

# Fall 2021 Reh School of Business Faculty Achievements

I am delighted to present the latest David D. Reh School of Business faculty achievements.

Reh School of Business faculty continue to produce cutting-edge scholarship that unearth critical findings in the world of business. Our faculty are being recognized as thought leaders in their fields; publishing in, and reviewing articles, for the best academic and practitioner journals; participating and presenting their research at academic conferences around the world; sharing their expertise in the media; and translating their knowledge in the classroom to enhance the learning experiences of our students.



I invite you to visit the [Reh School of Business faculty website](#) to learn more about our faculty, their research and teaching interests, and their extraordinary engagements to improve lives.

*Bebonchu atems*

Bebonchu Atems, Ph.D.  
Associate Dean of Faculty Advancement & Achievement  
Professor of Economics and Financial Studies

## **Refereed Journal Articles**

**Carlson, J., Paul, I.** (2022). "[Pick a Card: Price Ranges and Gift Card Choice](#)." *Journal of Retailing and Consumer Services*, 65, 102871.

**Abstract:** Gift cards are wildly popular with consumers. Vast assortments of gift cards are available at many regional and national retail stores (e.g., grocery, convenience, home improvement). The present research examines consumer reactions to price range amounts displayed on gift cards (e.g., \$20-\$100; \$25-\$250). Commonly affixed to gift cards to convey possible purchase loads, price ranges appear to serve as contextual information for a desired purchase load as a gift that can affect beliefs about the recipient's views of the gift card i.e., metaperceptions. Specifically, these metaperceptions tend to be more negative for a gift card displaying a price range when the desired purchase load is the lower bound rather than the upper bound. These beliefs can, in turn, affect gift card choice, but only when social risk is applicable. Four studies provide support for the theory.



**Crichton, R., Farhidi, F., Patel, A., Ellegate, N.** (2022). "[Clearing up the Benefits of a Fossil Fuel Sector Diversified Board: A Climate Change Mitigation Strategy](#)." *Business and Society Review*, 126 (4), 433-453.

**Abstract:** The effects of climate change are far-reaching and widespread. As the issue continues to batter the world, the call for mitigation initiatives is becoming louder. In responding to this call, we take a multidisciplinary approach to examining board diversity as an innovative solution in tackling climate change. Utilizing data from 69 fossil fuel organizations, our findings suggest that increasing female representation and foreign culture representation on the board can effectively reduce greenhouse gas emissions, the main contributor to climate change. In part, this is achieved through responsible leadership and innovation. Our contributions reach beyond traditional board diversity literature, where the benefits of diversity are confined primarily to a discussion of corporate social responsibilities. Instead, we depict the benefits of board diversity as a direct lever in mitigating climate change. We propose that this is through the diversified board's enhanced ability to identify stakeholder needs and, subsequently, conceive of more effective and responsibly innovative solutions.



**Felzensztein, C., Gimmon, E. (2021).** ["The Emergence of Family Entrepreneurship in the Transition Economy of Cuba."](#) *International Journal of Emerging Markets*, forthcoming.

**Abstract:** The goal of this paper is to better understand the emergence of small-scale entrepreneurial firms in the under-researched transition economy of Cuba. Given the scarcity of reliable publically available information and restrictions on private data collection in Cuba, in-depth interviews were conducted with a panel of small-scale entrepreneurs in three different points in time. Evolutions are analyzed over this period. The paper finds that family can overcome institutional constraints by helping the entrepreneur deal with market and social obstacles. Despite the absence of a supportive entrepreneurial ecosystem, these new entrepreneurs and their families have been able to transform longstanding passive attitudes into positive steps to set up new small-scale ventures in a country facing unprecedented internal and external challenges.



**Felzensztein, C., Gimmon, E. (2021).** ["Facilitating Entrepreneurship in the Failing Cuban Economic Model?"](#) *Journal of Entrepreneurship in Emerging Economies*, forthcoming.

**Abstract:** This study aims to understand necessity entrepreneurship in a poor emerging economy, where the supportive entrepreneurial ecosystem is not in place. We surveyed for the first time in 2015 and 2019 small-scale emerging entrepreneurs within the new entrepreneurial ecosystem in Cuba. The results suggest that the entrepreneurial environment has deteriorated and declined over this period. Our study offers new insights into necessity entrepreneurship in challenging contexts under poverty and crisis; and the ways for recovery.



**Feng, Z., Miller, S., Tirtiroglu, D. (2021).** ["Does Debt Management Matter for REIT Returns."](#) *The Journal of Real Estate Finance and Economics*, forthcoming.

**Abstract:** Asset and debt management are two essential managerial tasks in any firm. The traditional view holds that asset management is the primary driver of REIT returns for the following reasons: (1) interest tax shields are not a source of incremental value for REITs and (2) the plain tangibility of real estate assets helps to diminish the financial distress costs of REITs. This paper examines empirically whether debt management also matters for the operating returns (i.e., ROA, ROE,  $\Delta$ ROA or  $\Delta$ ROE) of a portfolio of REITs. Both applying Bennet's (1920) dynamic decomposition method to  $\Delta$ ROA or  $\Delta$ ROE and also defining ROA and ROE under the net income (NI) and the funds from operations (FFO) metrics guide the empirical approach of this paper. Our findings show that the effects of debt management on REITs' operating profitability cannot be ruled out. However, the



direction of these effects appears to be opposite to that of asset management. These results call for renewed and further investigations into the optimal capital structure questions for REITs.

**Huppertz, J.,** Parisi, R., Potolski, A., Tracy, V. (2021). "[Distance to Diagnosing Dermatology Provider as a Predictor of Multiple Melanoma Diagnoses.](#)" *Journal of the American Academy of Dermatology*, forthcoming.



**Abstract:** A national shortage and widening maldistribution of dermatologists can cause patients to postpone or forgo full body skin exams (FBSE) or treatment if they live far from a dermatology clinic ("spatial access"). While prior studies have found associations between melanoma severity and distance to diagnosing provider, the combined effect of age and distance on number of melanomas has not been examined. To determine whether age and distance to diagnosing dermatology provider predict the number of diagnosed melanomas and compliance with follow-up for FBSE. A retrospective review of melanoma patients' medical charts, melanoma pathology reports and follow-up data from 2012-2020. A multi-provider private dermatology practice serving urban, suburban, and rural patient populations. 346 patients whose pathology reports indicated melanoma. The main conclusions are that distance to diagnosing providers is a barrier to access for patients over age 70 whose mobility and comorbidities may hinder access to dermatology care. Furthermore, patients residing farther from the office may be less likely to schedule spot check appointments or FBSEs, thus decreasing the likelihood that a melanoma is caught early, when the lesion is dysplastic nevus (DN) or atypical intraepidermal melanocytic proliferation (AIMP). Training and technology that enable primary care providers to screen and refer seniors living in remote areas may alleviate gaps brought about by dermatologist shortages outside urban locations.

**LaFave, J.,** Balayan, A., Connor, C. (2022). "[The Evolution of Graduate Enrollment Management.](#)" *Strategic Enrollment Management Quarterly*, forthcoming.



**Abstract:** Enrollment management (EM) has been a focus of higher education since the 1970s. There is a large base of empirical research on EM, a coordinated effort to support undergraduate students from admission to graduation that has been widely researched. However, there is limited academic research on graduate enrollment management (GEM). What is missing is grounding GEM in literature and viewing the graduate student lifecycle with a cohesive lens. This article provides an academic foundation for GEM while discussing future research areas and encouraging GEM professionals to adopt a scholar-practitioner lens. The authors lay the foundation for the GEM concept, synthesize related literature, and discuss future research directions.



**Lin, Z.,** Byun, S., Fuller, K. (2021). "[The Costs and Benefits Associated with Inventor CEOs.](#)" *Journal of Corporate Finance*, 71, 102094.

**Abstract:** This paper examines various firm policies that highlight the potential tradeoffs associated with hiring CEOs with hands-on innovation experience. In addition to generating more patents, innovative CEOs also convert those patents into new services and products, as proxied by new trademark registrations. On the other hand, innovative CEOs do not receive higher pay compared to non-innovative CEOs, suggesting that innovative CEOs may receive other nonpecuniary benefits. Furthermore, innovative CEOs invest more in R&D leading to lower efficiency, hold more cash, and utilize less debt. In spite of these costs, it appears that hiring innovative CEO is still optimal for firms. We find that the improvements in corporate governance do not lead to changes in firm policies, suggesting that shareholders are willing to tolerate the potential costs associated with innovative CEOs.

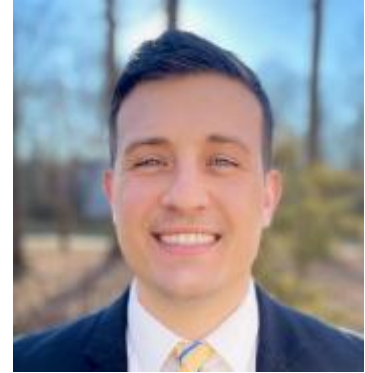


**Madraki, G., Mousavian, S.,** Salmani, Y. (2022). "[A Theoretical Framework to Accelerate Scheduling Improvement Heuristics Using a New Longest Path Algorithm in Perturbed DAGs.](#)" *International Journal of Production Research*, forthcoming.

**Abstract:** Job-shop scheduling problems are complex and still well-studied manufacturing problems. Improvement heuristic algorithms have been proposed to solve the scheduling problems using makespan as their performance measure. All these heuristics iteratively perturb trial schedules by selecting a new schedule from a set of nearby schedules (neighborhood); then, recalculate and compare the makespan until a sufficient schedule is determined. Unlike previous studies, we did not generate a new heuristic or a novel neighborhood calculation. Instead, we proposed a theoretical framework, Algorithm to Visit Affected Node (AVAN), which can be incorporated in qualified heuristics while using their current neighborhood structure to accelerate the recalculation of the makespan in each iteration. We modeled the system by Directed Acyclic Graph (DAG) where the length of the longest path equals the makespan. The scheduling perturbations are represented by adding and deleting edges. AVAN investigates the configuration of scheduling perturbations (added/deleted edges) to find an appropriate starting point to traverse the graph. AVAN is mathematically more efficient than previous longest path algorithms for perturbed DAG. Its time complexity is  $O(\Delta + |\Delta|\log(|\Delta|))$ , where  $|\Delta|$  is the number of affected nodes, and  $|\Delta|$  is the number of incoming and outgoing edges of the altered nodes.



**Paolini, C.,** Shaheen, A., Ciesco, E., Johnson, K., Kuhnen, G., Gartner, G. (2021). "[Interactive, On-Line Visualization Tools to Measure and Drive Equity in COVID-19 Vaccine Administrations.](#)" *Journal of the American Medical Informatics Association*, 8(11):2451-2455.



**Abstract:** Equitable distribution of vaccines is necessary to ensure those at highest risk of illness are protected from COVID-19 (coronavirus disease 2019). Unfortunately, there is significant evidence that vaccines have not been reaching the most vulnerable. At our large hospital system, we created interactive online tools to measure and visualize equitability of vaccine administrations and to help stakeholders identify populations at highest risk within state-designated eligible vaccine groups. Using race, ethnicity, gender, and social vulnerability, we are able to measure and reflect our vaccine administration performance against the communities that we serve. With our visualization tools, stakeholders have been able to target interventions to improve equity in vaccine administrations, including improvements in race, ethnicity, and social vulnerability. We plan to use the data elements incorporated in our electronic health record and data warehouse due to the COVID-19 pandemic to guide further population health efforts at decreasing disparities.

**Paul, I.,** Mohanty, S., Sengupta, R. (2022). "[The Role of Social Virtual World in Increasing Psychological Resilience During the On-Going Covid-19 Pandemic.](#)" *Computers in Human Behavior*, forthcoming.



**Abstract:** The 2020 COVID-19 pandemic has not only impacted the physical health of individuals but the fear and anxiety of contracting the disease has contributed to serious mental issues among people. The current research identifies a novel coping strategy to strengthen individuals' psychological resilience against the pandemic. Two studies showed a significant beneficial effect of representing oneself via avatar in social virtual world (SVW) on the psychological resilience towards contracting COVID-19. The studies showed that this effect is explained by the disembodied (i.e., out-of-body) experience one encounters in the SVW by digitally representing oneself via an avatar, which enables SVW users to project themselves onto a character in a parallel world that is immune to the COVID-19 virus, thus alleviating the anxiety of contracting the virus themselves in the real world. Additionally, it ruled out alternate explanations like escapism and enjoyment. The findings extend the Proteus effect (i.e., individuals behaviorally conform with their avatar's visual/physical appearance) to a more innate feature of the avatar—its imperviousness from the human body's limitations. The results have important implications for health policy makers along with making a strong case for marketing computer-simulated games like SVWs as virtual therapy tools.

**Sacks, M.** (2021). "[Incentives for the Over-Provision of Public Goods](#)" *Journal of Economic Behavior & Organization*, 191, 197-213.



**Abstract:** A wide range of public goods, such as open source software, possess two often-ignored features: (i) excludable and potentially rivalrous contribution benefits (e.g. status seeking) and (ii) nonexcludable and nonrival consumption costs (e.g. adoption costs). I develop a model of the voluntary provision of public goods that incorporates these features. I find that these additional features mitigate the well-known incentive problems, but introduce new ones. Costly consumption lessens the free-rider problem, leading to more efficient provision. Private benefits similarly reduce the free-rider problem, but can lead to over-provision via a negative congestion externality on the supply side. Status-seeking induces an increase in contributions to the benefit of each contributor but imposes a cost on all other consumers and contributors. Efforts to maximize welfare by a community leader or social planner often involve transferring surpluses from consumers to producers.

**Stephenson, A.,** Teitschert, M., Singer, S. (2021). "[Theoretically Speaking: A User's Guide to Theory Exposition in Publishing Health Care Management Research](#)" *The Journal of Health Administration Education*, forthcoming.



**Abstract:** Theory plays an important role in health care management research. It provides a structure for investigating – often complex – phenomena and identifies potential relationships between variables. Theory directs scholars in the determination of meaningful research questions and guides in the selection of appropriate measures and methods. However, while the value of theory is evident, training that illuminates the art and nuance of using theory when preparing manuscripts for publication is far less frequently offered in developmental opportunities than other skills like research methods. This article explains how to counsel PhD students and mentor junior faculty on the appropriate ways to use theory when publishing research in different health care journals. Specifically, the article describes strategic practices and considerations, and common pitfalls for using theory in 1) clinical and health services research journals, 2) health management and policy journals, and 3) management journals.

**Stephenson, A.,** Sullivan, E., Thomas, S., Raj, M., DePuccio, M., Fleuren, B., McAlearney, A. (2021). "[Reconceptualizing Family Caregivers as Part of the Health Care Team](#)" *Journal of Hospital Management and Health Policy*, forthcoming.

**Stephenson, A., Diehl, A., Dzubinski, L. (2022).** [“Cross Industry Comparison of Gender Bias Experienced by Women Leaders”](#) *Personnel Review*, forthcoming.

**Abstract:** This paper compares how women leaders in four US industries – higher education, faith-based non-profits, healthcare, and law – experience 15 aspects of gender bias. The study used convergent mixed methods to collect data from 1,606 participants. It included quantitative assessment of a validated gender bias scale and qualitative content analysis of open-ended responses. Results suggest that, while gender bias is prevalent in all four industries, differences exist. Participants in higher education experienced fewer aspects of gender bias than the other three industries related to male culture, exclusion, self-limited aspirations, lack of sponsorship, and lack of acknowledgement. The faith-based sample reported the highest level of two-person career structure but the lowest levels of queen bee syndrome, workplace harassment, and salary inequality. Healthcare tended towards the middle, reporting higher scores than one industry and lower than another while participants working in law experienced more gender bias than the other three industries pertaining to exclusion and workplace harassment. Healthcare and law were the two industries with the most similar experiences of bias. This research contributes to human resource management (HRM) literature by advancing understanding of how 15 different gender bias variables manifest differently for women leaders in various industry contexts and by providing HRM leaders with practical steps to create equitable organizational cultures.



**Stephenson, A., Sullivan, E., Hoffman, A. (2022).** [“Engaging Physicians In Leadership: Motivations, Challenges, And Identity-Based Considerations”](#) *Journal of Healthcare Management*, forthcoming.

**Abstract:** Physician leadership has been associated with improved patient outcomes, increased provider satisfaction, and decreased physician burnout, as well as more profitable, higher quality healthcare delivery. However, physicians often struggle when assuming leadership positions given the dissonance between the administrative role and the clinical role. Informed by social identity theory, we aimed to identify why physicians lead, how physicians experienced leadership roles, and the challenges they faced during the transition into those roles. We conducted 27 semi-structured interviews with primary care physician leaders between January and April of 2020. Interviews were transcribed and analyzed using the constant comparative method. Four themes developed from the analysis including (1) desire for change, (2) desire for growth, (3) challenges experienced during the transition to a leadership role, and (4) changes to professional identity. The results of this study identify aspects of leadership that are perceived by physicians as attractive and motivating. The findings also reveal challenges that occur during the transition into leadership as well as shifts in





professional identity experienced by physicians. The results can be used by healthcare managers and executives to empower more physicians to take on leadership roles and implement changes that alleviate stresses associated with physicians transitioning into leadership roles.

**Atems, B.,** Blankenau, W. (2021). "[The 'Time-Release', Crime-Reducing Effects of Education Spending.](#)" *Economics Letters*, 209, 110143.

**Abstract:** We analyze the response of violent and property crimes to a shock to government education expenditures. The effects are significant, delayed, and persistent. This is consistent with government education spending working through the human capital channel in a time-release fashion.



**Atems, B.,** Yimga, J. (2021). "[Quantifying the Impact of the COVID-19 Pandemic on US Airline Stock Prices.](#)" *Journal of Air Transport Management*, 97, 102141.

**Abstract:** This paper uses data at the trading day frequency and the method of local projections to quantify the dynamic responses of U.S. airline stock prices to a COVID-19 shock. We show that airline stock prices decline immediately by 0.1 percentage point in response to a 1% COVID-19 shock. In addition, the effect of the shock persists beyond the day on which it occurs, with most airline stock prices falling by as much as 0.6 percentage points after fifteen days. This negative response of airline stock prices to a COVID-19 shock is not explained by a COVID-19-induced increase in airlines' variable costs, but rather by a COVID-19-induced decrease in air travel, which, in turn decreases revenues, profitability, and stock prices of U.S. airlines.



**Atems, B.** (2021). "[The Response of the U.S. Aviation Industry to Demand and Supply Shocks in the Oil and Jet Fuel Markets.](#)" *Transportation Research Interdisciplinary Perspectives*, 11, 100452.

**Abstract:** The article disentangles shocks to the global crude oil and U.S. jet fuel markets into demand and supply shocks that underlie both markets, and then examines the effects of these shocks on the U.S. airline industry. I specify a block-recursive structural vector autoregressive (VAR) model that allows for global crude oil market variables to affect the jet fuel market contemporaneously, but not vice versa. Impulse response functions show that oil supply shocks have no significant impact on oil and jet fuel prices, while aggregate demand and precautionary demand shocks cause oil and jet fuel prices to rise. In addition, my results indicate that jet fuel shocks,



whether demand or supply, have no significant effects on global crude oil prices. On the other hand, jet fuel demand and supply shocks both significantly increase the price of jet fuel. Furthermore, jet fuel demand shocks have positive impacts on the U.S. aviation industry, while the effects of jet fuel supply shocks are generally negative.

**Zhang, Y., Zhang, J. (2021).** "[Catch Them All: Impacts of Location-Based Augmented Reality Mobile Applications on Local Businesses](#)" *Information & Management*, 58 (8), 103550.

**Abstract:** Mobile applications implemented with location-based and augmented reality (LBAR) technologies have become a new trend. They alter the app users' usage patterns, expand their mobility areas, and shape their daily lives. Consequently, local businesses may experience spillover effects in terms of store visits and online reputation. Anecdotal evidence is mixed regarding whether businesses gain from the LBAR apps. There lacks research that examines how the penetration of LBAR apps impacts local businesses and the potential economic value. To fill the gap in the literature, we leverage a natural experiment involving the launch of an LBAR mobile app to examine its business impacts on nearby restaurants' online reputations. We find that, in general, restaurants near the app portals do gain indirect benefits from the entry of the LBAR application in improving their online reputation. This spillover benefit of LBAR applications changes over time, and its internalization depends on the restaurant features, location, and the agglomeration of surrounding businesses. This paper provides theoretical and practical insights into the business impacts of LBAR technologies.



## **Books**

**Belasen, A. (2022).** "[Resilience in Healthcare Leadership: Practical Strategies and Self-Assessment Tools for Identifying Strengths and Weaknesses](#)." Productivity Press; 1st edition

**Book Description:** The book establishes resilience as a critical competency of high-performing leaders. The COVID-19 Pandemic serves as the ultimate test for leadership resiliency, challenging leaders to rethink their business model, and how patient outcomes can be improved.



Resilience in Healthcare Leadership focuses on strategies for building a culture of trust, fostering teamwork, promoting interprofessional cooperation, and improving patient outcomes. It provides executives and professionals with frameworks to critically assess strengths and weaknesses as well as tools to help align individuals, teams, and organizational goals for success.

## **Book Chapters**

**Mahmoodi, F.**, Losbichler, H. (2021). "Global Logistics – New Directions in Supply Chain Management." Sweeney, E., & Waters, D. (eds.), Kogan Page Ltd., 2021, 14-35.

Abstract: Intense global competition, short product life cycles, disruptions in the healthcare system and shortages of critical items due to COVID-19 pandemic, and the need to create shareholder value have resulted in significant interest in supply chain management. More recently, the force and speed of the global downturn due to COVID-19 pandemic has further reinforced the importance of supply chain excellence as a key to unfreeze cash, reduce operating cost and meet rapidly changing customer behavior. Against a backdrop of economic uncertainty and rising supply chain risk, it is more critical than ever to select the supply chain initiatives that result in superior financial performance.



This paper describes the link between supply chain management and financial performance. We first define Economic Value Added (EVA) as the primary financial metric and conduct an analysis of two global companies that are generally perceived to be among the supply chain leaders. We also link supply chain management to financial performance and propose a comprehensive five-step framework to identify supply chain initiatives that create the most shareholder value by utilizing EVA. Finally, we describe the difficulties and pitfalls in creating shareholder value along the supply chain.

## **Grants**

**Mette, J.** (2022). "[The Golden 'SPIRIT' \(Student Price Index for Research Integrated Teaching\)](#)." 2021-2022 Undergraduate Faculty Research Award. Office of the Provost, Clarkson University.

Project Summary: Understanding how US inflation is calculated can be challenging or even "mysterious" in Economics 101. Not only do prices and inflation rates vary between regions, but important disparities exist even within states and localities. This can make it difficult for students to understand inflation numbers and why they matter. Our proposal to create a Clarkson University student price index aims to address this gap and engage students in the research process.



The project offers students the opportunity to apply classroom concepts and sharpen their skills in survey design, data collection, and data processing. We target expenditures on tuition,

housing, groceries, transportation, recreation, internet, medical expenses etc. In the long run, we aim to update the information yearly and monitor inflation patterns across several categories of the student population (freshman vs. senior or greek vs. non-greek housing, etc.).

**Madraki, G.** (2022) "[Mitigating Vaccine Hesitancy on Social Media among the US Users in Health Disparities Communities.](#)" 2021-2022 Undergraduate Faculty Research Award. Office of the Provost, Clarkson University.



**Project Summary:** The COVID-19 pandemic reminded us of the catastrophic impacts of the anti-vax movement on public health. The sharply divided opinions over vaccination around the world are undeniable. Unvaccinated people are more likely to need high-end healthcare services, so vaccine hesitancy is even more serious for health disparity communities. Furthermore, social media exposure/interactions have significant influences on people's decisions, and vaccine uptake decision is not an exception. In fact, vaccination is one of the most critical decisions that has been notably influenced by social media. Social media are designed to expose users to the content/other users matching their beliefs. This creates an echo chamber on social media, intensifies vaccine-polarization, and has radicalized the anti-vax groups more than ever.

The main goal of this project is to mitigate the vaccine hesitancy among health disparities communities by reducing vaccine polarization on social media. First, we identified a sample of pro/anti-vax users on Twitter who are also part of a health disparity community. Then, we modeled the network using graph theory and measured the polarization level of individual users. Next, we proposed intervention scenarios which mitigates polarization, and we applied those scenarios to a simulated network to analyze their impacts.