Bond-Markets-Vol-1-A-global-perspective.pdf>
- Yale University. (2024, August 12). Overview of Yale's endowment. <https://www.yale.edu/funding-yale-home/overview-yales-endowment>

#### About the Authors

Daniel Kelly is an experienced Finance and Wealth Management professional having spent more than 10 years advising some of Australia's most wealthy individuals and families. Daniel has a distinguished career working with both domestic Private Banks and international Investment Banks. Daniel has expertise in advising clients in portfolio and investment management across all asset classes including equities, fixed income, alternative investments and derivatives. Daniel holds a Bachelor of Psychology from Macquarie University, completed his CFA (Chartered Financial Analyst) accreditation in 2023 and holds the RG146 Tier 1 accreditations across all subjects. Daniel's current role is Chief Investment Officer at Viola Private Wealth.

Tamar Psuturi is a Finance professional with more than five years of experience in portfolio management. Tamar holds a Master of Business Administration in finance and bachelor's degree in law. Also, Tamar has recently successfully completed CFA (Chartered Financial Analyst) level 2 and is currently progressing through Level 3. She has experience across various asset classes including equities, fixed income, alternative investments and derivatives. Currently Tamar works with the Bank of America Private Bank in Portfolio management.

### Discussion Questions

1. What role could digital assets such as Bitcoin or Ethereum play in asset allocation moving forward? Could these be used to replace gold as an inflation hedge and store of value?
2. Given the evolution of access to private markets, correlation and risk, is the 60/40 portfolio now redundant? Does fixed income still have a role in a modern asset allocation given the prevalence and benefits of private credit?
3. Is the widely held view that alternatives are more risky than traditional asset classes true? or is this an incorrect narrative caused by a lack of understanding in private markets?
4. What risks does the more opaque and complex nature of private markets pose for client understanding of their investments and the level of transparency from an advisor in being able to adequately describe the strategies and risks being implemented?
5. With the increasing democratization of alternative investments, what ethical considerations should investors and regulators be mindful of when expanding access to these asset classes?

### To Cite this Article

Kelly, D., & Psutui, T. (2024, Fall). Alternatives and their role in modern portfolio management. *Journal of Multidisciplinary Research*, 16(2), 57–73.



“Spider Monkey Acrobatics”  
Pan Dulce, Costa Rica  
2022

Photography by Heather Crawford.

Image Copyright © 2022 by Heather Crawford.  
All rights reserved. Used with permission.

# **COVID-19 Mental Health Decrease Factors**

**Parker Twiss**

*Arkansas State University*

Abstract

This study serves to bridge the gap between the negative effects COVID-19 has on mental health, along with identifying what specific factors during the pandemic caused the overall mental health of the population to decrease. The researcher used multiple forms of social media to distribute the survey to a wide variety of participants. Surveyed individuals provided a total of 2,699 usable responses from multiple countries, the majority from the United States. Political turmoil, family members believing misinformation, and unclear guidelines most commonly degraded the surveyed individual's mental health. Clear guidance from official sources and people abiding by COVID-19 mitigation measures could have reduced their mental stress. As every disaster impacts the affected population's mental health, understanding the specific factors that caused a significant decrease in mental health is imperative to prepare for the next worldwide pandemic or crisis.

Keywords

COVID-19, mental health, mental health decrease, pandemic

## **Introduction**

A primary disruption the COVID-19 pandemic caused is the marked decrease in mental health (Cullen et al., 2020; Pfefferbaum & North, 2020), along with a rise in anxiety and depression (Xiong et al., 2020). However, the specific factors that contributed to such a decline is an area lacking in supportive research. This study aims to identify which specific factors during the COVID-19 pandemic contributed to the decrease in mental health within the general population since the onset of the virus.

## **Review of Literature**

Evidence overwhelmingly shows that the COVID-19 pandemic not only has disrupted physical life but also has drastically and negatively affected the mental health of many individuals (Cullen et al., 2020; Pfefferbaum & North, 2020). While usually addressed during the recovery phase of disaster management, mental health impacts are regular challenges that occur both during and after disasters (Goldman, 2014).

A long-term disaster with an extended mitigation and recovery period presents a unique challenge. In the case of the COVID-19 pandemic, social rules and perceptions additionally affected the willingness to abide by COVID-19 rules (Tunçgenç et al., 2021).

The negative impact on mental health from the Sars-COV-2 pandemic has been well documented and measured (Cullen et al., 2020; Pfefferbaum & North, 2020). The negative impact on mental health has impacted a broad spectrum of communities and individuals (Browning et al., 2021; Tunçgenç et al., 2021; Wang, Kala, & Jafar, 2020; Pierce et al., 2020; Yard et al., 2021; Vigo et al., 2021). Since the impact is continuous for the duration of type of disaster, it is essential to identify which factors cause a negative impact on mental health during the pandemic. Specifically, this study needed to be initiated during a pandemic to get reliable data.

The mental health effects of this disaster have spanned a longer length of time due to the duration of the crisis. Finding a positive correlation between age and mental stressors can additionally help guide future relief efforts, as many young adults and children are confirmed to be impacted by the COVID-19 pandemic in terms of mental health (Son, 2020; Imran et al., 2021; Tetreault et al., 2021). The impact of the pandemic on overall mental health has been studied and accepted to be negative across multiple areas (Bartusevičius, 2021; Grover, 2020; Tee, 2020), but less research has been done to identify simultaneous, specific stressors. It is important to note that the media coverage of the trauma increased the stress of individuals outside of the affected area (Holman et al., 2014). With the pandemic being widespread, this coverage would be universal and was an important factor in the study.

Proper distribution and use of mitigating measures such as vaccines decreased the recipients' mental stress levels during the pandemic (Perez-Arce et al., 2021). In contrast, some measures such as a lockdown increased mental health stress levels of the population, especially when coupled with job loss (Rodolfo et al., 2020). Further studies confirm many individuals have undergone a variety of economic stressors during the ongoing pandemic (Kirzinger et al., 2020).

### **Purpose of Research**

The purpose of this study was to identify specific stressors that contributed to the mental health decline of surveyed individuals. Our primary research question was (1) What was the primary mental health stressor of the population? A subsequent question was (2) Did a government's role contribute to mental distress due to unclear guidelines? And the final question was (3) Did confidence in government agencies increase, decrease, or stay the same?

### **Methodology**

The eligible population for this study was any adult over the age of 18. The Institutional Review Board of Arkansas State University approved the survey. An informed consent form was a requirement to proceed with the survey.

The method of obtaining information was an online survey utilizing Qualtrics. The researcher distributed a multiple methods survey link including word of mouth and social media platforms (Imgur, Facebook, Discord, and Twitter). Participants were able to complete the survey in under 10 minutes, and the survey was available for 2 weeks in December 2021.

While the primary purpose of the study was to identify what factors caused an individual's mental health to decrease, there was the option to indicate one's mental health did not decrease.

The survey received 2,699 useable responses. The researcher compiled the responses in Qualtrics and analyzed them using SPSS Software and Microsoft Excel Suite.

## **Results**

The survey opened in December 2021 for two weeks, during which participants submitted 2,699 usable responses using the online survey software Qualtrics. The researcher exported this data, using SPSS and Microsoft Excel for the data processing and subsequent analysis.

The study focused on the 30-39-year-old group (48.7%), followed by the 18-29 age group (24.3%), 40-49 age group (18.9%), 50-59 (6.2%), 60-69 1.5%, and a small number of participants aged 70+. The gender of the responses was fairly split, at 56.0% Male, 38.2% Female, 4.1% as Other, and 1.2% as “Rather not Say.”

Responders were overwhelmingly located in the United States at 74.5%, followed by Canada (8.2%), and Great Britain/UK (4%). Participants provided responses from a total of 51 countries.

Within the United States, the responses split fairly evenly by population, with California, Texas, and Washington submitting the highest number of responses.

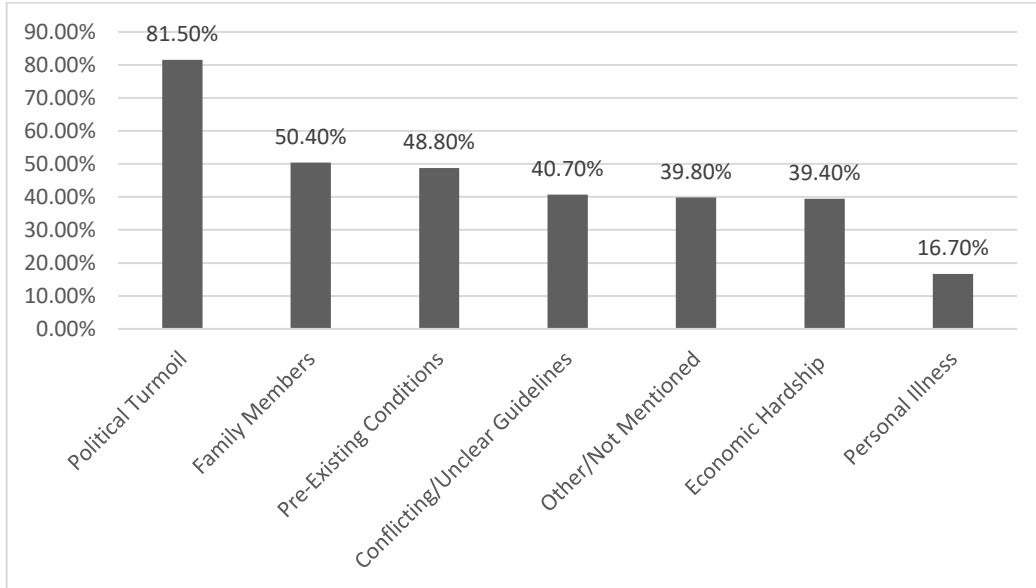
Income level per year spanned a wide range. The largest percentage was “\$27,000–50,000” (24.7%); followed by “51,000–75,000” (19.3%); “100,000+” (16.7%); “0–26,000” (14.6%); “76,000–100,000” (13.9%); “Unemployed” (6.8%); and “Prefer not say” (4.1%).

Of the 2,699 responses, 78.9% answered “Yes” when asked if their mental health state had decreased during the COVID-19 pandemic. 21.1% answered “No.”

When participants ranked the factors that most contributed to their mental distress, they identified “Political Turmoil” as the primary factor (81.5%); followed by “Family Members” (50.4%); “Pre-Existing Conditions” (48.8%); “Unclear/Conflicting Guidelines” (40.7%); “Other/Not Mentioned” (39.8%); “Economic Hardship” (39.4%); and “Personal Illness” (16.7%) (Figure 1). The “Other” Category included factors such as insufficient support for healthcare staff, specific political turmoil, and varied other answers.



**Figure 1**  
*General Stressors*

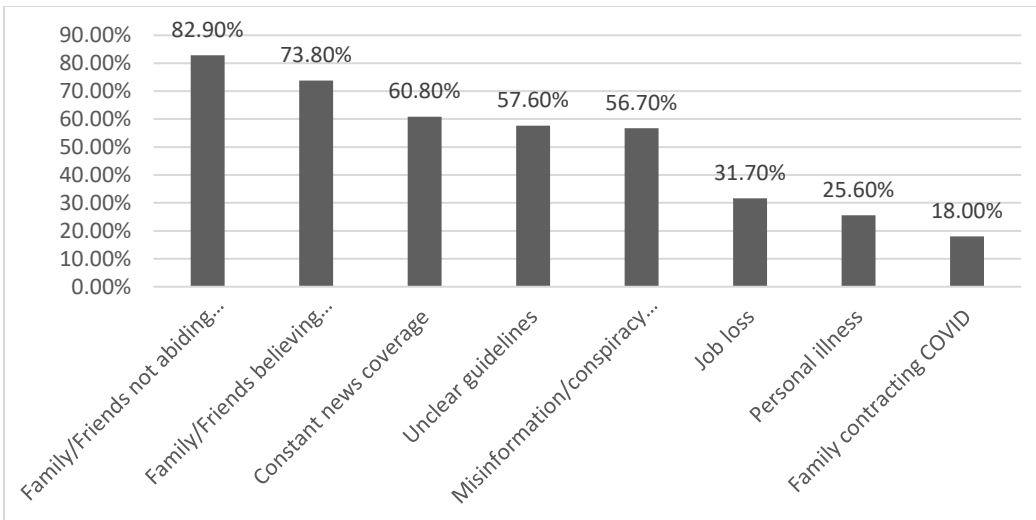


*Note: Data collected by the author December 2021.*

When participants ranked the factors from greatest to least stressor, they chose (1) “Political Turmoil,” (2) “Other,” and (3) “Economic Hardships” as the top three.

Participants then selected specific stressors that contributed to their mental health decrease. Of those selecting a specific stressor, the option selected most consistently was “Family and Friends not abiding by COVID restrictions” (82.9%). Next was “Family/Friends believing conspiracy theories” (73.8%); “Constant news coverage” (60.8%); “Unclear Guidelines” (57.6%); “Misinformation/conspiracy theories” (56.7%); “Job loss” (31.7%); “Personal illness” (25.6%); and “Family contracting COVID-19” (18%).

**Figure 2**  
*Specific Stressors*



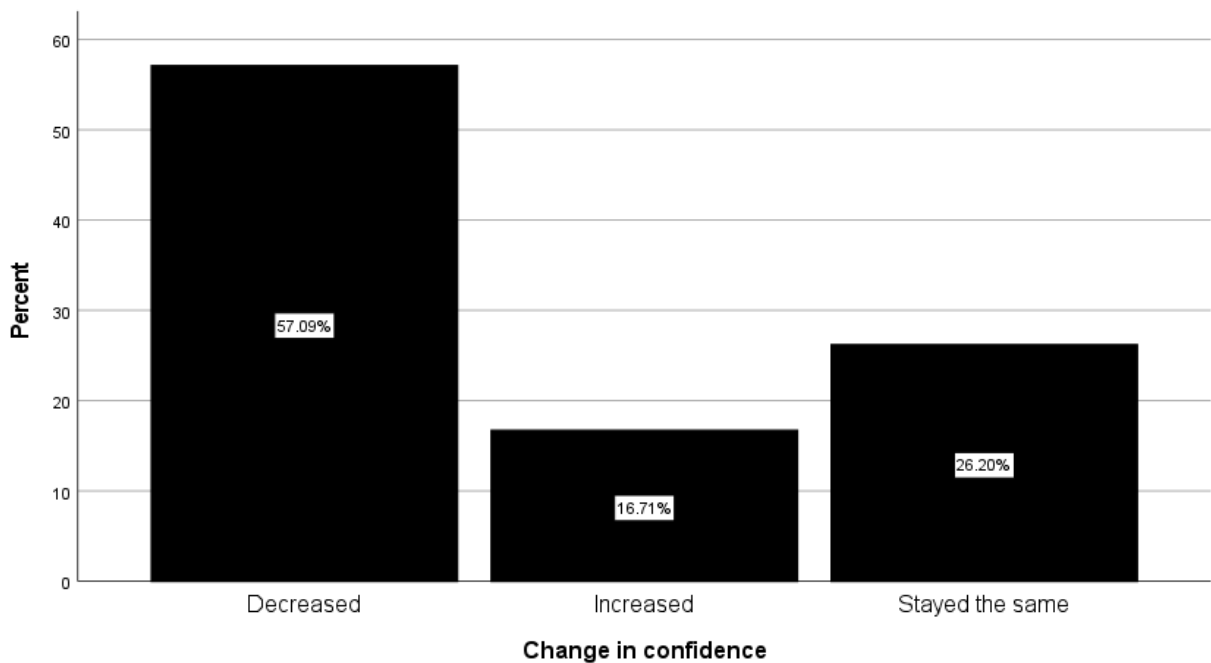
*Note: Data collected by the author December 2021.*



When participants ranked the stressors from greatest to least impact, their choices aligned with the previous results. The number one specific stressor was (1) “Family and Friends not abiding by COVID-19 restrictions,” (2) “Family and Friends believing conspiracy theories/misinformation,” and (3) “Constant news coverage.” In ranking, job loss scores an identical value as “Constant News Coverage,” and thus, the third position has two entries.

The researcher then asked the participants if their confidence in their Federal/National government’s ability to handle the crisis had increased, decreased, or stayed the same. The majority of participants selected “Decreased” (57.1%), “Stayed the same” (26.2%), and “Increased” (16.7%) (Figure 3).

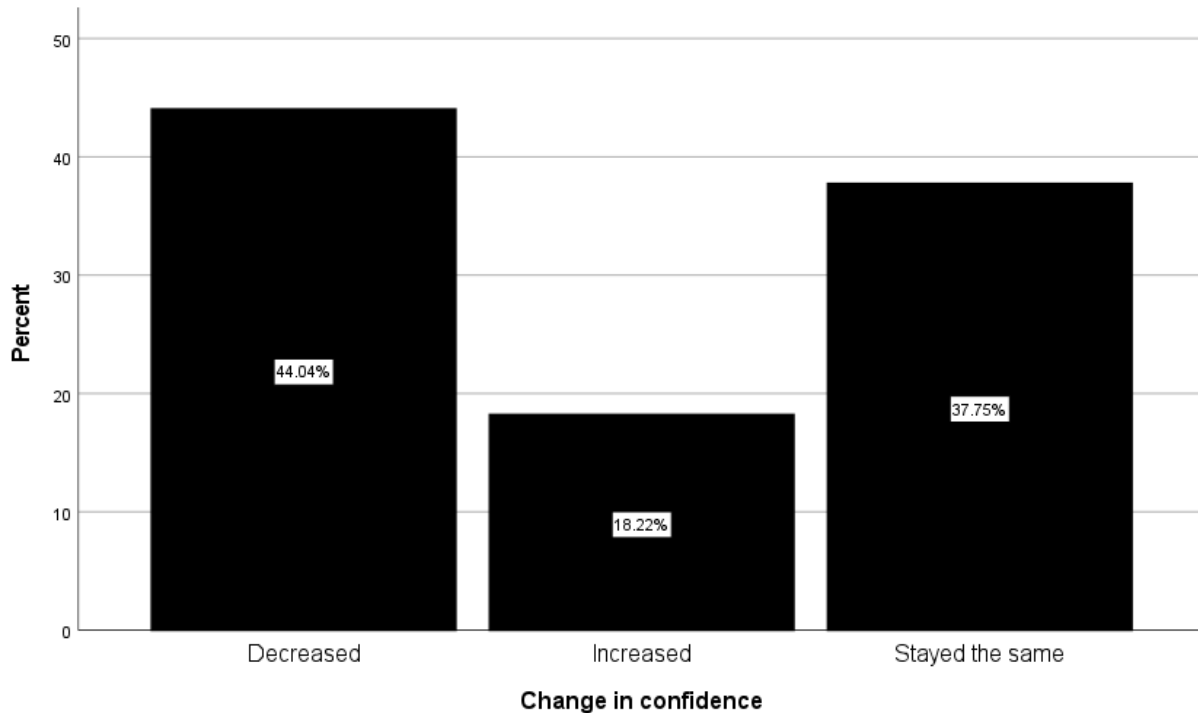
**Figure 3**  
*Federal Government Confidence*



*Note: Data collected by the author December 2021.*

The researcher then asked the same question regarding Local Governments. The majority still selected “Decreased” (44%), followed by “Stayed the same” (37.7%), and “Increased” (18.2%) (Figure 4).

**Figure 4**  
*Local Government Confidence*



*Note: Data collected by the author December 2021.*

To conclude the survey, the researcher asked participants which measures would have reduced their mental health stress. The majority selected “Widespread compliance with measures” (88.3%); followed by “Clear, decisive action from Local and Federal entities” (70.2%); “Clear and widespread information regarding precautions to take” (63.4%); “Additional financial stability and support options offered for individuals during the pandemic” (57.3%); “Decrease in media coverage of events” (18.9%); and “None” (2.2%).

### **Discussion**

The COVID-19 pandemic has impacted greatly the mental health of individuals across multiple countries (Cullen et al., 2020; Pfefferbaum & North, 2020). The majority of individuals selecting that their mental health did decrease during the pandemic supports this finding. Research revealed the specific factors contributing to this decline comprehensively.

Based on the data, the primary factors that led to an individual’s decrease in mental health included political turmoil, unclear guidelines, and individuals not abiding by precautions. This answered our primary discussion question: (1) What was the primary mental health stressor? In addition, the statistically significant ranking of both economic hardships and job loss (Figures 1 and 2 respectively), support prior findings concerning economic stressors during the pandemic (Rodolfo et al., 2020; Kirzinger et al., 2020).

Family and Friends not abiding by COVID-19 restrictions and believing misinformation was higher than unclear guidelines. This goes against expectations, as there was significant coverage of many back-and-forth guidelines from various governments. Addressing misinformation and conspiracy theories is not within the scope of this study. However, there is

sufficient data to draw a correlation between a governments action, or inaction, that did contribute to a decline of a population's mental health. This indicates a potential avenue for further research.

The clear majority of individuals had their confidence in the Federal/overall government decrease; this was in line with expectations. This data answered the third discussion question and confirmed that during a crisis, governments must actively work to relay accurate information and maintain the trust of their citizens. Mitigation measures such as vaccines have proven to decrease mental stress, supporting prior studies (Perez-Arce et al., 2021).

Participants did not select widespread media coverage as a primary stressor, contradicting prior studies (Holman et al., 2014). Considering the multi-faceted avenues from which this disseminates, many factors could explain this. It, though, ranked higher than other options. This indicates that it was an impactful stressor on an individual's mental health.

Participants indicated that widespread compliance and clear guidelines would have reduced their mental stress when asked about measures to decrease it. This outcome was not a surprise. However, the clear guidelines selection supports that even if not a primary cause of mental stress during the pandemic, it would have been significantly helpful. This aligns with prior data showing that the preventative measures others take (or fail to take) can heavily influence the actions of others (Tunçgenç et al., 2021).

Potential shortcomings of this survey include age and economic bias. Internet and social-media surveys require the users to both have an internet connection, the time to participate, and know how to navigate the interface. Due to the distribution on social media, the age is predominantly concentrated around the generations who grew up with the internet and are comfortable with social media. Additionally, individuals who took the survey may have had exposure to more news than others due to their online activities. It is unlikely any potential bias had a significant effect on the results of this study.

## **Conclusion**

The survey results aligned with previous assumptions. An individual's decrease in mental health included general topics such as political turmoil, unclear guidelines, and individuals not abiding by precautions.

Family and friends not abiding by COVID-19 restrictions and believing conspiracy theories specifically stressed participants during the COVID-19 pandemic. Confidence in both Federal/Country governments, along with Local governments decreased during the COVID-19 pandemic.

Participants identified widespread compliance with COVID-19 measures and clear guidelines as the top steps to reduce one's mental stress during the pandemic.

Overall, the findings of this project aligned with previous assumptions. However, the lack of unclear guidelines being not the primary cause of mental distress did not meet expectation.

Limitations of the study due to social media and utilizing the internet are present, but the large sample size aids in mitigating a significant bias.

With mental health having proven to suffer during the pandemic, the findings of this study can serve as a foundation to target mitigating measures during a subsequent disaster. Mental health is a key component of disaster recovery. With an understanding of the specific factors a long-term disaster inflicts on a population, appropriate preparatory and mitigation measures can be established.

References

- Browning, M. H. E. M., Larson, L. R., Sharaievska, I., Rigolon, A., McAnirlin, O., Mullenbach, L., & Alvarez, H. O. (2021). Psychological impacts from COVID-19 among university students: Risk factors across seven states in the United States. *PloS One*, *16*(1), e0245327. <https://doi.org/10.1371/journal.pone.0245327>
- Cullen, W., Gulati, G., & Kelly B. (2020). Mental health in the COVID-19 pandemic. *QJM: An International Journal of Medicine*, *113*(5), 311–312. <https://doi.org/10.1093/qjmed/hcaa110>
- Goldman, E. (2014). Mental health consequences of disasters. *Annual Review of Public Health*, *35*, 169–183. <https://doi.org/10.1146/annurev-publhealth-032013-182435>
- Grover, S., Sahoo, S., Mehra, A., Avsthi, A., Tripathi, A., Subramanyan, A., Patojoshi, A., Rao, G. P., Saha, G., Mishra, K. K, Chakroborty, K., Rao, N. P., Vaishnav, M., Singh, O. P., Dalal, P. K., Chadda, R. K., Gupta, R., Gautam, S., Sarkar, S., Rao, T. S., Kumar, V., & Reddy, Y. C. (2020). Psychological impact of COVID-19 lockdown: An online survey from India. *Indian Journal of Psychiatry*, *62*(4), 354–362. [https://doi.org/10.4103/psychiatry.IndianJPsychiatry\\_427\\_20](https://doi.org/10.4103/psychiatry.IndianJPsychiatry_427_20)
- Holman, E. A., Garfin, D. R., Silver, R. C., & Taylor, S. E. (Eds). (2014). Boston Marathon bombings, media, and acute stress. *Proceedings of the National Academy of Sciences*, *111*(1), 93–98. <https://doi.org/10.1073/pnas.1316265110>
- Imran, N., Zeshan, M., & Pervaiz, Z. (2020). Mental health considerations for children & adolescents in COVID-19 pandemic. *Pakistan Journal of Medical Science*, *36*(COVID19-S4), S67–S72. <https://doi.org/10.12669/pjms.36.COVID19-S4.2759>
- Kirzinger, A., Hamel, L., Muñana, C., Kearney, A., & Brodie, M. (2020). KFF health tracking poll – late April 2020: Coronavirus, social distancing, and contact tracing. KFF. <https://www.kff.org/coronavirus-covid-19/issue-brief/kff-health-tracking-poll-late-april-2020/>
- Perez-Arce, F., Angrisani, M., Bennett, D., Darling, J., Kapteyn, A., & Thomas, K. (2021). COVID-19 vaccines and mental distress. *PloS One*, *16*(9), e0256406. <https://doi.org/10.1371/journal.pone.0256406>
- Pfefferbaum, B., & North, C. S. (2020). Mental health and the COVID-19 pandemic. *New England Journal of Medicine*, *383*(6), 510–512. <https://doi.org/10.1056/NEJMp2008017>
- Pierce, M., Hope, H., Ford, T., Hatch, S., Hotopf, M., John, A., Kontopantelis, E., Webb, R., Wessely, S., McManus, S., & Abel, K. (2020). Mental health before and during the COVID-19 pandemic: A longitudinal probability sample survey of the UK population. *The Lancet Psychiatry*, *7*(10), 883–892. [https://doi.org/10.1016/S2215-0366\(20\)30308-4](https://doi.org/10.1016/S2215-0366(20)30308-4)
- Rossi, R., Soggi, V., Talevi, D., Mensi, S., Ntoli, C., Pacitti, F., Di Marco, A., Rossi, A., Siracusano, A., & Di Lorenzo, G. (2020). COVID-19 pandemic and lockdown measures impact on mental health among the general population in Italy. *Frontiers in Psychiatry*, *11*. <https://doi.org/10.3389/fpsy.2020.00790>
- Son, C., Hegde, S., Smith, A., Wang, X., & Sasangohar, F. (2020, September). Effects of COVID-19 on college students' mental health in the United States: Interview survey study. *Journal of Medical Internet Research*, *22*(9), e21279. <https://doi.org/10.2196/21279>
- Tee, M. K., Tee, C. A., Anlacan, J. P., Aligam, K. J., Reyes, P. W., Kuruchittham, V., & Ho, R. C. (2020). Psychological impact of COVID-19 pandemic in the Philippines. *Journal of Affective Disorders*, *277*, 379–391. <https://doi.org/10.1016/j.jad.2020.08.043>

- Tetreault, E., Teferra, A., Keller-Hamilton, B., Shaw, S., Kahassai, S., Curran, H., Paskett, E., & Ferketich, A. (2021, August). Perceived changes in mood and anxiety among male youth during the COVID-19 pandemic: Findings from a mixed-methods study. *Journal of Adolescent Health, 69*(2), P227–233. <https://doi.org/10.1016/j.jadohealth.2021.05.004>
- Tunçgenç, B., El Zein, M., Sulik, J., Newson, M., Zhao, Y., Dezechache, G., & Deroy, O. (2021, August). Social influence matters: We follow pandemic guidelines most when our close circle does. *British Journal of Psychology, 112*(3), 763–780. <https://doi.org/10.1111/bjop.12491>
- Vigo, D., Psych, L., Patten, S., Pajer, K., Krausz, M., Taylor, S., Rush, B., Raviola, G., Saxena, S., Thornicroft, G., & Yatham, L. (2020, May 11). Mental health of communities during the COVID-19 pandemic. *The Canadian Journal of Psychiatry, 65*(10), 681–687. <https://doi.org/10.1177/0706743720926676>
- Wang, Y., Kala, M. P., & Jafar, T. H. (2020). Factors associated with psychological distress during the coronavirus disease (COVID-19) pandemic on the predominantly general population: A systematic review and meta-analysis. *PloS One, 15*(12). <https://doi.org/10.1371/journal.pone.0244630>
- Xiong, J., Lipsitz, O., Nasri, F., Lui, L. M. W., Gill, H., Phan, L., Chen-Li, D., Iacobucci, M., Ho, R., Majeed, A., & McIntyre, R. S. (2020, December). Impact of COVID-19 pandemic on mental health in the general population: A systematic review. *Journal of Affective Disorders, 1*(277), 55–64. <https://doi.org/10.1016/j.jad.2020.08.001>
- Yard, E., Radhakrishnan, L., Ballesteros, M., Sheppard, M., Gates, A., Stein, Z., Hartnett, K., Kite-Powell, A., Rodgers, L., Adjemian, J., Ehlman, D., Holland, K., Idaikkadar, N., Ivey-Stephenson, A., Martinez, P., & Stone, D. (2021). Emergency department visits for suspected suicide attempts among persons aged 12–25 years before and during the COVID-19 pandemic — United States, January 2019–May 2021. *Morbidity and Mortality Weekly Report, 70*(24), 888–894. <http://dx.doi.org/10.15585/mmwr.mm7024e1>

#### About the Author

Parker Twiss holds an M.S. degree in Disaster Preparedness/Emergency Management from Arkansas State University. He additionally earned a B.A. in Biology from Brigham Young University, Idaho (2017). He is a Public Health/Emergency Management Consultant at Integrated Solutions Consulting (ISC). Prior to working with ISC, he was an Emergency Planning Specialist with the Bear River Health Department. ORCID 0009-0004-7105-7861. (Mr. Twiss was a graduate student when he prepared this article.)

#### Discussion Questions

1. What two factors defied expectations and ranked as higher stressors than “Unclear Guidelines?”
2. What factor contradicted prior study results and had participants fail to select it as a primary stressor?
3. What factors did participants indicate would have reduced their mental stress?

To Cite this Article

Twiss, P. (2024, Fall). COVID-19 mental health decrease factors. *Journal of Multidisciplinary Research*, 16(2), 75–84.

# **High School Adolescents' Perceptions of Gap Years as an Alternative Enrollment Option Post Graduation**

**Oscar DeGus**

*General Douglas MacArthur High School*

**David Friedman**

*General Douglas MacArthur High School*

## Abstract

An increase in the number of students taking gap years before postsecondary education has corresponded with research discussing the factors that predict such gap-taking. Studies have established high school as a significant crossroads within adolescents' academic pathways, however, there is a dearth of research directly analyzing high school adolescents' perceptions of gap years based on their school experiences. Thus, this study aimed to determine the association between high school students' demographic and academic characteristics and experiences, and their perceptions of taking a gap year as an alternative enrollment option post-graduation. The researchers distributed surveys to a suburban middle class high school population to collect demographic and academic student data and compare it to their responses to Likert-scale statements regarding schooling and gap years. Various statistical tests measured differences between which factors influence student gap-taking. Certain economic backgrounds differed significantly ( $p < .05$ ) in their perceptions, and academic expectations, college orientation, and curriculum were significant influences as well. Data regarding gender, grade level, and parental education differed markedly from previous studies analyzing college students. These findings present implications for student well-being following high school graduation and for the efforts of college, private, and government gap year organizations.

*Keywords:* gap years, gap-taking, high school, postsecondary education, perceptions, predicting factors

## **Introduction**

### **Defining a Gap Year**

The rise in the popularity of gap years has corresponded with new research on what causes students to consider them, as well as their possible effects. However, multiple studies define a gap year differently, and each definition significantly affects the data collected and the conclusions drawn from them. Hearn (1992) analyzed a survey of high school graduates to determine which demographic and academic factors led to delayed enrollment of college students. This study defines gap-year students as those who attended college one or more years after graduating high school. Similarly, a report the Australian Department of Education (Curtis et al., 2012) had prepared uses this same definition for a “gapper.” However, this is not the universal definition of a gap year. Instead, a review commissioned by the UK Department of Education and Skills (Jones, 2004), defines a gap as any period of time between 3 and 24 months during which an individual “takes out” of different forms of education or working. This study employed this definition to fit its needs as a broad longitudinal report, focusing on not only general gap years in education, but also employment. However, other studies focusing specifically on pre-university gap years have used this definition as well (Heath, 2007; Nieman, 2013).

As mentioned earlier, the way a study defines a gap year can greatly influence its results and conclusions. This can consist of leaving out many individuals who may have enrolled in college some extended period of time after graduating high school, but don't fit the specific parameters of a gap year student as a study defines it. For instance, some researchers do not consider students who do not hold a spot in a college to be “gappers” because they enroll into college during or after their gap year, instead of beforehand (Curtis et al., 2012). Similarly, Heath (2007) had to rely on rough estimates to determine the number of gap year students in the UK for this same reason. Therefore, surveying high school students on their perceptions and likelihood to take a gap year could help to gain a closer understanding of the current number of potential gap year students.

Heath (2007) found in his study that gap year students are predominantly white middle class individuals and that minority groups are severely underrepresented. One possible explanation for this is that students from non-English speaking backgrounds don't fully understand or use the term “gap year” to describe taking a year off between high school and postsecondary education (King, 2010). However, in contrast with Heath's and King's findings, 63% of the gap year students Niu and Tienda (2013) surveyed were either Black or Hispanic. The differences in these findings can still boil down to how a gap year is defined. For example, in a study of interviews of South African gap year students, Nieman (2013) expanded on his definition to only include breaks before college that included a “meaningful, purposeful, and planned activity.” Likewise, Heath (2007) made this distinction known as well, as opposed to Niu's and Tienda's (2013) general definition of a gap year, which included poor or economically disadvantaged students who may have taken one to work and save money for college.

Furthermore, Niu and Tienda (2013) compared gap year lengths of one semester up to four years and concluded that there isn't any measurable difference between on-time enrollment and a delay of one semester. Although there were observed differences between a delay of two years and a delay of three to four years, for its purposes, this study defines a gap year simply as any period of 1 to 4 years after high school graduation in which a student does not attend any form of postsecondary education institution, followed by postsecondary educational studies.



## **Predicting Factors**

Messersmith and Schulenberg (2008) determined a number of academic and demographic factors to be “particularly strong indicators” of youth either meeting or not meeting their expectation to graduate from a 4 year college. However, they found no differences between each gender regarding a student’s failure to meet their educational expectations. Similarly, Curtis et al. (2012) noted that gender was not a significant factor in determining which students took a gap year. In contrast, however, Jones (2004) observed that women made up most gap year students in the UK, and two thirds of King’s (2010) convenience sample of English university gap year students were female. Despite this, although Hearn (1992) did find that females were more likely to take a gap year, overall, he concluded that both race and gender were not strong predictors of nontraditional enrollment into postsecondary education when factoring in the types of institutions attended, and whether that attendance was full time, part time, or delayed. Due to the mixed conclusions drawn regarding gender as a predicting factor for gap-taking, this study will focus on sex assigned at birth as a key variable of student perceptions of gap years.

Additionally, Hearn (1992) concluded that academic and socioeconomic factors, such as academic ability, financial status, college orientation, and academic aspirations were demographics that consistently predicted gap-taking. Likewise, Niu’s and Tienda’s (2013) study observed similar predicting factors, however, they measured student academic expectations as opposed to their aspirations. College orientation occurs when a student is in the “predisposition” and “search” stages of college choice (Hossler et al., 1999; Paulsen et al., 2001), which Niu and Tienda (2013) and Messersmith and Schulenberg (2010) identify by how many of a student’s peers are discussing college plans, and when a student first thinks about going to college. Therefore, this article also will examine this and other academic and socioeconomic factors present in Hearn’s (1992) and Niu and Tienda’s (2013) studies.

Although Niu’s and Tienda’s (2013) use of “educational expectations” as opposed to Hearn’s (1992) “academic aspirations” seems trivial, there is a significant difference between them that multiple studies define (Kao & Tienda, 1998). For instance, Hearn (1992) measured academic aspirations by questioning students on the lowest level of education they’d be satisfied with, which sits in stark contrast to Niu’s and Tienda’s (2013) use of academic expectations, which assesses how “difficult as well as how realistic” a student’s primary goal is. Furthermore, Messersmith and Schulenberg (2008) noted how educational expectations have been both “highly stable and predictive” (Trusty, 2000), and representative of “plans that are already in action” (Bachman et al., 2008). Moreover, goals for educational attainment are directly related to long term well-being in the context of adolescents’ transitions to adulthood and students can restructure or revise them to bring their “current reality” closer to their “ideal goal state” (Messersmith and Schulenberg, 2010), which Niu and Tienda (2013) analyzed through the relationship between students’ educational expectations and the length they delayed college enrollment for a variety of reasons. Because of this, and its relation to numerous other predicting factors of gap-taking, this study will focus on educational expectations moving forward.

Finally, this study will look at different variables related to gap-taking in the context of a student’s transition to adulthood. The semi-structured interviews in Nieman’s (2013) study will serve as the basis for these, which this study has broken into the themes of burnout and academic motivation, life experience, maturity, and independence. Additionally, this study will measure a student’s perceptions of the affordability of college and their relation to gap years, which have

been predictive of gap taking, despite students' observed lack of knowledge on the subject (Hossler et al., 1999; Muntz, 2000; Avery and Kane, 2004; Niu and Tienda, 2013).

This study will measure students' perceptions of gap years and how they relate to their personal academic and future careers as well. Heath (2007) concluded that taking a gap year helps students build a "personality package," which they can attain during their time out of education, and then utilize to give them an advantage over their peers when applying to university and later in their professional careers as well. Conversely, however, Hearn (1992), Curtis et al. (2012), and Niu and Tienda (2013) found that the opposite was true, but it isn't entirely clear if a student's future in schooling or the labor force is due to their decision to take a gap year or existing differences in family background.

## **Research Gap**

There is a dearth of research directly analyzing high school adolescents' perceptions of gap years based on their experiences as high school students so far. Students' personal educational experiences directly shape their attitudes towards schooling and academic pursuits (Messersmith and Schulenberg, 2008), and high school is an early and significant crossroads within adolescents' academic pathways. Therefore, this study aims to determine the association between high school students' demographic and academic characteristics and experiences, and their perceptions of taking a gap year as an alternative enrollment option post-graduation. This study hypothesizes that underclassmen females, students of a lower socioeconomic status with lower academic expectations, less advanced curriculum, less college orientation, lower parental education, and who feel generally unprepared for postsecondary education will have higher perceptions of taking a gap year.

## **Materials and Methods**

### **Participants**

The researchers of this study distributed a survey to teen adolescents from a suburban middle class high school. According to the school's 2023 enrollment data (*NYSED Data Site*, 2023), the total school population is 1,270 students, with 71% of them being White, 19% being of Hispanic or Latino origin, 8% being of Asian or Pacific Islander origin, and 1% being African American. However, only 60.8% of the survey respondents identified as White, 17.7% identified as Hispanic, 16.2% identified as Asian, and no respondents identified as Black. 12% of the high school population are eligible for free school lunch, and 2% qualify for price-reduced meals. In addition to being more diverse, the surveyed respondents were disproportionately economically disadvantaged, with 23.1% and 6.2% of them qualifying for free and cost reduced lunch respectively. Additionally, 10.8% of respondents indicated that their household was lower middle class. 61% of the school's students take at least one AP course, but among survey respondents this figure is higher, with 75.4% of them indicating that they have or are currently taking one or more AP courses.

## **Research Design**

This study derived its survey design partly from that of Hearn's (1992) and Niu's and Tienda's (2013). It incorporates select multiple choice questions directly from Niu's and Tienda's survey, with the rest created based on the variables analyzed in each of the two studies. Moreover, a separate section of the survey uses a 5-point Likert scale based on statements reflecting the personal themes and variables discussed previously.

The demographics section of the survey consists of 12 total questions. This study measured data on respondents' college orientation based on "when did you first think about going to college?" and "about how many friends that you spend time with plan to go to college?" (Niu & Tienda, 2013). College expectations were broken into bachelor's degree or higher and less than bachelor's, based on previous analyses of this variable (Hearn, 1992, Niu and Tienda, 2013). Finally, the survey assesses parental education level using a question that the National Center for Education Statistics (2002) has used in the past.

The incorporation of the personal themes that Nieman (2013) discussed were done through fourteen 5-point Likert scale questions in order to quantify the responses in a way that allowed the study to collect data from more students than would be feasible in an interview, while still allowing students to express how they feel about the different aspects of taking a gap year as they relate to their personal experiences in schooling. Additionally, the demographic questions from earlier allow for the collection of qualitative data in a structured survey format, as multiple previous studies on the variables that predict gap-taking have done. The last item in this section is a multiple choice question that simply asks respondents if they want to take a gap year after graduating high school and before college.

Furthermore, this study conducted a pilot study with 10 students in order to check for errors in the survey and improve the wording and flow of questions to allow for respondents to complete each form in a timely manner, and the study received Institutional Review Board (IRB) approval before distributing the surveys among the student body.

## **Data Collection**

The survey has a total of 27 questions (See Appendix A for full survey). This study transferred all password protected data from Google Forms and stored it in Microsoft Excel. Collection of each students' demographic information maintained respondents' anonymity, and respondents needed to acknowledge and affirm an informed consent form before beginning each survey.

## **Data Analysis**

This study compared data from each demographic variable to the Likert scale questions using t-tests, ANOVAs, and chi-squared tests in order to find statistically significant differences or associations between what groups of respondents felt about different areas of schooling and gap years. This tested the study's initial hypothesis that sought to answer the research question regarding what factors best predict gap-taking among high school students.

## Results and Discussion

Out of all the surveys distributed, a total of 130 were completed and analyzed. There are disproportionately more upperclassmen (62.4%) than underclassmen (37.7%) among the students sampled in this study. Two t-tests and chi-squared tests of independence compared how both upperclassmen and underclassmen, as well how males and females, felt about the various aspects of schooling and gap years contained in each Likert scale statement. None of the statements displayed any statistically significant differences or associations between grade levels  $X^2(1, N = 130) = 1.898, p = .168$ . Thus, these results do not support the initial hypothesis that underclassmen would have a higher perception of taking a pre-university gap year. The fact that there is no significant difference between how upperclassmen and underclassmen students feel about gap years and schooling differs greatly with Hossler's et al.'s (1999) previous findings on how students' academic aspirations and attitudes toward postsecondary education greatly shift between each phase of college choice, spanning from 9th to 12th grade (Paulsen et al., 2001).

**Table 1**  
*Independent Samples T-Test Sex Assigned at Birth*

	<b>t</b>	<b>df</b>	<b>p</b>
I often feel burnt out overall by school	1.130	105.231	0.261
A gap year would be an enticing and useful break from schoolwork after high school	1.030	96.042	0.305
I feel I won't be motivated or ready to resume college education after a gap year	1.347	116.739	0.181
A gap year would offer meaningful life experiences	1.501	109.318	0.136
I feel I will be unprepared for college after graduating high school	0.817	115.263	0.416
I feel I'm not independent enough for college	- 0.012	122.126	0.991
A gap year would allow me to become more independent before attending college	- 0.758	121.074	0.450
I feel I'm not mature enough for college	- 2.063	111.231	0.041
A gap year would allow me to become more mature before attending college	- 0.964	114.363	0.337
I feel like I will not be able to afford college after graduating high school	1.697	115.057	0.092
A gap year would allow me to save money to afford college	0.642	111.976	0.522
A gap year would give me an edge over my peers in college and/or later in life	0.352	118.243	0.726
I feel a gap year would be an interruption of my academic career	0.494	116.315	0.622
I feel that a gap year would not offer enough value to be useful or justified for me	- 1.143	118.461	0.255

*Note.* Welch's t-test.

Only one statement, “I feel I’m not mature enough for college” ( $p = .0041$ ), displayed a statistically significant difference between males ( $M = 2.386$ ,  $SD = 1.161$ ) and females ( $M = 1.986$ ,  $SD = 1.007$ ), and a chi-squared test shows no significant association between sex assigned at birth and wanting to take a pre-university gap year  $X^2(1, N = 130) = 1.273$ ,  $p = .259$ . These results are in accordance with Niu and Tienda’s (2013) as well as Curtis’s et al.’s (2012) studies, which found no differences between males and females with regard to gap-taking, and do not support the initial hypothesis that females would have a higher perception of taking a pre-university gap year, which Jones’s (2004), and King’s (2010) findings from the UK suggested.

**Table 2**  
*Contingency Tables*

<b>Primary Language Spoken at Home</b>	<b>Knows What a Gap Year Is</b>		
	<b>No</b>	<b>Yes</b>	<b>Total</b>
English	19	91	110
Not English	5	15	20
Total	24	106	130

<b>Chi-Squared Tests</b>			
	<b>Value</b>	<b>df</b>	<b>p</b>
X <sup>2</sup>	0.671	1	0.413
N	130		

The next variable analyzed was the primary language that respondents spoke in their home. To test King’s (2010) hypothesis that an individual’s primary language can affect their understanding of gap years, a chi-squared test was used to compare English and non-English speakers’ knowledge of what a gap year is and showed no statistically significant association  $X^2(1, N = 130) = 0.671$ ,  $p = .413$ . Moreover, a t-test displayed no statistically significant differences between each group’s perceptions of gap years. This does not support the initial hypothesis that non-English speakers would have a higher perception of gap years, a conclusion which sits opposed to Curtis’s et al.’s (2012) findings that graduates from English speaking backgrounds were more likely to take a gap year.

**Table 3**

*ANOVA - I feel like I will not be able to afford college after graduating high school*

Cases	Sum of Squares	Df	Mean Square	F	p	$\eta^2_p$
Household Economic Status	29.594	2	14.797	15.166	<.001	0.193
Residuals	123.914	127	0.976			

*Note.* Type III Sum of Squares

**Post Hoc Comparisons - Household Economic Status**

			Mean Difference	SE	t	p <sub>Tukey</sub>
Lower class	middle	Middle class	0.430	0.283	1.520	0.285
		Upper class	1.597	0.338	4.730	<.001
Middle class	Upper class	middle class	1.167	0.234	4.990	<.001

*Note.* P-value adjusted for comparing a family of 3

The next factor of student perception of gap years analyzed was respondents' household economic status. Only one statement, "I feel I won't be able to afford college after graduating high school" ( $p < .001$ ,  $\eta^2_p = 0.193$ ) displayed statistically significant differences between all three economic levels, as demonstrated by the one-way ANOVA and Tukey's post hoc comparison. These results make logical sense considering that each household economic level has different access to monetary resources to fund a college education. However, there were no observed statistically significant differences for the statement "A gap year would allow me to save money to afford college" ( $p = .820$ ), indicating that household economic status does not affect how students perceive gap years as a potential solution for the costs of college.

**Table 4**

*Contingency Tables*

Household Economic Status	Economic Indicator			Total
	Cost reduced lunch	Free school lunch	Neither	
Lower middle class	1	7	6	14
Middle class	4	20	70	94
Upper middle class	3	3	16	22
Total	8	30	92	130

**Chi-Squared Tests**

	Value	df	p
X <sup>2</sup>	9.688	4	0.046
N	130		

A separate chi-squared test reveals the relationship between what household economic level students placed themselves in and whether or not they believed they qualified for cost reduced or free lunch  $\chi^2(4, N = 130) = 9.688, p = .046$ . Puzzlingly, the majority of respondents who indicated that they qualified for free or cost reduced school lunch also indicated that they were middle class. The threshold for qualifying for subsidized lunch in the surveyed school lies far below the median household income of the school's region (New York State Office of Temporary and Disability Assistance, n.d., United States Census Bureau, n.d.), indicating a lack of knowledge on either the qualifications for receiving subsidized school lunches, or students' own household income, which has significantly affected the results of this study in regards to the economic status factor of schooling and gap years. This is in accordance with Avery's and Kane's (2004) findings that students largely have a general misunderstanding of their own socioeconomic backgrounds, especially in relation to school and their college prospects.

**Table 5**  
*Independent Samples T-Test Taken Any AP Course(s)*

	<b>t</b>	<b>df</b>	<b>p</b>
I often feel burnt out overall by school	-0.512	48.279	0.611
A gap year would be an enticing and useful break from schoolwork after high school	1.250	53.634	0.217
I feel I won't be motivated or ready to resume college education after a gap year	-2.040	55.847	0.046
A gap year would offer meaningful life experiences	-0.940	45.935	0.352
I feel I will be unprepared for college after graduating high school	1.829	47.434	0.074
I feel I'm not independent enough for college	0.606	48.695	0.548
A gap year would allow me to become more independent before attending college	0.748	49.116	0.458
I feel I'm not mature enough for college	1.821	44.490	0.075
A gap year would allow me to become more mature before attending college	0.149	53.371	0.882
I feel like I will not be able to afford college after graduating high school	-1.463	50.970	0.150
A gap year would allow me to save money to afford college	-1.043	42.760	0.303
A gap year would give me an edge over my peers in college and/or later in life	1.447	53.730	0.154
I feel a gap year would be an interruption of my academic career	-2.363	50.842	0.022
I feel that a gap year would not offer enough value to be useful or justified for me	-1.977	53.500	0.053

*Note.* Welch's t-test.

Student curriculum was the next variable of gap year perception analyzed. The above t-test shows that, while AP students feel worried that they might not be able to smoothly transition from a gap year to college, overall, they do not feel it would be an interruption of their academic careers, differing from non-AP students' perceptions.

**Table 6**  
*Contingency Tables*

Taken Any AP Course(s)	Wants to Take a Pre-University Gap Year		Total
	No	Yes	
No	19	13	32
Yes	87	11	98
Total	106	24	130

Chi-Squared Tests			
	Value	df	p
X <sup>2</sup>	13.852	1	< .001
N	130		

A chi-squared test also demonstrates the effect that student curriculum has on respondents' desire to take a gap year  $X^2(1, N = 130) = 13.852, p < .001$ , showing a clear association between the two variables, with AP students being far less inclined to take one than non-AP respondents. Overall, these results support the initial hypothesis that high school adolescents with a less advanced curriculum, in this case one that doesn't include any Advanced Placement course, would have higher perceptions of taking a gap year, which agrees with Niu's and Tienda's (2013) findings.

One of the most significant factors affecting student perception of gap years analyzed in this study was college orientation. One-way ANOVAs were run for each Likert scale statement to compare how students' responses differed depending on what point in their educational pathways they thought of pursuing college, and eight total statements demonstrated statistical significance. This study classified respondents who indicated that they first thought about going to college before middle school, during middle school, or during high school as "pre middle school," "middle school," and "high school" oriented students respectively. Throughout all significant statements, high school oriented students held the highest perceptions of gap years, followed by middle school, and then pre-middle school oriented ones.

Across all significant statements, each one that related to students' educational experiences was also significant in terms of their relation to gap years. For instance, for the significant statements "I feel I'm not independent enough" ( $p = .040$ ) or "I feel I'm not mature enough" ( $p = .038$ ) for college, the statements "A gap year would make me more independent" ( $p = .011$ ) or "A gap year would make me more mature" ( $p = .015$ ) were also significant, demonstrating the same relationship between students' perceptions of gap years as earlier.



**Table 7**

*ANOVA - I feel that a gap year would not offer enough value to be useful or justified for me*

Cases	Sum of Squares	df	Mean Square	F	p	$\eta^2_p$
First Seriously Thought About Going to College	9.570	2	4.785	3.344	0.038	0.050
Residuals	181.730	127	1.431			

*Note.* Type III Sum of Squares

**Post Hoc Comparisons - First Seriously Thought About Going to College**

		Mean Difference	SE	t	p <sub>Tukey</sub>
Before middle school	High school	.713	0.285	2.503	0.036
	Middle school	.343	0.290	1.182	0.466
High school	Middle school	0.370	0.235	-1.573	0.261

*Note.* P-value adjusted for comparing a family of 3

One of the most interesting statements that displayed significance was “I feel that a gap year would not offer enough value to be useful or justified for me” ( $p = .038$ ,  $\eta^2_p = 0.050$ ). This question is broader than the others and encompasses multiple different perspectives on schooling to consider when summarizing the overall value of a gap year. Therefore, while pre-middle school ( $M = 3.731$ ,  $SD = 1.185$ ) oriented students differed significantly from high school ( $M = 3.018$ ,  $SD = 1.178$ ) oriented ones, the centers of all three groups of respondents lied within the neither agree nor disagree range of the Likert scale, demonstrating greater unsureness about this statement when compared to questions of more narrow focus on the topic.

**Table 8**

*Contingency Tables*

First Seriously Thought About Going to College	Wants to Take a Pre-University Gap Year		
	No	Yes	Total
Before middle school	25	1	26
High school	37	18	55
Middle school	44	5	49
Total	106	24	130

**Chi-Squared Tests**

	Value	df	p
X <sup>2</sup>	13.345	2	0.001
N	130		

Last, a chi-squared test shows a statistically significant association between when students first thought of attending college and whether or not they wanted to take a pre-university gap year  $X^2(2, N = 130) = 13.345, p = .001$ .

Altogether, it's abundantly clear from these results that college orientation, specifically when students first think about going to college, is an extremely influential factor that affects students' perceptions of different aspects of their educational experiences, in addition to how these aspects relate to gap years. This same trend emerges in Niu's and Tienda's (2013) data that is in this study: the earlier students set their minds on attending college, the less likely they are to take a gap year. However, the number of college-bound friends that a student has did not affect respondents' perceptions of gap years in this study, unlike in Niu's and Tienda's (2013).

Additionally, this study analyzed the parental education factor of gap-taking through one-way ANOVAs and a chi-squared test, all of which indicated no statistically significant results. The data don't support the initial hypothesis that students with less educated parents would have higher perceptions of taking a gap year, and instead indicate that parental education isn't a significant factor at all. This is strikingly different from the conclusions of previous research, which, either through statistical evaluation or just logical reasoning and assumption, noted that parental education is one of the most important academic factors that affects not only the likelihood of graduates to take a gap year, but also their general academic goals. Hossler and his colleagues found that "Seventy-five percent of students whose parents had a college degree actually enrolled in college" (Hossler et al., 1999; Muntz, 2000), and Hearn (1992), Curtis et al. (2012), and Niu and Tienda (2013) found similarly strong evidence to support parental education level as a significant predicting factor of gap-taking.

The fact that this study is the only one which directly surveyed high school adolescents of all grade levels on their perceptions of taking a pre-university gap year may be what sets apart its findings on parental education level from the aforementioned studies. However, certain limitations of the conduction of this study could have also contributed to these results.

**Table 9**  
*Independent Samples T-Test Educational Expectations*

	<b>t</b>	<b>df</b>	<b>p</b>
I often feel burnt out overall by school	-3.650	16.173	0.002
A gap year would be an enticing and useful break from schoolwork after high school	-1.017	9.989	0.333
I feel I won't be motivated or ready to resume college education after a gap year	-1.002	11.299	0.337
A gap year would offer meaningful life experiences	0.267	9.862	0.795
I feel I will be unprepared for college after graduating high school	-1.999	10.063	0.073
I feel I'm not independent enough for college	-1.632	10.345	0.133
A gap year would allow me to become more independent before attending college	-0.404	10.309	0.695
I feel I'm not mature enough for college	-2.238	10.099	0.049
A gap year would allow me to become more mature before attending college	-0.571	11.116	0.579
I feel like I will not be able to afford college after graduating high school	-1.680	9.755	0.125
A gap year would allow me to save money to afford college	-0.683	12.459	0.507
A gap year would give me an edge over my peers in college and/or later in life	-0.834	13.074	0.419
I feel a gap year would be an interruption of my academic career	1.506	10.464	0.162
I feel that a gap year would not offer enough value to be useful or justified for me	1.098	10.615	0.296

*Note.* Welch's t-test.

Last, educational expectations was the final factor of student perceptions of gap years analyzed. The above t-test demonstrates that bachelor's striving students differed significantly from non-bachelors striving ones in their perceptions of burn out ( $p = .002$ ), as well as maturity ( $p = .049$ ) as they relate to schooling, but not gap years. This indicates that more academically motivated students feel better prepared for college.

**Table 10**  
*Contingency Tables*

<b>Educational Expectations</b>	<b>Wants to Take a Pre-University Gap Year</b>		
	<b>No</b>	<b>Yes</b>	<b>Total</b>
Bachelors (4 year college degree) or higher	102	18	120
Less than Bachelors	4	6	10
<b>Total</b>	<b>106</b>	<b>24</b>	<b>130</b>

**Chi-Squared Tests**

	<b>Value</b>	<b>df</b>	<b>p</b>
$X^2$	12.417	1	< .001
N	130		

While these differing perceptions do not pertain to gap years, a chi-squared test still shows a statistically significant association between the two variables  $X^2(1, N = 130) = 12.417, p < .001$ . It is interesting to note, however, that only 10 students out of the 130 sampled responded that they did not expect to achieve a bachelor's degree, which may have influenced these results.

**Conclusions**

Although this study offers many insights, there are important limitations to consider. One of the most significant of these is the sample of students itself. This study only samples one school in a suburban middle class region of the U.S, which could be an explanation for differences found between the results seen here when compared to those in different countries, such as the UK and Australia (Hearn, 1992; Curtis et al., 2012), and even other parts of the U.S, like Texas (Niu & Tienda, 2013). Regional geographical differences have also been shown to significantly affect observed numbers of gap year students, which Curtis et al. (2012) concluded when factoring in students from urban versus rural areas.

Furthermore, adolescents' general lack of knowledge when answering some survey questions also poses a significant limitation to this study's results. The most prominent example of this being the way in which students misunderstood their economic backgrounds, which this study discussed earlier, and significantly influenced the conclusions drawn regarding this variable of gap-taking. While students may have all answered earnestly, simple mistakes could've still arisen when filling out their demographic information on their own, which in turn affected the outcomes of the study.

This study's outcomes shed light on how high school students' demographic makeup, as well as numerous academic factors and their experiences in school, affect how they perceive the value of a gap year.

Both Heath (2007) and Curtis et al. (2013) noted that, due to the nature that studies collect data on gap year students, many are unaccounted for when researchers tally the number of gap-takers in different countries and regions. The results from this study can greatly help map the

growing trend of taking a gap year. Rough estimates in places like the UK and Australia do enough to show that this trend exists, but surveying the plans of high schoolers to take a gap year provides valuable insight on the extent of this growth, as well as the implications of it. For instance, Hossler et al. (1999) found that 60% of freshmen and 70% of sophomores followed through with their postsecondary education plans, and this figure is even higher for upperclassmen students (Muntz, 2000). However, initial educational goals of students are still subject to significant change, even among seniors, which Messersmith and Schulenberg (2010) demonstrated through their analyses of “unexpected” versus “expected” academic pathways of students following high school graduation.

Moreover, this data helps colleges, universities, organizations, and governments better identify marketable students and determine the best timing for their marketing efforts.. Muntz (2000), on the topic of Hossler et al.'s (1999) study on the matter, specifically noted that research in the desires and aspirations of high school students can greatly assist college admissions offices in targeting certain students with marketing. Heath (2007) noted that an estimated 800 organizations provide “free or subsidized volunteer placements” in the UK and abroad, 85 of which primarily market to gap year students (Jones, 2004). Moreover, the UK government has tried actively promoting gap-taking through initiatives such as the 2003 “Young Volunteer Challenge,” and various other proposed programs that could subsidize and encourage students to take a gap year (Heath, 2007). Each and every one of these can utilize this study’s data to better identify marketable students and determine the best timing for their marketing efforts. Additionally, different implications regarding individual student fulfillment and success also exist. Every student wishes to make goals for themselves and to achieve them, both of which can greatly help with their well-being (Salmela-Aro & Nurmi, 1997; Freund & Baltes, 2002; Ntoumanis & Duda, 2007; Wiese, 2007; Sheldon & Cooper, 2008; Messersmith & Schulenberg, 2010). However, failure to meet one’s goals has the opposite effect (Carver et al., 1996). In regard to educational goals, overall life satisfaction can vary as students try to achieve what they’ve set out for, and one of the ways in which students can continue to strive to accomplish more is through reconstructing their goals (Messersmith & Schulenberg, 2010). For many, a gap year can be a viable way to modify their goal of a college education in order to overcome roadblocks, such as being able to afford college, feeling prepared enough for college, and understanding their own future career paths. Various groups of respondents from different demographic and academic backgrounds expressed each of these obstacles and more, and some did see taking a gap year as a solution to consider. Furthermore, Heath (2007) strongly asserts that a gap year is a tool for students to build a “personality package” in order to market themselves for colleges. In either case, this study helps support the idea that many students perceive taking time away from education as a device to reach their goals and the personal fulfillment that comes with obtaining a college degree.

Future researchers still can and should study students’ perceptions of gap years (Heath, 2007), especially in regard to high school adolescents. A larger, more diverse sample, especially from different geographic locations and socioeconomic backgrounds, would allow for conclusions to be drawn that can be generalized to a far wider population.

Additionally, numerous other factors of gap-taking still present themselves as significant variables to consider in future research, even if this study did not analyze them. One such factor is problem behaviors like drug and alcohol use as Messersmith and Schulenberg (2008) suggested. Furthermore, while this study measured parental education and relied on students themselves to accurately measure their economic status, other studies, such as Hearn’s (1992) and Curtis et al.’s (2012) instead opted to use parental socioeconomic status to more accurately measure the

aforementioned factors of gap-taking. Researchers can calculate parental socioeconomic status based on parental occupation, education, and family income, which is information adolescents may not show much interest or understanding in (Avery & Kane, 2004). Moreover, collecting this information in a more structured format, relying on census data or longitudinal studies can increase the accuracy of information and results. Furthermore, as stated by Ripley (2014), future research should consider analyzing the effects that parents have on their children's perceptions of gap years, as previous research has indicated that parents have a strong influence on students' educational pathways and what they value academically as a whole.

### **Statements and Declarations**

#### **Ethical Considerations**

This study received ethical approval from the IRB (approval #0323) on November 3, 2023.

#### **Consent to Participate**

Respondents gave written consent indicated on the online survey form to participate. Researchers anonymized all data.

#### **Consent for Publication**

Not applicable.

#### **Declaration of Conflicting Interest**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, or publication of this article.

#### **Funding Statement**

The author(s) received no financial support for the research, authorship, and/or publication of this article.

#### **Data Availability**

This study's datasets are available from the corresponding author on reasonable request.

References

- Avery, C., & Kane, T. (2004). *Student perceptions of college opportunities. The Boston COACH program*. <https://www.nber.org/system/files/chapters/c10104/c10104.pdf>
- Bachman, J. G., O'Mally, P. M., Schulenberg, J. E., Johnston, L. D., Freedman-Doan, P., & Messersmith, E. E. (2008). *The education-drug use connection: How successes and failures in school relate to adolescent smoking, drinking, drug use, and delinquency*. Erlbaum/Taylor & Francis. <https://doi.org/10.4324/9780203809709>
- Carver, C. S., Lawrence, J. W., & Scheier, M. F. (1996). A control-process perspective on the origins of affect. In A. Tesser (Ed.), *Striving and feeling* (pp. 11–52). Lawrence Erlbaum Associates. <https://doi.org/10.4324/9781315806396>
- Curtis, D., Mlotkowski, P., & Lumsden, M. (2012). *Bridging the gap: Who takes a gap year and why?* <https://files.eric.ed.gov/fulltext/ED533077.pdf>
- Freund, A. M., & Baltes, P. B. (2002). Life-management strategies of selection, optimization, and compensation: Measurement by self-report and construct validity. *Journal of Personality and Social Psychology*, 82(4), 642–662. <https://doi.org/10.1037/0022-3514.82.4.642>
- General Douglas MacArthur Senior High School Data, New York State Education Department (NYSED) data site. (2023). [Data.nysed.gov](https://data.nysed.gov). <https://data.nysed.gov/profile.php?instid=800000049687>
- Heath, S. (2007). Widening the gap: Pre-university gap years and the “economy of experience.” *British Journal of Sociology of Education*, 28(1), 89–103. <https://doi.org/10.1080/01425690600996717>
- Hearn, J. C. (1992). Emerging variations in postsecondary attendance patterns: An investigation of part-time, delayed, and nondegree enrollment. *Research in Higher Education*, 33(6), 657–687. <https://doi.org/10.1007/BF00992053>
- Hossler, D., Schmit, J., Vesper, N. (1999). *Going to college: How social, economic, and educational factors influence the decisions students make*. John Hopkins University Press. <https://doi.org/10.1353/jhe.2013.0007>
- Jones, A. (2004). Review of gap year provision. *DfES*.
- Kao, G., & Tienda, M. (1998). Educational aspirations of minority youth. *American Journal of Education*, 106(3), 349–384. <https://doi.org/10.1086/444188>
- King, A. (2010). Minding the gap? Young people’s accounts of taking a Gap Year as a form of identity work in higher education. *Journal of Youth Studies*, 14(3), 341–357. <https://doi.org/10.1080/13676261.2010.522563>
- Messersmith, E. E., & Schulenberg, J. E. (2008). When can we expect the unexpected? Predicting educational attainment when it differs from previous expectations. *Journal of Social Issues*, 64(1), 195–212. <https://doi.org/10.1111/j.1540-4560.2008.00555.x>
- Messersmith, E. E., & Schulenberg, J. E. (2010). Goal attainment, goal striving, and well-being during the transition to adulthood: A ten-year U.S. national longitudinal study. *New Directions for Child and Adolescent Development*, 2010(130), 27–40. <https://doi.org/10.1002/cd.279>
- Muntz, P. (2000). Going to College (Book Review) (Undetermined). *Journal of College Admission*, 168, 30–31.
- National Center for Education Statistics. (2002). *Education longitudinal study of 2002 parent questionnaire base year* (pp. 17–18). U.S. Department of Education. [https://nces.ed.gov/surveys/els2002/pdf/parentq\\_baseyear.pdf](https://nces.ed.gov/surveys/els2002/pdf/parentq_baseyear.pdf)

- New York State Office of Temporary and Disability Assistance. (n.d.). *School breakfast and lunch programs: OTDA*. New York State Office of Temporary and Disability Assistance. <https://otda.ny.gov/workingfamilies/schoollunch.asp>
- Nieman, M. M. (2013). South African students' perceptions of the role of a gap year in preparing them for higher education. *Africa Education Review*, 10(1), 132–147. <https://doi.org/10.1080/18146627.2013.786880>
- Niu, S., & Tienda, M. (2013). Delayed enrollment and college plans: Is there a postponement penalty? *The Journal of Higher Education*, 84(1), 1–26. <https://doi.org/10.1353/jhe.2013.0007>
- Paulsen, M. B., Hossler, D., Schmit, J., & Vesper, N. (2001). Going to college: How social, economic, and educational factors influence the decisions students make. *The Journal of Higher Education*, 72(3), 383. <https://doi.org/10.2307/2649342>
- Ripley, A. (2014). *The smartest kids in the world and how they got that way*. Simon & Schuster Paperbacks.
- Salmela-Aro, K., & Nurmi, J.-E. (1997). Goal contents, well-being, and life context during transition to university: A longitudinal study. *International Journal of Behavioral Development*, 20(3), 471–491. <https://doi.org/10.1080/016502597385234>
- Sheldon, K. M., & Cooper, M. L. (2008). Goal striving within agentic and communal roles: Separate but functionally similar pathways to enhanced well-being. *Journal of Personality*, 76(3), 415–447. <https://doi.org/10.1111/j.1467-6494.2008.00491.x>
- Smith, A., Ntoumanis, N., & Duda, J. (2007). Goal striving, goal attainment, and well-being: adapting and testing the self-concordance model in sport. *Journal of Sport & Exercise Psychology*, 29(6), 763–782. <https://doi.org/10.1123/jsep.29.6.763>
- Trusty, J. (2000). High educational expectations and low achievement: Stability of educational goals across adolescence. *Journal of Educational Research*, 93, 356–365. <https://doi.org/10.1080/00220670009598730>
- United States Census Bureau. (n.d.). *U.S. Census Bureau QuickFacts: Nassau County, New York*. <https://www.census.gov/quickfacts/fact/table/nassaucountynewyork/LND110210>
- Wiese, B. S. (2007). Successful pursuit of personal goals and subjective well-being. In B. R. Little, K. Salmela-Aro, & S. D. Phillips (Eds.), *Personal project pursuit: Goals, action, and human flourishing* (pp. 301–328). Lawrence Erlbaum Associates Publishers. <https://doi.org/10.4324/9781315089928>

## Appendix A

What is your grade level? (choose one):

- a. 9th (freshman)
- b. 10th (sophomore)
- c. 11th (junior)
- d. 12th (senior)

What is your sex assigned at birth? (choose one)

- a. Male
- b. Female

What is the primary language spoken in your home? (choose one)

- a. English
- b. Not English

I consider my household to be (choose one):

- a. Upper middle class
- b. Middle class
- c. Lower middle class

I qualify for (choose one):

- a. Free school lunch
- b. Cost reduced lunch
- c. Neither

How would you describe your parents' education level? (choose one)

- a. Did not graduate from high school
- b. Only graduated from high school
- c. Graduated from a 2 year trade school or community college
- d. Completed a 4 year college degree
- e. Completed a PhD or master's degree

Have you taken or are you currently taking any Advanced Placement (AP) course? (choose one)

- a. Yes
- b. No

When did you first seriously think about going to college? (choose one)

- a. High school
- b. Middle school
- c. Before middle school

About how many friends that you spend time with plan to go to college? (choose one)

- a. 4 or more
- b. 3 or fewer

Realistically speaking, how far do you think you will go in school? (choose one)

- a. Bachelors (4 year college) degree or higher
- b. Less than Bachelors

Do you know what a "gap year" is? (choose one)

- a. Yes
- b. No

A "gap year," in this study, is a period of 1 to 4 years after high school graduation in which a student does not attend any form of post-secondary education institution (college, university,



trade school, etc.). This period of delayed enrollment is then followed by post-secondary educational studies.

Please indicate how much you agree or disagree with the following statements by checking the box that corresponds with the answer that best represents your feelings.

Statement	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I often feel burnt out overall by school					
A gap year would be an enticing and useful break from schoolwork after high school					
I feel I will be unprepared for college after graduating high school					
I feel I'm not mature enough for college					
A gap year would allow me to become more mature before college					
I feel I'm not independent enough for college					
A gap year would allow me to become more independent before college					
I feel like I will not be able to afford college after graduating high school					
A gap year would allow me to save money to afford college					
A gap year would offer meaningful life experiences					
A gap year would give me an edge over my peers in college and/or later in life					

I feel a gap year would be an interruption of my academic career					
I feel I won't be motivated or ready to resume college education after a gap year					
I feel that a gap year would not offer enough value to be useful or justified for me					

### About the Authors

Oscar DeGus (oscardegusatwork@gmail.com) is a student at General Douglas MacArthur Senior High School in Levittown, New York. He began working on this study in the summer of 2023 and completed it the following year. He will be attending The Stern School of Business in New York University in the fall of 2025, majoring in Actuarial Science. ORCID 0009-0006-5293-7622.

David Friedman (dfriedman@levittownschoools.com), the Science Research Advisor at General Douglas MacArthur High School, has taught students from kindergarten through the college level, is a life-long learner, and takes great pride in his students' success. ORCID 0000-0001-8771-4038.

### Discussion Questions

1. How might the definition of a gap year affect the data collected on the number of students who plan to take one?
2. What was the most significant academic factor that impacted students' perceptions of gap years?
3. How did students' lack of knowledge regarding their household economic status impact the results of this study?
4. What are some of the real-world implications that this study has for future research, colleges and businesses, as well as student mental well-being?

### To Cite this Article

DeGus, O., & Friedman, D. (2024, Fall). High school adolescents' perceptions of gap years as an alternative enrollment option post-graduation. *Journal of Multidisciplinary Research*, 16(2), 85–104.

## Book Review

### Book Details

Yabe, M. (2022). *Deaf rhetoric: An ecology of health communication*. Springer Briefs in Public Health. Springer International Publishing. 80 pp., paperback, ISBN-13: 9783030962449.

### Reviewer

Leah R. Oakes, M.S., University of Tennessee, Knoxville

### Synopsis and Evaluation

Deafness is a generally low incidence disability, however; it poses some particular unique challenges in healthcare settings. While deafness is a disability, it is also a cultural and linguistic minority. The Deaf Community is a highly heterogeneous minority group, and additional layers of marginalization rooted in various oppressive and violent ideologies often exacerbate this. Thus, many structural and systemic barriers in place prevent deaf people from receiving adequate healthcare, if any. This intersection of identity, disability, language, and culture calls for special consideration from healthcare providers and the medical systems within which they work.

While referencing two prominent theoretical frameworks, the Western biomedical model and the social-cultural model of disability, Manako Yabe designed *Deaf Rhetoric: An Ecology of Health Communication* to serve as a guide to effective communication with deaf patients for healthcare providers, medical interpreters, and hospital administrators. Communication, and lack thereof, is often the primary barrier to deaf people receiving adequate medical care. Yabe focuses heavily on this area, primarily discussing the use of American Sign Language, ASL, interpreting services in its many forms.

Advancements in technology have led to an increase in popularity for video remote interpreting, VRI, which the COVID-19 pandemic has since significantly impacted, as other remote options have risen in popularity as well. While there are notable advantages to having an American Sign Language Interpreter available within seconds, this neglects the complexities and pitfalls of VRI. The book consists of five chapters.

Chapter One, *Deaf People and Healthcare Communication*, discusses the principles of disability justice, People-First Language, the different perspectives of deafness, relevant definitions (such as Deaf, deaf, and hard of hearing), myths surrounding deafness, issues of communication in healthcare, strategies for communication, and the intersectionality and culture of patient-healthcare provider communication.

In Chapter Two, *What is an Ecology of Health Communication?*, Yabe proposes a new theoretical framework, the Ecology of Health Communication; this framework aims to analyze and contextualize the various options for communication access for deaf patients, as well as the contexts within which they exist. These analytical dimensions are physical-material, psychological, social, spatial, and temporal – all working together to construct the ecology of health communication.

Chapter Three and Chapter Four focus on perspectives from patients and providers. Both provide insight from shared narratives from those whom healthcare interpreting impacts. Chapter Three, *Deaf and Hard of Hearing Patients' Perspectives*, shares narratives from eight deaf patients. These narratives center around the use of medical interpreters, both VRI and in-person, and their interpreting preferences for critical and non-critical care. In Chapter Four, *Healthcare Professionals' Perspectives*, Yabe shares the perspectives of eight healthcare providers and their experience working with deaf patients and interpreters.

Chapter Five, *Conclusion and Implications*, provides guidance for hospital administrators on the use of VRI and makes recommendations for additional training for providers. This chapter also discusses the influence of finances on the choice of interpreting modality and the subsequent quality of interpreting.

The greatest strength of this book is the time that it was published. The information and guidance provided in the book is incredibly relevant and opportune. As the use of VRI increased, the quality of interpreting has decreased; however, this seems to be largely ignored by hospital administrators and healthcare professionals. With effective communication being a predictor of healthcare outcomes, if we truly want to address disparities and inequities then communication must become a priority. *Deaf Rhetoric: An Ecology of Health Communication* is a relatively easy and quick read. This allows the information to be readily accessible to those who need it most; Yabe reports that there are very few Deaf Studies and Disability Studies curricula available at medical schools, meaning that the information shared here is desperately needed in the field.

As previously mentioned, the Deaf Community is a very diverse and heterogeneous group. With that, there are many deaf people who do not use American Sign Language, or any sign language, and prefer to use spoken language. Alternatively, there is a harrowing number of deaf people who have been subjected to language deprivation and experience extreme difficulties when communicating, regardless of modality. While the challenges these exceptionalities pose are not always caused or solved by interpreters, they are still relevant in the conversation of effective communication in medical settings. While Yabe's focus on those using signed languages is timely and of the essence, this lens is not all inclusive to the communication barriers other deaf people face.

Yabe calls hospital administrators and healthcare providers to action to increase their awareness and improve communication for deaf patients; however, she does not address the role that VRI companies and VRI interpreters fulfill. Many of the experiences shared in *Deaf Rhetoric: An Ecology of Health Communication* discuss the limitations and issues of VRI, including many VRI interpreters not being highly qualified, a multitude of technical issues associated with VRI, and the cultural mediation and advocacy role that many interpreters take on being lost through this model. While this is only one piece of the puzzle at hand, in order to achieve more effective and equitable healthcare communication, VRI personnel must be included in the process.

There is much work to be done to address disparities within healthcare for marginalized groups. Centering those experiencing the inequities firsthand is an excellent step in the right direction. Yabe's work comes at a time when existing curricula are alarmingly limited. Her work suggests that issues of training, awareness, and curriculum – along with attempts to make spending cuts – act within a vicious circle that prevents deaf people from receiving quality communication and healthcare services.

### **In the Author's Own Words**

“Not only cultural conflicts, but also the intersectionality surrounding D/HH patients have been strongly associated with healthcare communication barriers. Intersectionality is defined as the intertwined nature of gender, race, class, ability, sexuality, and other social categories... Meanwhile, the interlocking systems of racism and ableism can create inequality based on culturally specific judgements of race and disability... In other words, D/HH patients encounter communication barriers not only because of ableist attitudes towards deafness, but also due to additional factors such as linguisticism, racism, sexism, transphobia, audism, and ableism” (p. 9).

“Overall, this book emphasizes the value of process and the need to engage with D/HH communities, organizations, and institutions. This is specifically aimed at medical educators, healthcare practitioners, hospital administrators, healthcare professional students, and medical interpreters. Most importantly, healthcare communities must learn how to collaborate with D/HH patients and choose the best practices for improving patient-provider communication in any situation” (p. 52).

### **Reviewer's Details**

Leah R. Oakes is a deaf, disabled, and queer scholar pursuing a doctorate in Deaf Education at the University of Tennessee, Knoxville, where she works as a graduate research and teaching assistant in the Deaf Studies department. She holds degrees in American Sign Language from Kent State University and Deaf Education from the Rochester Institute of Technology. Leah's current research centers on the intersections of sexual health and wellness, disability justice, and queer-positive pedagogy, underpinned by anarchist and harm reduction frameworks. ORCID 0009-0004-8412-3856.

### **To Cite this Review**

Oakes, L. R. (2024, Fall). Review of *Deaf rhetoric: An ecology of health communication*, by M. Yabe. *Journal of Multidisciplinary Research*, 16(2), 105–107.





“Low Tide Maze”  
Point Reyes National Seashore, California  
2023

Photography by Heather Crawford.

Image Copyright © 2023 by Heather Crawford.  
All rights reserved. Used with permission.

## **Journal of Multidisciplinary Research**

### **Index to Volume 16 (2024)**

**Compiled by Raúl Fernández-Calienes**

#### **By Author**

- Bandy, K. (2024). The asynchronous online discussion forum dilemma. *Journal of Multidisciplinary Research*, 16(2), 39–43.
- Bayer, Y. M. (2024, Spring). Review of *The ageing of Aquarius: The hippies of the 60s in their 60s and beyond* by G. Nimrod. *Journal of Multidisciplinary Research*, 16(1), 133–136.
- Brenner, J. W., Metz, S. M., Hofmann, D. M., & Ashbaugh, C. M. (2024, Spring). Correlates and predictors of alcohol-related unintentional injury in collegiate athletes. *Journal of Multidisciplinary Research*, 16(1), 77–87.
- DeGus, O., & Friedman, D. (2024, Fall). High school adolescents' perceptions of gap years as an alternative enrollment option post-graduation. *Journal of Multidisciplinary Research*, 16(2), 85–104.
- Erez, B. (2024, Spring). Review of *Walking a tightrope: The story of a brave mother*, by T. Timor. *Journal of Multidisciplinary Research*, 16(1), 137–138.
- Fernández-Calienes, R. (2024, Fall). *Journal of Multidisciplinary Research: Index to Volume 16 (2024)*. *Journal of Multidisciplinary Research*, 16(2), 109–111.
- Gringarten, H. (2024, Spring). Editorial. *Journal of Multidisciplinary Research*, 16(1), 3.
- Gringarten, H. (2024, Fall). Editorial. *Journal of Multidisciplinary Research*, 16(2), 3.
- Kelly, D., & Psutui, T. (2024, Fall). Alternatives and their role in modern portfolio management. *Journal of Multidisciplinary Research*, 16(2), 57–73.
- Kleeger, J. (2024, Spring). Contracts are “good,” aren’t they? Law as philosophy and the adequacy of consideration. *Journal of Multidisciplinary Research*, 16(1), 5–28.
- MacAskill, A. (2024, Spring). An analysis of “woke” marketing. *Journal of Multidisciplinary Research*, 16(1), 119–126.
- Mantzaris, C., & Fošner, A. (2024, Spring). Germany’s tax revenue and its total administrative cost. *Journal of Multidisciplinary Research*, 16(1), 29–59.
- Mounzer, W., & Stenhoff, D. M. (2024, Spring). Using a self-management strategy to reduce smoking. *Journal of Multidisciplinary Research*, 16(1), 61–75.
- Munin, N., & Efron, Y. (2024, Spring). Dispute resolution in class: How can DR Pedagogies inform Doctrinal Law Classes? *Journal of Multidisciplinary Research*, 16(1), 5–21.
- Oakes, L. R. (2024, Fall). Review of *Deaf rhetoric an ecology of health communication*, by M. Yabe. *Journal of Multidisciplinary Research*, 16(2), 105–107.



- Shire, E., Savitz, R., & Savitz, F. (2024, Spring). An investigation of the determinants of middle school math student motivation and success. *Journal of Multidisciplinary Research*, 16(1), 127–132.
- Spuzic, S., Narayanan, R., Gooding, H., & Abhary, K. (2024, Fall). A contribution to improving clarity in transdisciplinary creation, sharing, and application of knowledge. *Journal of Multidisciplinary Research*, 16(2), 45–56.
- Twiss, P. (2024, Fall). COVID-19 mental health decrease factors. *Journal of Multidisciplinary Research*, 16(2), 75–84.
- Zimmer, C. J. (2024, Spring). Nontraditional strategies to find and retain STEM faculty in higher education. *Journal of Multidisciplinary Research*, 16(1), 89–95.

### **By Title**

- Kelly, D., & Psutui, T. (2024, Fall). **Alternatives** and their role in modern portfolio management. *Journal of Multidisciplinary Research*, 16(2), 57–73.
- MacAskill, A. (2024, Spring). An **analysis** of “woke” marketing. *Journal of Multidisciplinary Research*, 16(1), 119–126.
- Bandy, K. (2024). The **asynchronous** online discussion forum dilemma. *Journal of Multidisciplinary Research*, 16(2), 39–43.
- Kleeger, J. (2024, Spring). **Contracts** are “good,” aren’t they? Law as philosophy and the adequacy of consideration. *Journal of Multidisciplinary Research*, 16(1), 5–28.
- Spuzic, S., Narayanan, R., Gooding, H., & Abhary, K. (2024, Fall). A **contribution** to improving clarity in transdisciplinary creation, sharing, and application of knowledge. *Journal of Multidisciplinary Research*, 16(2), 45–56.
- Brenner, J. W., Metz, S. M., Hofmann, D. M., & Ashbaugh, C. M. (2024, Spring). **Correlates** and predictors of alcohol-related unintentional injury in collegiate athletes. *Journal of Multidisciplinary Research*, 16(1), 77–87.
- Twiss, P. (2024, Fall). **COVID-19** mental health decrease factors. *Journal of Multidisciplinary Research*, 16(2), 75–84.
- Munin, N., & Efron, Y. (2024, Spring). **Dispute** resolution in class: How can DR Pedagogies inform Doctrinal Law Classes? *Journal of Multidisciplinary Research*, 16(1), 5–21.
- Gringarten, H. (2024, Spring). **Editorial**. *Journal of Multidisciplinary Research*, 16(1), 3.
- Gringarten, H. (2024, Fall). **Editorial**. *Journal of Multidisciplinary Research*, 16(2), 3.
- Mantzaris, C., & Fošner, A. (2024, Spring). **Germany’s** tax revenue and its total administrative cost. *Journal of Multidisciplinary Research*, 16(1), 29–59.
- DeGus, O., & Friedman, D. (2024, Fall). **High** school adolescents’ perceptions of gap years as an alternative enrollment option post-graduation. *Journal of Multidisciplinary Research*, 16(2), 85–104.
- Shire, E., Savitz, R., & Savitz, F. (2024, Spring). An **investigation** of the determinants of middle school math student motivation and success. *Journal of Multidisciplinary Research*, 16(1), 127–132.
- Fernández-Calienes, R. (2024, Fall). **Journal** of Multidisciplinary Research: Index to Volume 16 (2024). *Journal of Multidisciplinary Research*, 16(2), 109–111.
- Zimmer, C. J. (2024, Spring). **Nontraditional** strategies to find and retain STEM faculty in higher education. *Journal of Multidisciplinary Research*, 16(1), 89–95.



- Bayer, Y. M. (2024, Spring). **Review of *The ageing of Aquarius: The hippies of the 60s in their 60s and beyond*** by G. Nimrod. *Journal of Multidisciplinary Research*, 16(1), 133–136.
- Oakes, L. R. (2024, Fall). **Review of *Deaf rhetoric an ecology of health communication***, by M. Yabe. *Journal of Multidisciplinary Research*, 16(2), 105–107.
- Erez, B. (2024, Spring). **Review of *Walking a tightrope: The story of a brave mother***, by T. Timor. *Journal of Multidisciplinary Research*, 16(1), 137–138.
- Mounzer, W., & Stenhoff, D. M. (2024, Spring). **Using** a self-management strategy to reduce smoking. *Journal of Multidisciplinary Research*, 16(1), 61–75.

To Cite this Index

- Fernández-Calienes, R. (2024, Fall). Journal of Multidisciplinary Research: Index to Volume 16 (2024). *Journal of Multidisciplinary Research*, 16(2), 109–111.



## About the Journal

### Advertising

For information on advertising in the *Journal of Multidisciplinary Research*, please contact the Editor-in-Chief (hgringarten@stu.edu).

### Archiving

The *Journal of Multidisciplinary Research* is archived in print form in the St. Thomas University Library and in electronic form on the journal's Website (<http://www.jmrpublication.org>); back issues are available at that Website. In the event the journal ceases publication, access to journal content will remain viable through both the Library and the Website.

### Disclaimer

The *Journal of Multidisciplinary Research* publisher, editor-in-chief, managing editor, associate editors, and reviews editor, and the members of the editorial advisory and editorial review committees are not responsible for errors or any consequences arising from the use of information contained in the *Journal of Multidisciplinary Research*; the views and opinions expressed do not necessarily reflect those of the publisher, editor-in-chief, managing editor, associate editors, or reviews editor; neither does the publication of advertisements constitute any endorsement by the publisher, editor-in-chief, managing editor, associate editors, or reviews editor of the products advertised.

### Electronic Submissions

The *Journal of Multidisciplinary Research* accepts electronic submissions.

### Indexing and Listing

The *Journal of Multidisciplinary Research* is indexed in [ProQuest](#), [Cabells](#), [EBSCO](#), [Gale-Cengage Learning](#), [Business History Conference Collective Bibliography \(BHC\)](#), [CiteFactor](#), [Ulrich's](#), [de Gruyter](#) (Germany), [Elektronische Zeitschriftenbibliothek \(EZB\)](#) (Germany), and [European Reference Index for the Humanities and the Social Sciences \(ERIH PLUS\)](#) (Norway) as well as the [Directory of Open Access Journals \(DOAJ\)](#) and the [Directory of Open Access Resources \(ROAD\)](#). It is listed in the [AcademicKeys](#), [Cision Directory](#), [EconPapers](#), [Gaudeamus](#), [Google Scholar](#), [Isis Current Bibliography](#), [JournalSeek](#), [Journals4Free](#), [The Linguist List](#), [MediaFinder](#), [Microsoft Academic](#), [NewJour](#), [Research Papers in Economics \(RePEc\)](#), [ACNP](#) (Italy), [BVB-Bibilotheke Verbund Bayern FAST-Zugang](#) (Germany), [CIRC](#) (Spain), [COPAC](#) (England), [CORE](#) (UK), [CUFTS Journal Database](#) (Canada), [EconBiz](#) (Germany), [Edanz](#) (Japan), [Globethics](#) (Switzerland), [HEC Paris Journal Finder](#) (France), [Library Hub Discoverer](#) (UK), [MIAR](#) (Spain), [Mir@bel](#) (France), [NSD - Norwegian Register](#) (Norway), [PhilPapers](#) (Canada), [REBIUN-CRUE](#) (Spain), [ROAD: Directory of Open Access Scholarly Resources](#) (France), [SUDOC](#) (France), [ZeitschriftenDatenBank \(ZDB\)](#) (Germany), and the [Open University of Hong Kong Electronic Library](#) (Hong Kong). It is accessible via [BASE-Bielefeld Academic Search Engine](#) (Germany), and the [NIST Research Library](#) (National Institute of Standards and Technology, part of the U.S. Department of Commerce).

### **License Statement and Copyright**

Authors publishing in the *Journal of Multidisciplinary Research* may use the following Creative Commons license for their articles: Creative Commons Attribution Non-Commercial No Derivatives license ([CC BY-NC-ND](#)), for which no charge applies. This license allows users to download and share the article for non-commercial purposes, so long as the article is reproduced in the whole without changes, and the original authorship is acknowledged.

### **Open Access Statement**

The *Journal of Multidisciplinary Research* is an open access publication. It does not charge readers or their institutions for access. Our users have the right to read, download, copy, print, search, or link to the full texts of its contents.

### **Peer Review Process**

The *Journal of Multidisciplinary Research* abides by a double-blind peer review process such that the journal does not disclose the identity of the reviewer(s) to the author(s) and does not disclose the identity of the author(s) to the reviewer(s).

### **Permissions and Reprints**

For information on permissions and reprints in relation to the *Journal of Multidisciplinary Research*, please contact the Editor-in-Chief ([hgringarten@stu.edu](mailto:hgringarten@stu.edu)).

### **Privacy Statement**

The *Journal of Multidisciplinary Research* uses the names and e-mail addresses it enters into this journal exclusively for the stated purposes of this journal and will not make these available for any other purpose or to any other party.

### **Publication Frequency**

The *Journal of Multidisciplinary Research* is published two times per year.

### **Sponsorship**

The *Journal of Multidisciplinary Research* publisher is St. Thomas University. The *Journal of Multidisciplinary Research* sponsor is St. Thomas University.

### **Submissions Policies**

The *Journal of Multidisciplinary Research* does not have Article Processing Charges (APCs) or Article Submission Charges (ASCs).

The *Journal of Multidisciplinary Research* takes measures to screen for plagiarism, including software such as TurnItIn.

*Journal of Multidisciplinary Research* content requires the following: (√) Attribution, (√) No Commercial Usage, and (√) No Derivatives.

The *Journal of Multidisciplinary Research* license statement is available [here](#).

*Journal of Multidisciplinary Research* authors retain copyright to their work.

### **To Cite Articles**

To cite from the *Journal of Multidisciplinary Research*, you may use this example:

Dunn, M. W., Dastoor, B., & Sims, R. L. (2012, Spring). Transformational leadership and organizational commitment: A cross-cultural perspective. *Journal of Multidisciplinary Research*, 4(1), 45-59.

## Submissions

### Author Guidelines

The *Journal of Multidisciplinary Research* (JMR) seeks to publish authors who strive to produce original, insightful, interesting, important, and theoretically solid research. Demonstration of a significant “value-added” contribution to a field’s understanding of an issue or topic is crucial to acceptance for publication.

All articles submitted to the JMR must be accessible to a wide-ranging readership. Authors should write manuscripts as simply and concisely as possible, without sacrificing meaningfulness or clarity of exposition.

Manuscripts should be no more than 26, double-spaced pages (justified, one-inch margins, half-inch indentations, in Times New Roman 12-point font, *using active voice*), including an abstract (up to 200 words), keywords (up to seven terms), references (with DOI numbers), discussion questions (three to five), and relevant tables and figures (in their correct position in the text, not separate and not at the end of the manuscript), and appendixes (at the end of the manuscript). At his or her own discretion, the JMR editor-in-chief may allow additional space to papers that make very extensive contributions or that require additional space for data presentation or references.

### Submission Preparation Checklist

When an author submits his or her manuscript to the *Journal of Multidisciplinary Research* for publication consideration, he or she agrees to abide by JMR publication requirements. Specifically, an author must:

- Agree that his or her manuscript is not under review for publication elsewhere and that he or she will not submit it to another publication during the review period at the JMR.
- Attest that the manuscript reports empirical results that have not been published previously. An author, whose manuscript utilizes data reported in any other manuscript, published or not, must inform the editors of these reports at the time of submission.
- Confirm he or she has not submitted the manuscript previously to the JMR for review. He or she may submit a manuscript that previously was released in conference proceedings, but the editors may view this manuscript less favorably.
- Agree that, during the review process, he or she will take down all other versions of submitted manuscripts (e.g., working papers, prior drafts, final drafts) posted on any Web site (e.g., personal, departmental, institutional, university, archival, working series).
- Agree that his or her submission supports the core values of St. Thomas University (<http://www.stu.edu>).
- Adhere to the sixth edition of the *Publication Manual of the American Psychological Association* (APA, 6th edition). At the initial stage, the editors tend to review less favorably those manuscripts that do not conform to APA and may return them to the primary author for revision prior to submission to the full review process.
- Submit the manuscript in a Microsoft Word file from which the author has removed the title page, his or her name, and all author-identifying references.
- Submit the manuscript via e-mail to the JMR Editor-in-Chief (at [hgringarten@stu.edu](mailto:hgringarten@stu.edu)).
- Be willing to review submissions to the *Journal of Multidisciplinary Research* by other authors if the JMR Editor-in-Chief calls upon him or her to do so.

**JMR**

*Journal of Multidisciplinary Research*  
<http://www.jmrpublication.org>

## Editorial Review Board

The [\*Journal of Multidisciplinary Research\*](#) Editorial Review Board consists of selected individuals, expert in their field(s), who review submissions to the JMR and serve for one year.

Jeanne Abrams, Ph.D., *University of Denver, Colorado*  
Itay Basevitch, Ph.D., *Anglia Ruskin University, United Kingdom*  
Kevin Brady, Ph.D., *Rollins College*  
Paul Breman, D.B.A., *Utrecht School of Applied Sciences, The Netherlands*  
Diane N. Capitani, Ph.D., *Northwestern University, Illinois*  
Anirban Chakraborty, Ph.D., *Stanford University, California*  
Marie Thérèse Champagne, Ph.D., *University of West Florida, Florida*  
Michael E. Dillon, Jr., Ph.D., *South College, Tennessee*  
Robert Epling, Ph.D., *St. Thomas University, Florida*  
Claudia E. Fisher, Ph.D., *Lemontree Brand Strategy Consulting, Germany*  
Yair Galily, Ph.D., *Interdisciplinary Center (IDC), Israel*  
Leandro D. Gryngarten, Ph.D., *Emory University, Georgia*  
Arnon Hershkovitz, Ph.D., *Tel Aviv University, Israel*  
Michelle Hough, D.Sc., *Pennsylvania State University, Pennsylvania*  
Lawrence D. Hubbell, Ph.D., *Seattle University, Washington*  
Lloyd Mitchell, M.B.A., C.P.A., *St. Thomas University, Florida*  
Christian Moriarty, Esq., *St. Petersburg College, Florida*  
Kate L. Nolt, Ph.D., *Creighton University, Nebraska*  
Veronica Paz, D.B.A., C.P.A., *Indiana University of Pennsylvania*  
Selen Razon, Ph.D., *West Chester University of Pennsylvania, Pennsylvania*  
Carlos M. Rodríguez Ph.D., *Delaware State University, Dover, Delaware*  
Michelle I. Seelig, Ph.D., *University of Miami, Florida*  
Orna Sharabani-Yosef, Ph.D., *Tel-Aviv University*  
Tsafi Timor, Ph.D., *Kibbutzim College of Education, Israel*  
Hanna Trojanowska, Ph.D., *Siedlce State University, Poland*  
Tseng, Chien-Chi, Ph.D., *University of Florida, Florida*  
Marilena Vecco, Ph.D., *Erasmus University Rotterdam, The Netherlands*  
Margaret Wilkins, Ph.D., *University of Tennessee, Tennessee*

# JMR

*Journal of Multidisciplinary Research*

<http://www.jmrpublication.org>