Research in Review
2023 Edition
2023 METRICS

$2,410,601 Funding
$2,325,451 External funding
$155,552 Tri-Council funding
$183,700 Faculty support for research

QUALITY OF RESEARCH
86% of our publications are in Q1 and Q2 Journals

QUANTITY OF RESEARCH
122 number of pieces published in journals

International Collaboration
70% of our publications are authored with a co-author at an institution outside of Canada

Research Topics Breakdown
Most frequent topics studied in faculty of management publications in 2023

- Business, Management and Accounting: 55.2%
- Economics, Econometrics and Finance: 33.6%
- Social Sciences: 24.0%
- Decision Sciences: 16.0%
- Computer Science: 12.0%
- Engineering: 14.4%
- Environmental Science: 8.0%
- Agricultural and Biological Sciences: 6.4%
- Medicine: 8.8%
- Environmental Science: 8.0%
A Message from our Associate Dean Research

Our Faculty’s vision is a world where talented people from the private, public, and not-for-profit sectors work together to create social and economic value and new possibilities. As researchers, we are among these people. In 2022 we worked hard to uncover new possibilities that contribute to social and economic value, and this is a time to celebrate achievements.

The Research in Review 2023 spans over two organizational structures, where we provided the academic home to the School for Resource and Environmental Studies until June 2023, and continued in a new structure without this group since July 2023. This means that our size and research foci changed over the course of the year.

During the year of transition, when we adopted our new organizational structure, we, just under 80 faculty members, published more than 120 pieces in peer-reviewed journals, 86% of which appeared in journals ranked in the top quartile. We secured approximately $2.3 million in external research funding, and we employed 51 individuals in research positions.

We are proud of the quantity and high academic quality of our work, and equally proud of its importance to society. Our research focuses on important social and community issues. Many of us wrote about sustainability, risk, and risk management in various contexts, for example during crises related to climate, production, or supply chains. Others investigated behaviours of individuals, for example consumers in the marketplace, or users of information. We have also researched how governments as employers and as service providers fare in new world contexts.

Wiesława Dominika Wranik, PhD  
Professor and Associate Dean Research
Research Publications 2023

Notes on what is included in this review:

The report is based on a search in Scopus for authors employed in the Faculty of Management. Only publications with a date of 2023 are included. Some relevant items may not appear in Scopus. Additions were made to this report if identified by individual researchers by April 3, 2024. Some publications are reported in Scopus as 2023 “articles in press” and may end up being assigned to a 2024 issue. Management researchers' names are in bold print. Publications authored by several researchers from Management appear only once under the author who appears first in the list of authors.

Students or trainees are identified by an asterisk next to their name

Hamed Aghakhani


Purpose: In recent years, corporate social responsibility (CSR) has taken on a more prominent role in both large and small businesses because of its significant impact on various aspects of business performance. To date, a growing body of literature has demonstrated the mechanisms whereby CSR practices affect organizational outcomes; however, there has been little research examining how CSR practices contribute to customer loyalty within the pharmacy context. As such, this study aims to explore how CSR practices influence the loyalty of pharmacy customers, particularly in relation to the mediatory effects of customer-company identification (CCI) and customer trust.

Design/methodology/approach: A survey questionnaire was developed and administered to collect the required data from the pharmacy context. The resultant data were subjected to exploratory factor analysis to identify the scale dimensions, followed by multiple regression analysis to test the hypotheses. Findings: Analysis of the results (n = 528) revealed that perceived CSR indirectly impacts loyalty through the mediatory effects of trust and CCI. All hypothesized effects were also confirmed via empirical testing. Originality/value: The findings of this research suggest that not only are CSR activities responsive to societal concerns, but they can also promote customer identification with pharmacies and strengthen customer trust, which can, in turn, lead to long-term customer loyalty.

We show that firms hype up their corporate social responsibility (CSR) narratives during the turn-of-the-year earnings conference calls to project an overly responsible public image of their firms. This previously unexplored phenomenon does not appear to be related to past, current, and future CSR engagements and cannot be explained by observed time-varying firm attributes and unobserved time-invariant firm and CEO attributes. We find that the fourth-quarter CSR narrative hike is more pronounced among firms that are (ex ante) expected to do more corporate good as well as firms embedded in dirty industries, but less prevalent among firms facing elevated product-market threats. Although elevated CSR narrative is associated with positive short-term market reaction and lower near-term stock price crash risk, such behavior tends to reduce financial report readability and leads to lower equity valuation in the longer term. Our analyses suggest that CSR narrative hike at the turn-of-the-year is a pervasive phenomenon in the corporate landscape and may have valuation and governance implications.


This study uses a large sample of international stocks to examine the sources of the benefits of international portfolio diversification. It finds not only that international diversification outperformed industrial diversification over the past 27 years, but also that the gains from international diversification derive primarily from mitigating market, political, and inflation risks. Economic risk appears important for investors giving more weight to smaller countries, while financial risk appears more important to funds limited to large countries. Risks related to the quality of the legal and credit environments seem less important for international diversification.


Using a large sample of stocks from 48 developed and emerging markets over 1995 to 2021, we find evidence that suggests that international diversification is the best risk-reduction tool when all markets are considered. However, after the turn of the millennium, industrial diversification is the best alternative for funds limited to developed markets, especially when they are restricted to a region. Importantly, the benefits of diversification persist through hard times, such as the Asian financial crisis, the IT bubble burst, the global financial crisis, and the COVID-19 pandemic, demonstrating their countercyclicality and proving their value when investors need them the most.
James Barker


As the COVID-19 pandemic unfolded, community pharmacies adapted rapidly to broaden and adjust the services they were providing to patients, while coping with severe pressure on supply chains and constrained social interactions. This study investigates whether these events had an impact on the medication incidents reported by pharmacists. Results indicate that Canadian pharmacies were able to sustain such stress while maintaining comparable safety levels. At the same time, it appears that some risk factors that were either ignored or not meaningful in the past started to be reported, suggesting that community pharmacists are now aware of a larger set of contributing factors that can lead to medication incidents, notably for medication incidents that can lead to harm.


Community pharmacists worldwide operate with the continual risk of errors (Quality Related Events—QREs) occurring in their dispensing processes. Contemporary analysis of community pharmacy QREs tends to concentrate on the outcomes of the error, such as the degree of patient harm, rather than on the risks associated with the triggering of a QRE. Drawing on risk identification and mapping techniques from the information security sector, we conducted a risk mapping exercise of QREs occurring in Canadian community pharmacies as identified in publicly available accident investigations. The findings from the present study identified relationships and patterns between various risk factors, types of errors, and patient outcomes. For example, the risk factors most associated with errors that result in patient fatality were the “sound-alike/look-alike” medication labeling and the dispensing checking and verification processes in the pharmacy. Study findings support the application of risk identification and mapping techniques to community pharmacy risk and QRE mitigation practices and regulations.

Simon Berge


This study analyzed the influence of the producer’s organizational form (individual or cooperative) on the three dimensions (economic, social and environmental) of sustainability in the Plateaux Region of Togo. An innovative approach called Deep Participatory Indicator-Based (DPIB) was used to target the analysis at the producer local level. The environmental sustainability score was above average for individual producers compared to cooperatives. Economic sustainability score is not related to the producer’s organization form. Social sustainability was not dependent on the form of
organization. The analyses led to participatory planning and actions based on three cooperative principles. Actions based on the seventh cooperative principle – Concern for Community - raise awareness among cooperators producers on the importance of carrying out social works, agroecological practices and sustainable agriculture for community members. The actions related to the fifth and sixth cooperative principles – Education, Training & Information and Cooperation among Cooperatives, strengthen the capacities of cooperatives on the need to seek higher quality markets and inform coops in the region about opportunities for combined marketing actions.

Sylvain Charlebois


Promoting local food consumption for economic growth is a priority; however, defining “local” remains challenging. In Nova Scotia, Canada, this pioneering research establishes a comprehensive framework for assessing local food consumption. Employing three data collection methods, our study reveals that, on average, Nova Scotians allocate 31.2% of their food expenditures to locally sourced products, excluding restaurant and take-out spending, as per the provincial guidelines. The participants estimated that, in the previous year, 37.6% of their spending was on local food; this figure was derived from the most effective method among the three. However, the figure was potentially influenced by participant perspective and was prone to overestimation. To enhance accuracy, we propose methodological enhancements. Despite the limitations, the 31.2% baseline offers a substantial foundation for understanding local food patterns in Nova Scotia. It serves as a replicable benchmark for future investigations and guides researchers with similar objectives, thereby establishing a robust research platform.


The COVID-19 pandemic uncovered the weaknesses in the global food system, disrupting food production, processing, distribution, and consumer behaviors. The study seeks to examine the state of recovery in the restaurant operations, changes in supplier relationships, and the likelihood of pivoting off-premise dining options post-COVID-19. Based on primary data from 181 restaurants in Canada, the findings revealed that takeout was the most widely used off-premise dining option by the restaurants in the study before and during the COVID-19 pandemic. The most significant change during the pandemic occurred in the use of curbside pickup and delivery through third-party aggregators. The use of the drive-thru option remained at the pre-pandemic. The pandemic significantly impacted restaurants' sales and traffic levels and permanently closed some restaurant units. As of September 2021, two-thirds of the restaurants reported having recovered more than 50% of full capacity. The nature of supplier relationships during COVID-19 and pre-pandemic firm characteristics (number of restaurant units, business form, and restaurant category) influenced the likelihood of pivoting one or more off-premise dining options post-pandemic. By controlling the
effect of pre-pandemic firm characteristics, the study provides empirical evidence on the state of recovery in restaurant operations and the likelihood of pivoting off-premise dining options postCOVID-19.


Educated consumer food choices not only enhance personal health but can also contribute to environmental, economic, and social well-being, as well as food sustainability. This exploratory study examines Canadian consumers’ perceptions of sustainable and innovative food, along with their sources of information. It uses nationwide survey data and statistical tests (chi-square and Kruskal–Wallis tests) to test differences between different demographic groups. Results show that consumers refer mostly to the ecological aspect of food sustainability in their perceptions and food-buying behavior. Web-based information was a widely consulted source of information about food-related sustainability and innovation, although it ranked low among consumers in terms of trust level. The most trusted sources of information about food sustainability and innovation were mainly institutional—medical professionals and university scientists. Survey results also demonstrate that perceptions of sustainability and trust in sources of information varied in different socio-demographic segments. The current insights can be used to guide policymakers in making informed guidelines and recommendations to inform Canadian consumers about sustainable food consumption practices.


Given the growth and change in Canadian salmon aquaculture in the last several years, there is a need to understand consumer habits on salmon consumption and knowledge and perception of salmon production in Canada. The objective of this study is to better understand current salmon consumption trends and consumer views and opinions on salmon farming production in Canada. Canadian participants completed a survey separated into two different sections: (1) consumption habits and preferences and (2) knowledge and perception of production methods. Quantitative descriptive data was collected through a cross-sectional consumer survey in Canada, which included 30 questions. Total sample size was 10,009 respondents (48% female, 52% male). Participants were randomly selected from the representative of the Caddle omni access panel. A total of 79% of Canadians do eat salmon, of which 10% eat salmon weekly. Baby Boomers (born in 1946–1964) have the highest consumption rate at 84%, while Millennials (born in 1981–1996) have the lowest, at 72%. A total of 49% of Canadians prefer wild salmon but 42% have no preference. A total of 62% want to eat a product produced in a natural habitat. Of those surveyed, 37% believe wild salmon presents a lower risk of contamination, and 29% believe wild salmon to be more nutritious. A total of 21% of Canadians prefer to eat farmed salmon that has been raised on a landbased farm; however, a total of 39% prefer an ocean farm as a method of production. While 38% of Canadians prefer Atlantic salmon, 33% prefer Pacific salmon (Sockeye, Pink, Chinook, and Chum species) and 29% do not have a preference. Only 26% of Canadians were aware that organic salmon existed. A total of 55% of Canadians would be more inclined to buy farmed salmon if it were fed a diet that is environmentally sustainable and nutritious. A total of 54% believe that aquaculture
is a sustainable way to harvest salmon in Canada. Canadians appear to support the sustainable nature of ocean farm production. Nonetheless, our results suggest that 50% of respondents appear to misunderstand what land-based and ocean farm means. Overall, Canadians enjoy salmon, but results indicate consumers are misinformed about method of production and species type indicating a need for improved information accessibility to the public on salmon production and consumption.


Food waste is becoming an increasingly popular topic, and the conversation surrounding the need for “best before” dates is also gaining interest globally. With a few exceptions, there is no requirement for “best before” dates on many food products in many countries. In this article, the links between “best before” dates and food waste, as well as climate implications and consumer implications, will be explored. The article also explores the history of food safety and “best before” dates and the current use of these food labeling practices in Canada, the United States, and the United Kingdom. Based on the limited requirements for “best before” date labeling across several jurisdictions and the implications that accompany high levels of food waste, there is an opportunity to address current policy for food labeling that can address these issues. Further research should look at how policy could be used to create greater awareness of what “best before” or “use by” dates indicate and should consider policy changes to remove labels from certain foods that do not currently require “best before” dates, such as fresh, uncut produce.


A national Canadian survey, completed in October 2021 of 10,019 Canadians, provides detailed insight into the Canadian novel food marketplace. Questions gauged consumer perception, and openness to cultured proteins (CPs) across a range of considerations, juxtaposing Generation Z (those born between 1997 and 2005) with the broader Canadian average. Survey respondents, to a degree, are open to CPs commercialization, while mixed about the environmental and ethical value. CPs companies, regulators, policy-makers and investors need to be aware of the multidimensional aspects of consumer decision-making, backing claims with validated science. Overall value will need to be matched with taste and nutritional claims, built on trust, in Canada, and globally. Whether it is the social ethics of Generation Z that will become the strongest proponents of CPs (or aspirational consumers regardless of their age), market value creation for the emergent sector can think of brand validation, and the public-private motivations in an adaptive science.


Since the 2019 Canada Food Guide was released, there have been concerns raised over the cost of food, with an emphasis on the affordability of nutritious food. In this study, we evaluate the affordability of the 2019 Canada Food Guide in relation to the previous edition from 2007. As a result of the pandemic and other significant world events, many are feeling financial stress as
prices in many areas of life rise, including housing, gas, and food. Our results show that it is more cost-effective, on average, for children and teens to follow the 2019 Canada Food Guide, but more expensive for adults, when compared to the 2007 edition.

Jing (Jenny) Chen


This study develops a game theoretical model with two-competing hardware/software platforms, to examine whether a platform should charge consumers for first-party content, or offer it for free. Four strategies are considered: both platforms charge, both platforms offer the content for free, one platform charges and the other offers the content for free. As the platforms are two-sided, third-party content developers (TDs) can join and provide third-party content to consumers on the platforms. We find that two driving factors, the degree of cross-side network effect (DCNE) and function matching degree of the free version (FMDFV), affect the two platforms’ Nash equilibrium strategies. Unlike the monopolistic platform, who always chooses to charge consumers for first-party content, under a duopoly competition setting either both platforms charge for first-party content, or both platforms offer free first-party content. Interestingly, we find that a prisoner’s dilemma arises when DCNE and FMDFV are both small and when the Nash equilibrium strategy is for both platforms to charge for first-party content. In addition, when both platforms charge for first-party content, a win-win outcome can be achieved for the two platforms and the consumers, if DCNE is moderately large and FMDFV is small. Interestingly, we find that it is unnecessary for a platform to charge a profit-making price to consumers or a profit-making access fee to TDs.


This study aims to explore the impacts of manufacturers’ downstream distribution channels on upstream sourcing strategy and of the business relationship between manufacturers resulting from upstream sourcing transactions on downstream distribution strategy, through investigating the interplay of co-opetition and decentralization. We consider a framework with two manufacturers producing substitutable products. In the upstream component market, one manufacturer needs to source a key component from either a third-party supplier or its competing manufacturer. In the downstream consumer market, each manufacturer sells the end product through either an integrated or a decentralized distribution channel. The two channels engage in a price competition. For a given downstream distribution strategy, we find that even at a higher component price, the manufacturer who purchases the component may have incentive to source from its competitor that has an integrated channel, while having no incentive to choose a decentralized competitor. A key driver behind this contrast is that co-opetition can be substituted by a decentralized channel used by the competitor, which enables the manufacturer who purchases the component to mitigate price competition more efficiently. For a given upstream sourcing strategy, in contrast to the
literature which shows that manufacturers generally prefer downstream decentralization at high competition intensity, we find that integration is always preferred by manufacturers who engage in supplier–buyer cooperation. A key underlying driver is that co-opetition helps the manufacturer who sells the component mitigate price competition more efficiently than decentralization. We also extend our analysis by investigating manufacturers’ decisions on both sourcing and distribution strategies.


We investigate the strategies of an e-commerce platform (EP), selecting a supplier for its store brand and determining whether to provide information that can reduce consumers’ uncertainty about their quality preferences. The EP can choose either a non-competing outside supplier or a competing inside supplier that sells a high-quality brand product through the EP. Consumers have complete knowledge about the qualities of the two products, although they remain uncertain about which product best meets their need. We find that the EP has an incentive to disclose information when the ratio of the cost per unit quality of the inside supplier’s product relative to that of the EP's own-brand product is high, and it prefers the inside supplier when this ratio is low. We identify the EP’s optimal strategy profile. Specifically, when this ratio is low, the EP selects the inside supplier and refrains from disclosing information when the ratio is sufficiently low. However, when the ratio is high, the EP selects the outside supplier and discloses information only if the ratio is sufficiently high. We also find that market competition softens both when the EP selects the inside supplier and when it discloses information.


In the Internet economy, digital platforms have become vital information and business infrastructure and reshaped the competition environment. Online-to-offline (O2O) platforms that link consumers’ online searches with offline consumption through purchases from local physical stores have become popular in the digital era. This paper studies the impact of a service firm’s decisions on product concentration on its performance in a platform-based local market. Informed by the infomediary role of digital platforms and the agglomeration theory, we theorize the roles of customer usage of digital platforms and spatial agglomeration in shaping the relationship between product concentration and firm performance. We look at data from China’s movie theater industry, in which the majority of movie theaters have joined O2O platforms, and we find that theaters’ movie concentrations have a significant positive impact on their revenues. The positive relationship is the weakest when customer usage of O2O platforms is medium and is comparatively stronger when the demand-side usage of O2O platforms is low or high. When spatial agglomeration is higher, the positive relationship is weaker. Theoretical and practical implications of the study are discussed.

We examine price setting and the decision to disclose quality preference-revealing information in a supply chain with two competing manufacturers supplying two quality-differentiated products to a common retailer. Consumers have complete knowledge of product quality but are uncertain about how the quality will match their own preferences. We study who should provide preference-revealing information to help consumers understand their own quality preferences, and how such information disclosure affects horizontal and vertical competitions in the supply chain. We show that the manufacturer with a higher unit quality production cost has a higher incentive to provide such information, and we show how each supply chain member sets its information policy. The role of information releaser will switch from an upstream member (a manufacturer) to the downstream member (the retailer) as the market information level (the consumer’s degree of informativeness before disclosure) increases. Information disclosure softens both horizontal and vertical competitions in the supply chain. We extend our model to examine the case in which the two manufacturers make simultaneous decisions, and the case when a supply chain member incurs a cost for implementing information disclosure.


A manufacturer can improve product quality and a retailer can provide in-store service in order to improve customer satisfaction and manage customer returns in a supply chain. In this paper, we develop a model for a supply chain in which the retailer offers a full-refund customer returns policy, and the customer is heterogeneous in willingness-to-pay for product quality and faces uncertainty as to the fitness of the product. We examine the manufacturer’s optimal quality improvement strategy and the retailer’s optimal in-store service strategy. Our study shows that the optimal customer returns management strategy from the perspective of the supply chain as a whole coincides with the individual interests of both the manufacturer and the retailer. We show that each of the four supply chain strategies (no quality improvement and no in-store service, in-store service but no quality improvement, quality improvement but no in-store service, and both quality improvement and in-store service) can be a dominant supply chain strategy, depending on several factors. These factors include the degree of the increase in product quality and/or the degree of the increase in the likelihood of the customer’s satisfaction due to in-store service, and the relative efficiencies of producing and selling the product with/without the manufacturer’s quality improvement and/or with/without the retailer’s in-store service. We show that when either the manufacturer can flexibly determine the quality improvement level, or the retailer can flexibly adjust in-store service level, or both can decide their respective strategies, the dominant strategy includes both in-store service by the retailer and quality improvement by the manufacturer.


We investigate upstream coopetition and competition in a supply chain in the context of a high-quality brand manufacturer’s strategy on upstream outsourcing and e-commerce platform’s strategy on downstream information disclosure. The high-quality brand manufacturer outsources production and sells through an e-commerce platform, where a low-quality manufacturer also sells. The high-quality manufacturer may outsource to a third manufacturer who produces only the
brand manufacturer’s high-quality product, maintaining a competition relationship with the low-quality manufacturer (competition strategy). The high-quality brand manufacturer also has the option to outsource to the low-quality manufacturer, entering into a co-opetition relationship (coopetition strategy). The consumers have knowledge about the quality of the two products, but they are uncertain about their quality preference. That is, they are not sure which of the two quality-differentiated products available in the market will meet their own needs. Their uncertainty can be eliminated by the e-commerce platform’s disclosure of preference-revealing information. We find that the brand manufacturer prefers the coopetition strategy when the ratio of the two products’ cost-quality efficiencies is very low or moderate. The e-commerce platform has an incentive to disclose preference-revealing information when the ratio of the two products’ cost-quality efficiencies is moderate or high. We show the optimal strategies of the supply chain with the brand manufacturer’s outsourcing strategy and the platform’s information disclosure strategy, and we also extend the discussion to the impacts of several related issues.


Offering lenient returns policies is a common post-sales service strategy that retailers use to ensure customer satisfaction. Some customers, however, abuse these lenient returns policies, which leads to fraudulent returns. In response, retailers take some strategic actions, such as increasing retail prices to offset the loss, or imposing restrictions on otherwise lenient returns policies. This paper argues that customers will have different fairness perceptions to retailers’ strategic actions, which can further influence their shopping behaviors. Our empirical results show that customers preferred more stringent returns policies to counter fraudulent returns and perceived restrictions to be fairer if used. Restrictions targeting perpetrators of fraudulent returns, either monetary or non-monetary, were perceived to be fairer than those applied to all customers. Our findings provide justification and support for retailers to strategically restrict product returns. Managerial insights from our study also help retailers identify effective instruments in the design of customer-friendly returns policies to reduce fraudulent returns.


This article examines the information acquisition strategy of a dual-channel supply chain, in which a manufacturer sells a product both through a retailer and through its own direct channel. Either the manufacturer or the retailer can acquire demand information from a third-party marketing research company. The manufacturer first decides whether or not to acquire such information, and then the retailer decides whether or not to acquire information. This setup implies a signaling game (either the manufacturer or the retailer may have private demand information) with an endogenous information structure. We identify conditions under which neither of the firms will acquire demand information, even when the cost of implementation is negligible. We also show that information acquisition can have a negative impact on the retailer, the supply chain, customers, and society. The manufacturer who acquires information always prefers to share information with the retailer, which benefits the retailer. The retailer who acquires information, however, may not want to share information with the manufacturer. The managerial insight of our paper is that firms that have more
accurate demand data must develop strategies for the appropriate use of that information, both in their own planning and within the context of their dual-channel supply chain.


It is common for sellers to markdown product prices late in a selling season which prompts consumers to strategically manage their purchase timing. Facing consumers’ strategic behaviour, the manufacturer should decide the prices for products carefully to ensure its profit. This paper explores the manufacturer’s optimal pricing decisions in a closed-loop supply chain by considering the customers’ type, the limited number of returns, consumers’ acceptability of the remanufactured products, as well as the discounting rate of consumers’ perceived value for a delayed purchase. The results show that the manufacturer’s retailing plan and the optimal prices depend on the unit production cost of the new and remanufactured products. In general, the consumer’s strategic behaviour hurts the manufacturer’s profit. When consumers are strategic, the manufacturer reduces the selling price of the new product and it is less likely to engage in remanufacturing when the unit production cost of the new product is high as compared to the case of myopic customers. The numerical experiments provide additional implications and show that the manufacturer can take some simple counter-measure strategies to react to either the underestimation or overestimation of the expected price by the consumer.


The retailer, who is closer to customers, usually has more information on demand than its manufacturer does. This paper focuses on a manufacturer’s information acquisition strategy in a supply chain, and the design of the first-best contract to achieve a win-win for the manufacturer and its retailer. We consider a manufacturer encroachment supply chain in which the manufacturer sells products both directly to the consumer and indirectly through a retailer. The retailer has private demand information while the manufacturer has the option of acquiring demand information. The manufacturer sets the retail price in its direct channel, and the retailer sets the retail price in the retail channel. We consider the two retail price leadership cases, either the manufacturer decides the retail price first or the retailer decides the retail price first. We find that the manufacturer can be hurt by acquiring information, even when the cost is negligible, because competition between the two channels is intensified. Moreover, while one might expect that the retailer is better off from having more information, we show that the retailer can in fact benefit when the manufacturer acquires information. Lastly, we find that the retailer may be worse off from being the retail price leader when the manufacturer acquires demand information, and price competition can be intensified if more customers prefer the direct channel (indirect channel) when the manufacturer (the retailer) acts as the price leader.

Platforms are giants in today's operations. Companies like Amazon and eBay are huge enterprises which belong to top enterprises in the world. In this article, we discuss platform supply chain innovations in the blockchain era. We first search the literature and identify the level of popularity of the topic over the past years. Next, we review some closely related studies in the literature and introduce the featured papers in this IJPR special issue. After that, we identify research gaps, present the ABCDE framework and propose a future research agenda.


We examine how retail pricing leadership affects a manufacturer’s encroachment decision and how manufacturer encroachment affects its retailer’s profitability. When a manufacturer encroaches on the retail market by introducing a direct channel, both the manufacturer and its existing retailer need to set retail prices for their own channels. In setting the retail prices, either the manufacturer or the retailer may be the first mover, or the two may set prices simultaneously. We show that retail pricing leadership significantly affects the encroachment decision if the manufacturer has a selling cost disadvantage in the direct channel. If the manufacturer can lead by setting its direct channel selling price first, it is more likely to encroach, and will do so as long as the degree of consumer acceptance of the direct channel is larger than 1/2. Otherwise, the manufacturer is equally likely to encroach if the retailer sets the retail price first or if they set the prices simultaneously, and the encroachment decision depends on the degree of consumer acceptance of the direct channel and the direct selling cost. Interestingly, when the manufacturer sets its direct selling price before or simultaneously with the retailer, it launches the direct channel to create a threat to the retailer, while when the retailer has first-mover advantage, the manufacturer may directly sell to consumers.


We examine the manufacturer’s encroachment strategy in the supply chain in the presence of the retailer’s in-store service. The manufacturer has the option of encroachment with a direct channel, and the retailer has the option of providing in-store service. If the retailer decides to offer service, it sets the service level. We show that in the presence of in-store service, the manufacturer is less likely to encroach on the retail market than in the absence of in-store service. The retailer always prefers to provide in-store service. If the manufacturer decides to encroach, it will strategically use its direct channel with no sales as a threat to the retailer, independent of whether or not the retailer provides in-store service. The retailer can be better off with manufacturer encroachment, but it can be worse off when consumer sensitivity to in-store service is very low. We show that the retailer can strategically employ in-store service to deter the manufacturer’s encroachment when the consumer sensitivity to in-store service is sufficiently high.


We investigate whether and when a retailer who sells two quality differentiated products supplied by two manufacturers should reveal product fit information to help consumers find a product that
better fits their needs. We show that the retailer’s optimal information strategy depends on the consumer’s unit misfit cost and production efficiencies of both manufacturers. The retailer should reveal product fit information when the ratio of the efficiencies of the two manufacturers is sufficiently low, or the consumer’s unit misfit cost is sufficiently high. The retailer is less likely to benefit from revealing product fit information when the consumer’s unit misfit cost is either low or very high. Two mechanisms, margin-enhancing (driving the efficient manufacturer to reduce the wholesale price) and market-targeting (setting higher retail prices for both products), that the retailer can benefit from revealing product fit information are discussed, and the associated conditions are identified. Our findings suggest that the inefficient manufacturer is always better off when the retailer reveals fit information, but the efficient manufacturer may suffer. A win-win-win for all supply chain members can be achieved under certain conditions.


Extended warranties are widely adopted and accepted in the marketplace by manufacturers and retailers as it helps to enhance the customers’ post-sale satisfaction. In closed-loop supply chains, the extended warranty not only generates profit for the manufacturer, but also provides warranty returns of the new products for remanufacturing. In this paper, a two-period model is developed and optimal pricing strategies for the extended warranties are derived. We compare the optimal pricing and retailing strategies of the extended warranties for remanufactured and new products offered by the manufacturer with and without the retailer’s own extended warranty while considering the competition between the manufacturer and the retailer for the extended warranty of new products. We find that the introduction of the retailer’s extended warranty does not always hurt the manufacturer’s profit. Numerical analyses also show that there exists an optimal extended warranty length for the manufacturer that maximises its profit. Moreover, we show that the retailer cannot extract more profit by increasing the length of its own extended warranty.


We consider a duopoly in which a premium firm (Firm 1) competes with a regular firm (Firm 2). They launch a new fashion product, adopting one of two types of innovation, qualitative or nonqualitative, which offer different levels of market acceptance and uncertainty. We consider two groups of fashion consumers, snobs and conformists (defined by preference for exclusivity or conformity). We first examine the case in which the premium firm commits to entering the market first and chooses its type of innovation, and then the regular firm decides on market-entry timing and innovation type. The price game and the strategy interaction between the two firms are examined. We show that consumers’ exclusivity and conformity positively impact the optimal decisions of the two firms when the initial market share of snobs is large. When the market share loss due to late entry is sufficiently high, Firm 1 may prefer a non-qualitative innovation under certain identified conditions; otherwise, it always prefers a qualitative innovation. Firm 2 always benefits from Firm 1’s choice of qualitative rather than non-qualitative innovation. We further discuss the strategy interaction when the premium firm commits to entering the market late.
Anika Cloutier


Understanding the causes and consequences of varying mental health experiences in the workplace has gained significant research attention, yet little is known about the assumptions people hold about mental health at work, especially with regard to the expectations people may have of their leaders’ mental health. Given people tend to romanticize organizational leaders and have expectations regarding prototypical leader attributes, we consider whether people also hold expectations of leaders’ mental health. Drawing on implicit leadership theories, we propose that people will expect leaders experience better mental health compared to those occupying other organizational roles (e.g., subordinates). Using mixed methods, Study 1 (n = 85) showed that people expect that those in leadership roles enjoy higher well-being and experience less mental illness than those in non-leadership roles. Using vignettes in which an employee’s health was manipulated, Study 2 (n = 200) demonstrated that mental illness is incongruent with leadership prototypes. Using vignettes in which organizational role was manipulated, Study 3 (n = 104) showed that compared to subordinates, leaders are perceived as having more job resources and demands, but people expect that it is leaders’ greater access to organizational resources that facilitates their well-being and inhibits mental illness. These findings extend the occupational mental health and leadership literatures by identifying a novel attribute upon which leaders are evaluated. We conclude by considering the consequences of leader mental health expectations for organizational decision-makers, leaders, and employees aspiring to lead.


Researchers in the environmental studies and sciences play a critical role in influencing real-world decision-making and policies. However, interference during research and sharing of results has been documented in Canada and around the world. Further, research has shown that workers from marginalized social identity(s) experience discrimination in the workplace. Whether interference in research is related to social identity has never been examined. Using a mixed-methods design, we surveyed 741 environmental researchers in Canada to understand the relationship between social identity (gender, disability status, 2SLGBTQI+ status, race, and perception of racial identity) and reported experiences of interference. Results found that researchers with marginalized identities experienced worse outcomes across 11 of the 25 quantitative measures. For example, most marginalized groups experienced significantly greater fear of misrepresentation by media and (or) fear of negative career consequences due to public commentary, and racialized and disabled persons reported greater external interference in their work (e.g., from management and workplace policy). Given these findings, we express concern that the experience of interference in research can (1) threaten the personal well-being of marginalized researchers, (2) limit the representativeness of information disseminated, thereby impacting environmental decisionmaking
and policy, and (3) contribute to inequities in representativeness of marginalized researchers in environmental sciences in Canada.


When researchers are sufficiently resourced to conduct research and communicate their findings, the knowledge produced can benefit the environment and society through policy. However, interference with the research process and its subsequent knowledge mobilization (“interference in science”) has been observed in several countries, particularly for environmental researchers. Using a mixed-methods approach, we surveyed environmental researchers in Canada (n = 741) to investigate the perceived prevalence, source, and effects of interference and considered whether these perceptions differ by region, career stage, research area, and membership in any scientific society. Although over half of researchers were not restricted from speaking to the media (54%), and most had never been asked to make “undue modifications” to their work (84%), the vast majority (92%) reported at least some degree of interference in their work during their careers. Consequences of interference were more prevalent among early-career researchers and included negative impacts on job satisfaction, mental health, and undue modification to work leading to inaccurate or incomplete science communication. Although environmental researchers in Canada deem themselves overall better able to conduct and communicate their work than under previous federal governments, reports of ongoing political interference remain concerning. We recommend increased support for researchers and further investigations into interference.


Organizations are increasingly embracing the idea that employees’ mental health matters. To achieve the benefits associated with a mentally healthy workforce, many organizations have turned to their leaders. Those in leadership roles are increasingly being asked to consider, gauge, monitor, support, maintain and even improve the mental health of their employees. Though leaders play an important role in their employees’ mental health, assuming responsibility for others’ mental health could tax leaders’ own mental health, ironically, especially those leaders who are sensitive to the many needs of their followers. To integrate what is known about leaders’ mental health, and advance our knowledge of this important organizational issue, we organize our chapter around answering two main questions: (1) What predicts leaders’ mental health; and (2) What are the consequences of leaders’ mental health. Within each of these sections, we highlight and summarize what is known about the topic, and what questions remain to be answered. We conclude by discussing possible interventions both for leaders and organizations.
Scott Comber


Public health is tasked with addressing the urgent global priority of promoting the health and human rights of adults engaged in sex work and research is critical to support this endeavor. ‘What’ is studied, ‘how’ research is done, and ‘who’ is centered in this research is reflected in how research funding is allocated. In this article, we interrogate funding allocation for sex work-related health research in Canada. Drawing on critical perspectives aimed at illustrating how stigma operates in society, we examine operating grants ($N=64$) awarded by the federal health research funding agency between 2003 and 2020. We find that sex workers’ health is problematized disproportionately in a street marketplace context that centers on HIV and sexually transmitted infections. Limited work attends to the socio-structural context of sex work and instead perpetuates stigmatizing narratives about sex work. Public health intervention studies are rare, presenting a barrier for implementing and evaluating evidence-based health promotion strategies. Notably, the research projects were conducted by a small number of highly networked, geographically clustered researchers, illustrating gaps in research that considers the complexity of sex work. We propose that it is essential to consider funding as a process that may be limiting the range of health issues being addressed and privileging a small community of researchers, which can inadvertently serve to worsen health inequities among some sex work communities. Researchers and funding bodies may draw on this analysis to inform a research agenda that meaningfully supports the health, safety, and well-being of sex workers in Canada and globally.

Colin Conrad


Virtual influencers (VI) are on the rise on Instagram, and companies increasingly cooperate with them for marketing campaigns. This has motivated an increasing number of studies, which investigate our perceptions of these influencers. Most studies propose that VI are often rated lower in perceived trust and higher in uncanniness. Yet, we still lack a deeper understanding as to why this is the case. We conduct 2 studies: 1) a questionnaire with 150 participants to get the general perception for the included influencers, and 2) an electroencephalography (EEG) study to get insights into the underlying neural mechanisms of influencer perception. Our results support findings from related works regarding lower trust and higher uncanniness associated with VI. Interestingly, the EEG components N400 and LPP did not modulate perceived trust, but rather
perceived humanness, uncanniness, and intentions to follow recommendations. This provides a fruitful beginning for future research on virtual humans.


The Covid-19 pandemic has caused a widespread disruption to the way that we work. One of its lasting consequences will be the ubiquity of remote work. The effective use of collaboration tools is therefore a critical factor for information systems (IS) research when design the workplaces of the future. We theorize that social presence and workplace ergonomics control are important predictors of perceived performance. Moreover, we investigate how different factors (i.e., collaboration tool efficacy, mode of work, and number of meetings) influence social presence. Using survey data (N = 389), we provide evidence that workplace ergonomics control and social presence are indeed important for perceived performance. Surprisingly, we observe that only collaborative platform efficacy has a significant impact on social presence, and that neither the number of meetings nor the modality were significant factors. Based upon these results, we derive implications for theory and practice.

Léo-Paul Dana


Entrepreneurs use their innovative mindset to change societies. They take various actions to create value and ensure the socio-economic development of societies. Besides, SME entrepreneurs have to consider SME and entrepreneurship related policies simultaneously while acting in any context. Then, the context, in general, and the culture, more specifically, could play a vital role in their survival and success. Although the cultural factors have been widely studied in entrepreneurship research, this domain has remained overlooked while studying SME entrepreneurship. Therefore, this chapter focuses on how culture and entrepreneurial opportunities are investigated in SME entrepreneurship research. The authors conducted a systematic literature review that includes publications indexed in Scopus between 1995 and 2021. Thus, general trends are discussed, and the chapter provides a big picture for those interested in researching this area. Findings revealed that most publications have implicitly paid attention to this issue despite its importance, and culture has been used as a control variable or a general measure to categorize the findings. Finally, it is noteworthy that future researchers could focus on opening the black box of culture and its relationships with SME entrepreneurship instead of considering it purely as a contextual factor.

This study examines the impact of volatility on the returns of nine National Stock Exchange (NSE) indices before, during, and after the COVID-19 pandemic. The study employed generalized autoregressive conditional heteroskedasticity (GARCH) modelling to analyse investor risk and the impact of volatility on returns. The study makes several contributions to the existing literature. First, it uses advanced volatility forecasting models, such as ARCH and GARCH, to improve volatility estimates and anticipate future volatility. Second, it enhances the analysis of index return volatility. The study found that the COVID-19 period outperformed the pre-COVID-19 and overall periods. Since the Nifty Realty Index is the most volatile, Nifty Bank, Metal, and Information Technology (IT) investors reaped greater returns during COVID-19 than before. The study provides a comprehensive review of the volatility and risk of nine NSE indices. Volatility forecasting techniques can help investors to understand index volatility and mitigate risk while navigating these dynamic indices.


Transformational entrepreneurship (TE) has become a prevalent mind-set to survive societal, ecological and economic sustainability factors, particularly in emerging economies. Interestingly, different types of digital platforms (DPS) (i.e., transaction, innovation and integration) have assisted in this transformation. Although the implementation of DPSs by small and medium-sized enterprises (SMEs) has been easing this transition process, several boundary conditions persist, and solutions are in demand. This research aims to investigate the main boundary conditions to DP execution by SMEs towards TE in emerging countries similar to Iran. Indisputably, this study contributes to providing in-depth qualitative and quantitative insights into level-based interactions between such barriers to TE diffusion among Iranian SMEs. In this regard, a mixed-method approach has been employed while extracting the list of DP boundary conditions via a systematic literature review. Then, in the quantitative section, a multi-layer decision-making approach consisting of Delphi, interpretive structural modelling (ISM), and matrix-based multiplication applied to a classification (MICMAC) has been applied to screen for the most important boundary conditions to TE, analyse the level-based interactions between the finalised boundary conditions and determine the importance and role of DP boundary conditions. To consider the uncertainty of the socioeconomic environment in emerging countries and to include the intuition and hesitation of the entrepreneurs in the analytical section, intuitionistic fuzzy sets were considered, and a novel IF-Delphi-ISM-MICMAC approach embedded with the multi-scenario analysis was performed. In either scenario, obstacles associated with extant laws and low governmental supportive policies, inconsistency between the technical requirements of the business network and DPSs' features, and low accessibility of digital technologies were the first-level boundary conditions.


The intricate relationship between financial fraud and credit risk, and their combined impact on banking stability, is a vital and under-researched aspect of financial system integrity. To fill this knowledge gap, this study embarked on a thorough bibliometric analysis of the field, utilizing 2790 documents from various sources, including 1853 articles, 504 books, and 177 reviews, spanning
the years 1990 to 2023. Utilizing advanced tools, like Biblioshiny and VOSviewer, this study illuminated key geographical, thematic, and intellectual trends, shedding light on an annual growth rate of 13.43% in the related literature and an average citation per document of 28.29. This detailed analysis offered valuable insights into the current research landscape, emphasizing areas such as author collaboration, with 20.32% international co-authorships, and the prevalence of single-authored documents, at 1100. Despite the existing body of research, the interconnected dynamics between financial fraud and credit risk and their implications for banking stability remain underexplored. Therefore, this study sought to unravel this complex relationship and examine its effects at both the micro (individual banks) and macro (banking sector and wider economy) levels. The findings carry significant practical implications, informing policy development, shaping risk management strategies, and contributing to regulatory measures. Despite its limitations, including the potential transformation of identified trends due to evolving financial systems and financial crimes, this study represents a significant contribution to scholarly discourse in the field. It lays the groundwork for future research and facilitates a more secure and resilient banking sector, reflecting the data-driven insights obtained from the research.


This introduces the reader to the Great Reset of management and organization theory. Concepts are discussed and six cases are presented, provoking thought, debate, and dialogue for or against a Great Reset of management and organization theory. We conclude that management and organisation theorists might rather study than advocate or co-perform resets great or small that aim at privileging this development goal or that minority over others.


Family entrepreneurship benefits women because of their economic, family, and social needs. But, as rural women, it is not much easy for them to maintain their family entrepreneurship successfully. Thus, this paper aims to explore the main challenges faced by rural women entrepreneurs in Bangladesh to survive their family entrepreneurship. Design/methodology/approach: This study is qualitative in nature, based on narrative inquiry. The purposive sampling technique was used as a part of a non-probability sampling method to collect the data from rural women entrepreneurs from three districts (Khulna, Shatkhira, and Sylhet) in Bangladesh engaged in family entrepreneurship. No new information was found after collecting the data from seven (07) respondents; thus, they were chosen as the final sample size. Findings: The findings show that rural women entrepreneurs faced primarily social and cultural, financial, and skill-related challenges, though they face other challenges to survive their family entrepreneurship. The attitude and perception of society toward women and their roles are at the root of social and cultural barriers. Researchers also found that financial challenges have a colossal impact on rural women and the other problem. Practical implications: Although entrepreneurial activities are essential for socio-economic development in these developing countries, this research adds to the existing information by highlighting the main challenges that rural women face when they want to be business owners and entrepreneurs.
Originality/value: Research on rural women entrepreneurship in Bangladesh is limited and new. This study can provide an overview of the challenges faced by the rural women entrepreneurs and provide them with a blueprint for the development of women entrepreneurs in developing countries.


Entrepreneurship is the readiness and ability of an organization, primarily a new business, to develop, organize, and conduct its business to make a profit despite uncertainties. Social commerce (s-commerce) assists consumers to buy products online. However, few studies have investigated the influence of entrepreneurship and online platform capability on consumers’ online purchase decisions. Academicians, researchers, and practitioners are also increasingly interested in understanding how the s-commerce environment influences entrepreneurship and online purchase decisions. Against this background, this study set out to examine this phenomenon.

Using information adoption models and contagion theory as well as the input from the literature review, a theoretical model was developed. Such a model was tested with a factor-based PLS-SEM approach by analyzing the responses of 342 respondents. The results find that electronic WOM (eWOM) credibility, predicted by online e-WOM content and platform credibility, and impacted by online reputation, could significantly influence consumers’ online purchase decisions. The study also finds that both positive and negative valance of eWOM as well as entrepreneurship significantly influence eWOM credibility, which in turn positively influences consumers’ purchase decisions when using online platforms.


Studies on the impact of group–based financing on women entrepreneurs in the developing world are underrepresented in entrepreneurship research. With this exploratory study, we focus on women entrepreneurship from a community financing perspective to account for the underlying mechanisms of a community financing scheme and its impact on women entrepreneurs in the developing world. Data generated by interviewing 75 women entrepreneurs in Nigeria's gendered financial markets revealed that ‘Ajo’, —a community financing scheme shaped their entrepreneurial journeys, including their social structures. In their context, an overlay of prosocial acts of reciprocity, solidarity, collectivism, camaraderie, and trust underpinned how they pooled and shared financial resources. These findings contribute to our understanding of how women entrepreneurs engaged and interacted with a community financing scheme in their endeavours to promote their businesses in financial markets where gender biases existed. Such an understanding holds academic, policy, and social implications.

Although informal entrepreneurship has attracted attention from entrepreneurship scholars, it remains under-theorized. This systematic review critically analyses, evaluates and integrates data on informal entrepreneurship gathered from studies published in eight (8) leading entrepreneurship journals. Although this form of entrepreneurship is practiced across the globe, it is generally perceived as an activity occurring in the peripheries of mainstream economics and inferior to formal entrepreneurship. This review develops essential knowledge for entrepreneurship research by theorizing informal entrepreneurship as a potent process in business formation and it establishes a future research agenda.


This research investigates the dynamic interplay between financial technology, information and communication technology, energy consumption, and economic growth on environmental sustainability within Emerging and Growth-Leading Economies (EAGLEs) from 2005 to 2020. Utilizing advanced econometric techniques, such as Fully Modified Least Squares (FMOLS) and Vector Autoregressive Error Correction Model (VECM), the investigation scrutinizes the hypothesized relationships among these variables. Panel unit root tests were deployed to assess stationarity, while panel least squares methodology was employed to determine the presence of co-integration among the variables under study. The analysis reveals that internet usage, GDP, and renewable energy consumption exhibit a notable influence in diminishing CO2 emissions within EAGLE economies. Additionally, the findings substantiate the existence of long-term causality originating from these variables and impacting CO2 emissions. Conversely, the role of ATM networks in CO2 emissions remains ambiguous, implying that financial technology’s influence on environmental sustainability is inconclusive. Consequently, the research posits that environmental sustainability in EAGLE economies is chiefly determined by factors such as internet usage, economic expansion, and renewable energy consumption, with financial technology demonstrating no discernable impact. In light of these findings, the study advocates for the reevaluation and adaptation of existing policies and strategies to account for shifting climatic conditions. By doing so, decision-makers can better align their efforts with the pursuit of environmental sustainability in the context of rapidly evolving economies.


Women's economic empowerment (WEE) has emerged as a key component at national and international policy-making agendas. The purpose of this paper is to examine and validate the antecedents of WEE for urban working women. Design/methodology/approach: This study used a descriptive and exploratory research design. A total of 286 responses from women working in the formal sector of Delhi-NCR were collected through self-administered questionnaires on a five-point Likert scale using non-probability quota sampling technique. The sample was controlled for the employment sector, that is, healthcare, education and information technology. Exploratory factor analysis has been performed in the first step to test the data's dimensionality with the goal of producing a set of items that reflect the meaning of the relative construct. Thereafter, confirmatory factor analysis has been used for data analysis. Findings: Digital banking usage (DBU) has been
identified as the most significant contributor to WEE. Practical implications: Besides digital banking, government support has also emerged as a key indicator of WEE, necessitating a government policy review to improve WEE. Research findings indicate that, if WEE initiatives are to reach their full potential, they must individually address the extracted factors. This study offers a new framework for understanding and enhancing WEE for urban working women in India. Originality/value: To the best of the authors’ knowledge, this study is the first of its kind to use factor analysis to explore the multi-dimensionality of WEE using the novel dimensions of DBU, women’s agency and government support, in addition to the established variables of financial literacy, social norms and workplace human resource policies.


Business plan competitions (BPCs) are opportunities for nascent entrepreneurs to showcase their business ideas and obtain resources to fund their entrepreneurial future. They are also an important tool for policymakers and higher education institutions to stimulate entrepreneurial activity and support new entrepreneurial ventures from conceptual and financial standpoints. Academic research has kept pace with the rising interest in BPCs over the past decades, especially regarding their implications for entrepreneurial education. Literature on BPCs has grown slowly but steadily over the years, offering important insights that entrepreneurship scholars must collectively evaluate to inform theory and practice. Yet, no attempt has been made to perform a systematic review and synthesis of BPC literature. Therefore, to highlight emerging trends and draw pathways to future research, the authors adopted a systematic approach to synthesize the literature on BPCs. The authors performed a systematic literature review on 58 articles on BPCs. Several themes emerge from the BPC literature, including BPCs investigated as prime opportunities to develop entrepreneurial education, the effects of BPC participation on future entrepreneurial activity, and several attempts to frame an ideal BPC blueprint for future contests. However, several research gaps emerge, especially regarding the lack of theoretical underpinnings in the literature stream and the predominance of exploratory research. This paper provides guidance for practice by presenting a roadmap for future research on BPCs drawing from the sample reviewed. From a theoretical perspective, the study offers several prompts for further research on the topic through a concept map and a structured research agenda.


This study explores the effect of internal branding on organisational financial performance and brand loyalty with the mediating role of psychological empowerment. Design/methodology/approach: The data gathered from 200 Pasargad insurance employees in Iran were analysed. Structural equation modelling and R were used to evaluate the model. Financial performance was measured by four concepts (ROI, ROE, Sales growth, ROA) based on available data from March 2010 to March 2020. Findings: The results revealed that internal branding and psychological empowerment have no significant effect on financial performance, but both have a significant positive effect on brand loyalty. Likewise, the mediating role of psychological
empowerment on the subject of the impact of internal branding on brand loyalty was confirmed. Furthermore, psychological empowerment did not play a mediating role in the impact of internal branding on financial performance. Research limitations/implications: The findings of this study could be important for managers of organisations active in the insurance industry to highlight internal branding and enhance psychological empowerment and employee brand loyalty. Moreover, managers’ perception of the effective role of psychological empowerment to enhance employee brand loyalty is another practical aspect of this research. Originality/value: Considering the mediating role of psychological empowerment to the effect of internal branding on financial performance and brand loyalty is an innovative aspect of the present study. Meanwhile, the use of R software for VB-SEM was another point to surge the value of this paper.


Few studies probe small and medium enterprises (SMEs) in the context of sustainability. Thus, this study examines the sustainability orientation in SMEs and its impact on financial performance, considering the ‘ageing effect’. It employs a sample of Italian SMEs operating in the wine sector, using a survey questionnaire to collect qualitative and quantitative data for analysis. Accordingly, although sustainability remains typically unembedded within such SMEs, when it is embedded, a positive correlation with performance is evident. Furthermore, age is a relevant variable that can explain a different sustainability orientation and its impact on financial performance. This research contributes insight into sustainability orientation in SMEs, extending the sustainability, age, and SME performance literature. Managerial implications suggest the need to better emphasise social issues and invest more in skilled human resources and training programmes.


Environmental and social issues have become increasingly important both at operating and strategic levels. Enterprises must integrate sustainability within their strategies. This implementation should be supported by different managerial tools and digital technologies. The latter is central in supporting sustainability implementation and conversion, and therefore, the interaction between digitalization and sustainability can unlock higher potential. Consequently, this study mainly aimed to understand the link between digitalization, sustainability, and performance in the Italian context. Our findings reveal a significant relationship between digitalization, sustainability, and profitability performance and that when positive results are achieved under the environmental and social lens, economic performance also improves. Our study highlights the role of enterprise size and its impact on financial and sustainable performance, thus addressing the gaps in the literature.


The goal of this study is to look into how changes in crude oil prices affect GDP per capita and exchange rate fluctuations.to investigate the influence of crude oil price shocks on GDP per capita
and exchange rate movements. This research employed yearly time series data for the price of crude oil, exchange rate (USD/INR), and GDP per capita, from 1990 to 2020. Arithmetical tools such as Descriptive, Unit Root, Granger Causality Test, and OLS Model were applied. The present study discovered a strong bi-directional Granger causality effect of Dubai crude oil prices on exchange rates, as well as a bi-directional Granger influence of exchange rates on WTI crude oil prices. The diagnostic tests were successfully passed by the estimated models. According to the OLS model, the exchange rate was driven only by the price of Dubai crude oil, although the price of WTI crude oil influenced both the GDP per capita and the exchange rate over the research period. The key policy recommendation derived from this analysis is that the Reserve Bank of India (RBI) must depreciate the rupee, first to restore much-needed exchange rate stability, then to stimulate domestic manufacturers, and finally, to attract foreign capital inflows.


In the evolving landscape of entrepreneurship, digital technologies have ushered in new possibilities, attracting considerable academic attention. Despite the burgeoning research in Digital Entrepreneurship, the field remains fragmented, warranting a synthesized overview and structured research agenda. Consistently with the above, the paper presents a quantitative mapping of Digital Entrepreneurship through a bibliometric analysis of its publications. The research aims to address the need for a comprehensive, bibliometric overview of the topic, which has been echoed in recently published papers. In order to achieve this goal, we collected data from the Web of Science database, a common and scientifically sound choice in entrepreneurship research. The data were analyzed by applying Latent Dirichlet Allocation and topic modeling, thus providing a unique approach to bibliometric mapping. Topic modeling allows for the processing and analysis of significant amounts of scientific data, thus making it an ideal tool for bibliometric research. We find the field of Digital Entrepreneurship to be rather lively and in rapid development, with several publication outlets, affiliations, and countries contributing to it. We found four main topics to be extracted: the implications of Digital Entrepreneurship for innovation, Digital Entrepreneurship as an enabler for empowerment, the transformation of business models through digitalization, and the surge of digital platforms as entrepreneurial ecosystems. Additionally, we have provided a comprehensive overview of the theoretical lenses used amid the sample and a structured research agenda built upon extant gaps. From a theoretical perspective, the article serves as a starting point for future research on the topic and a comprehensive analysis of its present and past. From a practical perspective, the study is of interest to digital entrepreneurs willing to learn more about the opportunities and challenges provided by the digital landscape.


This empirical study aimed to examine the relationships between religious capital and information technology (IT) investment. We utilised a survey research design to collect data from small and medium enterprise (SME) owners in India. In addition, this study also utilised the ordinary least square model to test the hypotheses and a two-stage least square model to reduce endogeneity problems. The empirical analysis shows that religious capital increases internal financing sources
(IFS) and IT investment in SMEs in India. IFS, in turn, increases IT investment. Notably, religious capital increases the chances of IT investment by 34.40% and increases the chances of having higher IFS by 10.80%. Empirical results contribute to the literature on the relationships between religious capital and IT investment.


This study investigates whether female self-employment at the country level is similarly or differently impacted by the same factors as male self-employment. In order to determine these factors, we referred to three major theories explaining the entrepreneurship determinants at the macro level, namely institutional theory, eclectic theory and gender theory. The hypotheses arising from this theoretical framework are tested on the basis of a panel data analysis for the 36 OECD countries over the period 2000–2014. Our analysis reveals that while certain factors (social perception of entrepreneurship, economic development and gender equality in nascent entrepreneurship) play the same role at the national level with regard to female and male self-employment, other factors (unemployment and normative support for entrepreneurship) have a different influence.


Innovation is the key to satisfy consumer demand for new and better products. Hence it is pertinent to examine driving factors that affect consumers' purchase decisions for technologically advanced new products. This research aims to investigate factors influencing adoption of new products, particularly smartphones. Descriptive as well as causal methods of research have been adopted for this research. Researchers have used a self-administered survey for collecting data of customers who have recently purchased smartphones in Delhi National Capital Region (NCR). For this study, with a sample size of 254, convenient sampling has been used due to nature of the research. Key factors have been explained through intention to adopt (12.9%), motivated customer innovativeness (11.1%), financial risk (7.6%), functional innovativeness (7.5%), hedonic innovativeness (7.7%) and customer involvement (7%). In practice, findings of the present study would allow marketing managers in a deeper differentiation of the market and help them recognise highly creative consumer segments; this can, in turn, allow companies to plan effective marketing strategies, thereby leading to success of new products. Results of the study indicate that the eight factors used in the study have considerable influence (69% of total variance) on new product adoption in Delhi NCR.


The purpose of this study, based on the theory of planned behaviour (TPB) and digital entrepreneurship literature, is to unveil the role of digital entrepreneurial knowledge and entrepreneurial role models in shaping digital entrepreneurial intentions (DEIs) among Saudi Youth through a moderated mediation perspective. This study aims to propose that the relationship
between digital entrepreneurial knowledge and intention is mediated by main TPB antecedents under the moderating role of entrepreneurial role models. Design/methodology/approach: Data were collected from a sample of 487 Saudi students from three main Saudi public universities located in Riyadh using an online survey questionnaire. By applying SEM, this study builds and tests the measurement and structural models to examine the hypothesised relationships among main variables. Findings: Results revealed that the main antecedents of TPB (namely, attitudes towards digital entrepreneurship and perceived control behaviour) are significantly related to DEI. In addition, digital entrepreneurial knowledge indicates indirect effects on intentions via these two antecedents. However, entrepreneurial role models exert only a negative and significant moderating effect on the relationship between perceived behaviour control and DEI. Research limitations/implications: This study contributes to the literature by showing how most of the TPB antecedents can play a mediating role between digital entrepreneurial knowledge and the intentions of Saud Youth. The main limitation of this study is that it was not possible to generalise the findings. Future research directions are proposed to add new insights. Practical implications: The results of this study have clear implications for both theory (entrepreneurship scholars) by investigating DEI and its determinants and for practice (entrepreneurship educators and policymakers) by promoting digital entrepreneurship among youth through university-based awareness and building capability programs and curricula. Originality/value: The study helps to understand the role of digital entrepreneurial knowledge in shaping DEI through the development of an extended TPB intention-based model. The findings also indicate that digital entrepreneurial knowledge has indirect effects on Youth’s intentions. The findings show insights related to the influence of entrepreneurial role models on TPB antecedents in the transitional context of Saudi Arabia.


Climate change and climate finance continue to attract substantial research interest in several dimensions and categories through COVID-19 breakout and resulting disruptions were crucial. An in-depth scientometric analysis was undertaken to gain concise insights on evolution and publication trends of this multi-dimensional field. Corpus of 657 articles, extracted from Web of Science from 1995 to 2020, were used to identify networks of co-authorship, keywords, subject categories, institutions, and countries engaged in publishing on climate finance along with cocitation and cluster analysis. Networks and interactive visualizations created using CiteSpace revealed new research areas where climate finance may be beneficial along with potential directions of development for climate finance discipline. We identify carbon neutrality, accounting for sustainability, planetary boundaries framework, sustainable finance, managing climate risk for third pole, financial innovation and green finance, green swans, COVID pandemic and corporate law and governance in climate finance as emerging domains of climate finance research, seeking overwhelming research attention globally.

We explored and found that a set of key resources, that we call human capital resources, play an important role in ethnic minority microbusinesses in an ethnic majority social and economic space. We have also found that these key resources are developed and maintained within the coethnic niche economic space shaped by coethnic cultural value systems. Building on qualitative interview data and drawing on Bourdieu’s forms of capital and the resource-based view of the firm, our study presents a novel microentrepreneurship model that we call the culture-induced entrepreneurship model. Overall, our model provides insights into how ethnic minority culture informs the creation of a set of human capital resources and how these key resources contribute to business performance in regional ethnic minority microbusinesses. Our model also shows relationships between these key human capital resources.


There is limited research examining the relationship between social media and green food purchasing behaviour. In the current study, we examine the factors that affect consumers’ green food purchasing behaviour in Türkiye. Design/methodology/approach: Data collected from the participants by survey method were analysed using Smart PLS 4.0 with IBM SPSS 26 and PLS to run SEM. Findings: Our findings have revealed that from all the structural elements in the theory of planned behaviour (TPB), only attitude and perceived behavioural control contribute to consumers’ green food purchasing behaviour, while subjective norms do not contribute to consumers’ green food purchasing behaviour. Additionally, it was found that social media usage (SMU) and digital marketing interactions (DMI) have a positive and significant effect on green food purchasing behaviour. More information, experiences, opinions and recommendations on green foods in social media channels can encourage consumers to buy more green food. Originality/value: This study first evaluates the applicability of the TPB model in explaining green food purchasing behaviour. This study is extended with two new factors included in the original framework of the TPB model, namely, SMU and DMI.


In contemporary developed Western societies, structural discrimination often bars ethnic minorities from entering mainstream entrepreneurship and labor markets. Consequently, minorities engage in microentrepreneurship for economic survival and to retain their social identities. Yet despite the economic value of ethnic minority microbusinesses, little is known about the underlying forces that develop fundamental resources which shape their performance. Based on Bourdieu’s forms of capital and the resource-based view of the firm, our study presents a novel culture-induced entrepreneurship model. This model explains how ethnic minority culture shapes the development of human capital resources and how these resources contribute to business performance in communities which are often characterized as “left behind.” Our study challenges the dominant underdog discourse of (cultural) capital deficit among ethnic minority entrepreneurs.

Despite increasing interest in the relationship between religion and entrepreneurship, extant studies have failed to provide a clear explanation of this interdependence at the individual level. Our study addresses this knowledge gap by using a methodology based on an inductive and interpretative approach to collect and analyze primary data from 27 African immigrant entrepreneurs who are members of several Christian communities in the United Kingdom. Our original contributions include: At the theoretical level, the identification and definition of three types of individual religious expressions; at the methodological level, the development and application of qualitative measurement scales to the evaluation and graphical representation of individual religious profiles; on a practical level, the presentation of relevant content that indicates the mutual interdependence between an individual's religious manifestations and their entrepreneurial decisions and actions. Finally, in terms of modelization, we propose a general model that connects the individual profile of religious expressions and entrepreneurial initiatives in a dynamic process, which fuels emergent gradual changes in religion, culture, and the socioeconomic context.


The objective of this study is to test the impact between corporate social responsibility and firm performance using green supply chain management as mediation. The type of this study is quantitative research, using purposive method sampling with 211 PROPER corporates listed in the 2015–2019 period. The study data were obtained from the Indonesia Stock exchange market. The study resulted in an indication of the positive effect of corporate social responsibility implementation on green supply chain management, the firm performance benefits positively from green supply chain management, corporate social responsibility has a positive effect on firm performance and green supply chain management can be a mediating variable between corporate social responsibility and firm performance. Corporates in Indonesia are faced with pressure from stakeholders regarding their environmental impact. This could push the application of corporate social responsibility and green supply chain management in Indonesian corporates to increase their firm performance.


Namibian wine or the production thereof is not widely known and, although it is found on the shelves of a few local retailers and some restaurants consumption, is relatively low. There is relatively little evidence on the level of cooperation and competition among the Namibian wine makers, as there is diminutive or no clear evidence of clusters. This chapter examines the growth potential of Namibian wine in local markets and the potential to access lucrative foreign markets. It also aims to investigate the level of cooperation and competition among the Namibian wine makers, which is a great factor in ensuring the promotion and internationalisation of Namibian wine. The purpose of this study is to establish the presence and volume of Namibian wines on shelves of local retailers and international markets and to investigate and present strategies that Namibian wine makers can implement. Data were collected through the use of a questionnaire with the Erongo Mountain Winery in order to understand the drivers and barriers to internationalisation of their businesses.

The chapter aims to provide an overview of the family business in Bahrain’s business environment. The first part of the chapter introduces readers to Bahrain by giving general information about the country. The following sections are about the economic outlook where the internal and external performance of the country are emphasized. This general economic outlook is followed by the business ecosystem established in Bahrain. After providing valuable facts about the business ecosystem in the country, the chapter next portrays the family business arena in the Kingdom, their abilities, possibilities, participation, and contribution to the socio-economic development in the country. The final section of this chapter is provided by concluding remarks on the overall economic outlook, business ecosystem, and family business findings in the Kingdom, emphasizing the current status of family businesses and their future perspectives.

Iraj Fooladi

Several studies have examined whether environmental, social, and governance (ESG) focused funds outperform their benchmarks. While these studies vary in their methods and scope, their findings indicate that, at a minimum, these funds do not underperform their benchmarks on a risk-adjusted basis. This study is designed to further contribute to this body of research by analyzing the performance of the Jantzi Social Index (JSI) relative to its underlying benchmark, the TSX 60, and to gain insight into the possible factors that drive their performance differences. Our findings indicate that JSI's performance differential is driven (primarily) by the higher weight that JSI attaches to companies with higher net ESG scores and not (necessarily) by its superior asset-selection ability. As the regulators globally move toward making ESG disclosure mandatory, these findings become particularly relevant.

Shuna Ho


Although companies recognize the importance of social responsibility and community engagement, conflicts between companies and communities have been noticeably increasing. To better understand the role of institutional environments in company-community conflicts, we analyze two mining conflicts—Minera Yanacocha's Minas Conga extension project in Peru and Minera Los Pelambres' El Mauro Tailings Dam in Chile. Our findings imply that, to prevent negative consequences and alleviate company-community conflicts, mining companies should address underlying structural causes and pursue informal approaches in order to obtain and maintain their social license. We find that better formal institutional environments not only alleviate conflict intensity but also facilitate informal approaches through which companies and communities can cooperate to resolve conflicts. The best practice would be to start and continue dialogs between communities and companies, mediated by impartial governments, to understand the concerns of the counterparty and find means by which to address the causes.

Kyung Young Lee


This study investigated the factors influencing the continuance intention of live streaming shopping (LSS) viewers. Based on affordance theory, a structural equation model examined the influence of shopping affordance and engagement on LSS viewers. This study also explored the viewers' behavior during and after COVID-19 through multi-group analysis. Dual-process theory was borrowed to examine the moderating effect of streamers' expertise and viewers' attachment. The
study contributes to affordance theory and LSS literature by analyzing 354 LSS viewers during and 320 after the pandemic, providing practical insights for managers and LSS platform users.


Purpose: This study aims to apply the information system success model (ISSM) to examine the relationships among actual use, use continuance intention, user satisfaction and net benefits in the context of quick-service restaurant (QSR) patrons using two contactless technologies (CT): selfservice kiosks (SSK) and mobile applications (MA) for food ordering. The study also investigates the moderating roles of social interaction anxiety (SIA) and language proficiency (LP) in the abovementioned relationships. Design/methodology/approach: Survey data from 421 QSR patrons with experience using McDonald's SSK and MA were collected and analyzed through a seemingly unrelated regressions (SUR) technique. Findings: Research findings reveal positive associations among actual use, use continuance intention and satisfaction with CT (i.e. SSK and MA). The actual use and satisfaction with CT are positively associated with individual benefits, leading to improved patron satisfaction with QSR. Findings also reveal that, in the case of MA, SIA positively moderates relationships between actual use/satisfaction and individual benefits and between satisfaction and organizational benefit, while LP shows negative moderating effects on those relationships. Originality/value: This study is one of the first attempts to present empirical evidence of constructs in the ISSM (actual use, use continuance intention, satisfaction and individual/organizational benefits) in the context of QSR patrons using SSK and MA. It also shows that using MA can address some patrons' psychological problems interacting with others in their food-ordering processes.


Background: Mobile curated (shortened) news is now increasingly popular. Each curated news article is accompanied by a link that readers can click to read the full-length article on the news provider’s website. To date, little empirical research has examined the factors that influence mobile newsreaders’ intentions to read full-length articles from their curated short forms. To address this gap, this study employs the Heuristic-Systematic Model (HSM) of information processing and examines: 1) how the heuristic and systematic factors of online curated news influence newsreaders’ intention to read full-length articles; and 2) how newsreaders’ language proficiency levels moderate these effects. Method: A survey was conducted with 195 participants recruited from Amazon MTurk. The participants first read a sample curated news item developed for this study and then filled out the questionnaire to measure the variables of interest. To test the hypotheses, a partial least square method was used with SmartPLS 4.0. Results: Our results showed that people have stronger intentions to read full-length articles when they perceive the curated news to have highly relevant information, an attractive title, a credible source, or less understandable information. Furthermore, newsreaders’ language proficiency level has a moderating impact on some of these effects. The effects of these factors can be attributed to how they influence newsreaders’ reading behaviors and their heuristic or systematic processing of the curated news. Conclusion: The curated news can be properly designed to motivate newsreaders’
intention to read full-length articles. The findings contribute to the body of knowledge on HSM and mobile news adoption. The findings also provide mobile-curated news service providers and online full-length news media platforms with valuable practical implications.

Yuntian Li


This study examines the voluntary disclosure of earnings forecasts by female CEOs. We find that in the backdrop of increased pressure to perform from investors and other stakeholders, female CEOs tend to issue more earnings forecasts than male CEOs, and those forecasts are more accurate. We also find that while financial analysts generally prefer to follow companies headed by male CEOs, female CEOs’ efforts to issue accurate earnings forecasts pay off, as these efforts help them close the analyst coverage gap. We provide complementary evidence on the disclosure efforts of female CEOs with regard to updates to the forecast and the 10-K report. Lastly, we show that financial analysts rely more on the earnings forecasts of female CEOs, possibly because they recognize female CEOs’ superior forecasting quality. Our results are robust to the use of alternative research designs, including difference-in-difference, propensity score matching, and entropy balancing. Overall, our study documents gender differences in voluntary disclosure by senior management.

Catherine Loughlin


Purpose: Successful knowledge transfer (KT) between younger and older workers (YW and OW, respectively) is critical for organizational success, especially in light of the recent surge in employment volatility among the youngest and oldest segments of the workforce. Yet, practitioners and scholars alike continue to struggle with knowing how best to facilitate these exchanges. The qualitative study offers insight into this phenomenon by exploring how KT unfolds in YW/OW dyads. Design/methodology/approach: The authors performed a reflexive thematic analysis of semistructured interviews with two samples of blue- and white-collar younger/older workers from the USA (N = 40), whereby the authors interpreted the “lived experiences” of these workers when engaged in interdependent tasks. Findings: The analysis, informed by social exchange theory and exchange theories of aging, led to the development of the knowledge transfer process model in younger/older worker dyads (KT-YOD). The model illustrates that, through different combinations of competence and humility, KT success is experienced either directly (by workers weighing the perceived benefits versus costs of KT) and/or indirectly (through different bases of trust/distrust perceived within their dyads). Further, humility in dyads appears to be necessary for KT success,
while competence was insufficient for realizing KT success, independently. Originality/value: In exposing new inner workings of the KT process in YW/OW dyads, the study introduces the importance of humility and brings scholars and organizations a step closer toward realizing the benefits of age diversity in their workplaces.

Bertram MacDonald


Shark conservation is an urgent and complex biodiversity matter. While research on sharks is an important output of the knowledge production processes that could inform conservation policy and management decisions, whether all relevant knowledge is reaching the public and policy-makers has been questioned. Concerns have been expressed that attention given to research is skewed towards specific and often more sensationalist topics that do not provide an accurate picture of the shark-related issues and of possible solutions to decision-makers and the general public. This study thus analysed Web of Science publications related to sharks to determine the degree of attention different areas of shark-related research received in science, social media, news media, and policy documents. Highly concentrated distributions of citations, and mentions in social media, news media, or policy documents were found, but little relationship exists between the attention that individual publications or research areas receive in the different spheres. These findings show the diversity of shark-related research and its audiences and suggest a need for research evaluation to acknowledge that research impact can take many forms. In addition, developing outreach strategies is needed to ensure that relevant research is adequately disseminated to the public and policy-makers. This study can help researchers, resource managers, and other stakeholders better understand the diverse body of scientific evidence that could be mobilized into policies and practices for shark conservation.

Philipppe Mongeon


The role played by research scholars in the dissemination of scientific knowledge on social media has always been a central topic in social media metrics (altmetrics) research. Different approaches have been implemented to identify and characterize active scholars on social media platforms like Twitter. Some limitations of past approaches were their complexity and, most importantly, their reliance on licensed scientometric and altmetric data. The emergence of new open data sources such as OpenAlex or Crossref Event Data provides opportunities to identify scholars on social media using only open data. This paper presents a novel and simple approach to match authors
from OpenAlex with Twitter users identified in Crossref Event Data. The matching procedure is described and validated with ORCID data. The new approach matches nearly 500,000 matched scholars with their Twitter accounts with a level of high precision and moderate recall. The data set of matched scholars is described and made openly available to the scientific community to empower more advanced studies of the interactions of research scholars on Twitter.

Rick Nason


Complexity is a form of system that is relevant in virtually all aspects and levels of healthcare. The importance and relevance of the science of complexity for healthcare has been written about extensively for over two decades. The problem this article addresses is that complex systems and how to manage them still appear to be relatively unknown nor well understood by most stakeholders of healthcare. The ignorance of complexity science includes multiple dimensions of healthcare, including frontline practitioners, support staff, and healthcare administrators. An additional challenge is to also involve policy-makers, and indeed the general public in advancing their appreciation of how this still evolving field of study can improve healthcare efficiency and outcomes. A third challenge is acceptance and willingness to embrace complexity. This article discusses a framework for evaluating complexity acceptance, as well as the unique challenges that the existing healthcare infrastructure and culture exhibit that are hindering adoption of complexity. Suggestions are put forward for further exploration and consideration.

Armagan Ozbilge


In this article, we study the impact of cross-channel returns on a bricks-and-clicks dual-channel retailer’s overall profit, individual channel prices, and individual channel demand under two scenarios: 1) exogenous returns and 2) refund-dependent returns. Our study reveals a number of interesting results. For example, when channel substitutability is high, accepting online purchased returns in the bricks-and-mortar store is likely to drive the in-store price up, despite a drop in the offline demand due to the cannibalization effect. In general, firms should allow crosschannel returns when channel substitutability is high, return handling cost is low, and self-channel returns are not hefty. Unlike the extant literature, we also see that bricks-and-mortar returns impact a multiple-channel retailer’s optimal return policy. We are also able to verify that our main findings are fairly consistent under both exogenous and refund-dependent returns scenarios.
Sherry Pictou


This article explores the relationship between Indigenous Food Sovereignty and the resurgence of Indigenous law through an examination of the Mi’kmaq concept of Netukulimk. We present a case study of L’sitkuk First Nation’s exploration of the original spirit and intent of the eighteenth-century Peace and Friendship Treaties and their enactment of the Mi’kmaq always those treaties are anchored in, focusing on insights coming out of We Story the Land, our documentary film about L’sitkuk youth and their mentors on a canoe journey to reclaim a series of ancient routes leaving from the reserve to cross their traditional territory.

Kevin Quigley


This chapter provides an overview of border security in Atlantic Canada. It examines border security as a function of the structure of the region and regional approaches to security and governance. Through a review of existing literature and interviews with practitioners in the field, the chapter considers the increasing integration of marine security forces, both nationally and internationally, and their relationships to seaports where most of the international trade occurs in the region. This chapter posits a layered approach to port security in the Atlantic region that includes the early maritime warning program, the clearance of goods, and security clearance required for port workers. We found that not all actors favor this approach: the Canadian and US governments prize efficiency of border security measures at ports. The economic prosperity of maritime communities hinges disproportionately on ports; so inefficiencies that security measures impose compromise the region’s competitiveness. In addition, the chapter finds that the 2004 devolution of ports to local authorities has enhanced local agency, but communities struggle to finance updated security infrastructure, preferring instead to invest scarce resources in better physical infrastructure to maintain their ports’ competitiveness.

David Roach

Positive Airway Pressure (PAP) therapy is the most common and efficacious treatment for Obstructive Sleep Apnea (OSA). However, it suffers from poor patient adherence due to discomfort and may not fully alleviate all adverse consequences of OSA. Identifying abnormal respiratory events before they have occurred may allow for improved management of PAP levels, leading to improved adherence and better patient outcomes. Our previous work has resulted in the successful development of a Machine-Learning (ML) algorithm for the prediction of future apneic events using existing airflow and air pressure sensors available internally to PAP devices. Although researchers have studied the use of ML for the prediction of apneas, research to date has focused primarily on using external polysomnography sensors that add to patient discomfort and has not investigated the use of internal-To-PAP sensors such as air pressure and airflow to predict and prevent respiratory events. We hypothesized that by using our predictive software, OSA events could be proactively prevented while maintaining patients' sleep quality. An intervention protocol was developed and applied to all patients to prevent OSA events. Although the protocol's cooldown period limited the number of prevention attempts, analysis of 11 participants revealed that our system improved many sleep parameters, which included a statistically significant 31.6% reduction in Apnea-Hypopnea Index, while maintaining sleep quality. Most importantly, our findings indicate the feasibility of unobtrusive identification and unique prevention of each respiratory event as well as paving the path to future truly personalized PAP therapy by further training of ML models on individual patients.

Lorn Sheehan


The uncertainty behind a warming climate produces significant risk for communities that rely on tourism, but vulnerability assessment can help inform planning for adaptation and mitigation efforts. Since coastal regions have significant tourism economies, and rely on the tourism sector for socio-economic stability, we seek to understand how assessments of vulnerability have been applied in coastal communities by systematically assessing literature that describes the concepts of adaptation, resilience, and vulnerability. We conducted a systematic search across three peer-reviewed journal databases (Web of Science, Scopus, and PubMed) to compare the types of methods and models used to determine coastal adaptation and vulnerability in various geographical and demographic settings. The systematic process found 205 unique articles; 143 were deemed relevant as they focused on adaptation, resilience, or vulnerability assessment. A qualitative analysis of the key themes of relevant studies, identified using thematic coding, found that vulnerability and adaptation research in tourism-based coastal communities is predominantly done through qualitative methods, researched more frequently in higher-populated areas of Europe and North America, have a focus on water as a driver of vulnerability, focus on socio-economic
impacts of vulnerability, and emphasize locally-based knowledge in understanding adaptive
capacity. Bibliometric analysis of citations and mentions in social-media reveal a larger number of
papers with a higher citation rate focused on coastal-based systems (salt-water) with an emphasis
on regional studies rather than those with a specific urban or rural focus. We found few studies
aimed at coastal communities using tourism operators as informants, but rural coastal
communities had higher social-media metrics indicating their comparative public importance.
Thus, we highlight the need for locally-informed case studies in vulnerability and adaptation
assessment for small coastal communities.

Mike Smit

Hughes (née Richardson), B., Benoit, B., Rutledge, K., Dol, J., Martin-Misener, R., Latimer, M., Smit,
M., McGrath, P., Campbell-Yeo, M. (2023). Impact of parent-targeted eHealth educational
interventions on infant procedural pain management: A systematic review. JBI Evidence Synthesis,

Objective: The objective of this review was to determine whether electronic health (eHealth)
educational interventions about infant procedural pain and pain management impact parental
outcomes (eg, mental health, knowledge uptake), eHealth outcomes (eg, acceptance, use), and
pain management outcomes (eg, parental involvement, infant pain response). Introduction: Pain in
infants is a common concern for parents. Routine postpartum care for infants in early life requires
them to endure painful procedures, such as immunizations, yet infants often receive little to no
pain management. Parents are an essential component of effective pain management, although
they may not be aware of the roles they play. Despite the increased number of eHealth resources
available to educate parents about infant pain management, their impact has yet to be synthesized.

Inclusion criteria: This review considered studies that evaluated eHealth educational interventions
targeted at parents during pregnancy and up to 1 year postpartum. Interventions included, but were
not limited to, mobile applications, web-based applications, websites, videos, interactive training,
hands-on direct simulation, short message service (SMS), and desktop applications. Primary
outcomes included parental outcomes (eg, stress or anxiety, self-efficacy, knowledge, attitudes),
eHealth outcomes (eg, acceptance, use), and pain management outcomes (eg, parental
involvement, infant pain response). Experimental, quasi-experimental, and observational study
designs were included. Methods: MEDLINE, CINAHL, PsycINFO, Embase, Scopus, Web of Science,
and SciELO were searched for studies published in English up to June 14, 2021. Citation lists of
relevant reviews and included studies were also searched for additional peer-reviewed articles. Two
independent reviewers conducted critical appraisal using standardized tools from JBI, and data
extraction, using a data extraction form designed by the authors. Statistical pooling of quantitative
data was not possible due to heterogeneity; thus, the findings were reported narratively. Results: A
total of 4163 unique studies were screened, with 11 studies ultimately included for synthesis. Five
articles were randomized controlled trials, 5 articles were analytical cross-sectional studies, and 1
article was quasi-experimental. Studies reported on 4 unique eHealth educational interventions, all
of which used video format and primarily targeted the postnatal period. The findings for all primary
outcomes were mixed but suggested either improvements in outcomes or no impact. The certainty
of evidence was determined as low or very low across primary outcomes for reasons related to imprecision, risk of bias, and indirectness. Conclusions: Although heterogeneity of findings limited quantitative synthesis of data, this review suggests that short and engaging educational videos have the potential to positively impact parents' knowledge, confidence, and desire to be involved in procedural pain management for their children. Most of the interventions presented in this review describe evidence-based information about procedural pain management strategies that are known to be effective for infant populations. Thus, it is reasonable to assume that infant pain response should be lower when parents appropriately apply the strategies. However, the findings of this review were not able to confirm this assumption. More research is needed to evaluate the impact of parent-targeted pain management education on infant pain response.


We conducted a scoping review to identify and describe trends in the use of social media images as data sources to inform social science research in published articles from 2015 to 2019. The identified trends include the following: (1) there is increasing interest in social media images as research data, especially in disciplines like sociology, cultural studies, communication and environmental studies; (2) the photo sample size is often smaller than that is typically used in text-based social media analysis and usually is collected manually; (3) thematic coding, object recognition and narrative analysis are the most popular analysis methods that are often conducted manually; (4) computer vision and machine-learning technologies have been increasingly but still infrequently used and are not fit for all purposes; and (5) relatively few papers mention ethics and privacy issues, or apply strategies to address ethical issues. We identify noteworthy research gaps, and opportunities to address limitations and challenges.


[no abstract]


The purpose of this research was to explore parental perspectives on the impact of parent restrictions imposed in response to the COVID-19 pandemic across Canadian Neonatal Intensive Care Units (NICUs). A co-designed online survey was conducted targeting parents (n = 235) of infants admitted to a Canadian NICU from March 1, 2020, until March 5, 2021. Parents completed the survey from 38 Canadian NICUs. Large variation in the severity of policies regarding parental presence was reported. Most respondents (68.9%) were classified as experiencing high restrictions, with one or no support people allowed in the NICU, and felt that policies were less easy to understand, felt less valued and respected, and found it more challenging to access medicine or health care. Parents reported gaps in care related to self-care, accessibility, and mental health outcomes. There is significant variation in parental restrictions implemented across
Canadian NICUs. National guidelines are needed to support consistent and equitable care practices.


Objective: To explore parental perspectives on the use of technology in neonatal intensive care units (NICU), and its impact during COVID-19 parental presence restrictions. Methods: Codesigned online survey targeting parents of infants admitted to a Canadian NICU from March 1st, 2020 until March 5th, 2021. Results: Parents (n = 117) completed the survey from 38 NICUs. Large variation in policies regarding parental permission to use technology across sites was reported. Restrictive use of technology was reported as a source of parental stress. While families felt that technology helped them feel close to their infant when they could not be in the NICU, it did not replace being in-person. Conclusion: Large variation in policies were reported. Despite concerns about devices in NICUs, evidence on how to mitigate these concerns exists. Benefits of using technology to enhance parental experiences appear substantial. Future study is needed to inform recommendations on technology use in the NICU.


Sustainability and large infrastructure projects are intricately linked. When considering large and disruptive infrastructure projects, proponents, regulators, and stakeholders consider a variety of information sources to understand how the project and its environmental changes will impact people living in the region. This is often done using small data, through interviews, town halls, and surveys. Big Data approaches have potential to augment these methods; for example, novel approaches natural language processing (NLP) on social media data can reveal human-nature interactions in impacted areas. Existing literature suggested that sentiment and frequency analyses can help us understand public attitudes. As a case study to illustrate this potential, we have examined public engagement with landscapes impacted by large hydroelectric development. We examined 6,122 geotagged image captions within 35 well-defined geographical locations associated with three dam projects in Canada: Mactaquac dam (New Brunswick), Oldman dam (Alberta), and Site C dam (British Columbia) on Instagram. The sentiment results of the study expressed a high positive attitude towards the three landscapes and frequency analysis exposed that the people are more likely to engage with the landscape in the context of fun, recreation, exercise activities and vacations. This can inform planning processes to ensure that impacts to these important interactions are examined and mitigated, achieving long-term environmental, social, and economic well-being.

Among many by-products of Web 2.0 come the wide range of potential image and text datasets within social media and content sharing platforms that speak of how people live, what they do, and what they care about. These datasets are imperfect and biased in many ways, but those flaws make them complementary to data derived from conventional social science methods and thus potentially useful for triangulation in complex decision-making contexts. Yet the online environment is highly mutable, and so the datasets are less reliable than censuses or other standard data types leveraged in social impact assessment. Over the past decade, we have innovated numerous methods for deploying Instagram datasets in investigating management or development alternatives. This article synthesizes work from three Canadian decision contexts – hydroelectric dam construction or removal; dyke realignment or wetland restoration; and integrating renewable energy into vineyard landscapes – to illustrate some of the methods we have applied to social impact assessment questions using Instagram that may be transferrable to other social media platforms and contexts: thematic (manual coding, machine vision, natural language processing/sentiment analysis, statistical analysis), spatial (hotspot mapping, cultural ecosystem modeling), and visual (word clouds, saliency mapping, collage). We conclude with a set of cautions and next steps for the domain.


Marine and coastal environments are diverse and dynamic, supporting competing human interests and demands. As society seeks to balance contested uses of space, more holistic planning processes have emerged, which consider social, economic, and ecological factors. One approach that considers social factors, and more specifically social acceptance, is “social license to operate” (SLO). Originating in the terrestrial mining industry, SLO has been adopted by various marine industries. Except for some emerging work in the conservation field, SLO is typically applied to industrial marine and coastal contexts. To understand SLO’s uses in other marine and coastal planning contexts, namely conservation, adaptation, and restoration, we conducted a scoping review using the term SLO and similar concepts, including public or social acceptance, support, and buy-in. Results indicate the concept of SLO is still emerging in non-industrial marine and coastal planning, with an emphasis on gaining public acceptance rather than maintaining it. The concept of SLO was applied broadly, including as a measurement for public support and a product of effective engagement. Most publications focused on barriers and drivers of SLO. Influential factors are identified and organized by theme, then discussed based on their relationships within a social-ecological system framework. Considering the common factors and their associated systems helps to link elements necessary to obtain SLO, highlighting their interconnectedness with each other, society, and the natural environment. The findings of this review illustrate SLO’s utility for academics and practitioners alike, through its application in methods, tools, values, and concepts that characterize public inclusion for marine and coastal planning.
Binod Sundararajan


The gaps that strategic communication has to bridge have widened due to competing values driven by self-interest versus superordinate organizational goals. We propose a higher-order comprehensive model, grounded in a) the social behavioral aspects of evolutionary psychology and strategic communication; b) evolutionary game theory reciprocity; and c) the niche construction of leadership. We offer the concept of 'leaderspeak', which brings into effect the concepts of collaborative and mutually beneficial relations, altruism, spite, and selfishness. In this paper, we seek to parse the role of reciprocity, altruism, and how receivers are motivated to respond to leader communication (leaderspeak, i.e., leader communication that considers all the multi-modal affordances of language, including non-verbal communication, to outline the intent of the leader). This is an initial attempt to delve deeper into the evolving human need while ensuring reciprocity between the sender and receiver. Our aim is to understand and address the attitude, “I hear you, and get what you want me to do for you, so what’s in it for me?”.


This textbook explains the effects of culture on business practices and introduces students to the cross-cultural and international dimensions of working internationally, exploring topics across both business and finance. Given that doing business across cultures has become the norm in modern companies, managers must develop and acquire the skills to lead effectively in cross-cultural contexts. This textbook will help you to attain those skills through its practical and situational examples involving countries and regions around the world while learning about the cultural and business practices of people from different backgrounds, ethnicities, diversities, educational levels, and social strata and hierarchies. It covers important aspects of doing business across cultures/countries, such as the role (and importance) of technology adoption, different organizational forms, financial and accounting approaches in different parts of the world, negotiating practices, ethics across the globe, and working and studying abroad. Further, it equips readers with useful knowledge about cross-cultural nuances beyond the usual discussions of high vs. low contexts, power distance, uncertainty avoidance, and such dimensions of cross-cultural interactions. The varied experiences of the authors – having lived and worked in many countries – along with their backgrounds in linguistics, communication, and financial accounting provide unique perspectives not available elsewhere. With its case studies, end-of-chapter exercises, as well as multiple-choice and short-answer questions, this broad, yet thorough textbook will guide you in leading with cultural intelligence.
Oumar Sy


We use returns across 13 African stock markets to perform factor-spanning tests. Contradicting US-based results, HML is not redundant in the five-factor model, UMD generates a reliable alpha in the Q-based regression, and the mispricing-purged SMB does not consistently dominate the other SMB factors. Because they cannot explain HML and UMD, the Q and Q5 models do not subsume the five- and six-factor models. Since none of the other models captures the ROE factor, the Q-factor model is never subsumed. The Q model spans the Q5 model because the expected growth factor rEG is not priced in African markets.


Event studies are widely used in finance research to investigate the implications of announcements of corporate initiatives, regulatory changes, or macroeconomic shocks on stock prices. These studies are often used in a single-country setting (usually the U.S.), but little work has yet been conducted in an international context, perhaps due to the complexities inherent in implementing cross-country studies. This paper explores the methodological challenges of conducting event studies in international finance research. We emphasize how scholars should choose an event, select the study period (short vs. long term), estimate abnormal returns, infer statistically whether the event under consideration produces a reliable price reaction, and explore the role of formal and informal institutions in explaining cross-country differences in price reactions. We also provide an extension of event studies to an important but less studied asset class in an international setting – the fixed-income market. We conclude by offering practical recommendations for researchers conducting cross-country finance event studies and identifying opportunities for future research. Given the increasing number of global events, such as the COVID-19 pandemic, Brexit, and the Paris and Trans-Pacific Partnership agreements, we believe our paper is especially timely.

Samantha Taylor


This fictional case centers around a young Dutch couple who emigrated to Canmore, Alberta. Upon arriving, Saul and Rens opened two successful food trucks and are now looking to promote each truck’s main chef to truck manager. They plan to offer a performance bonus based on the net income of each truck and have requested a local accounting student to advise them on the new bonus structure. Goode Food Trucks Inc. presents an opportunity for students to demonstrate
technical competence in managerial accounting (rate methods, period cost allocation, and data visualization); strategy and governance (employee performance incentives); and financial reporting (reporting needs) while incorporating enabling competencies (communicating and adding value). The case and teaching notes were adapted from principles used to train and evaluate Chartered Professional Accountant (CPA) candidates and tailored to an appropriate level for undergraduate learners. MBA instructors may also use this case to apply multiple concepts in a defined context, thus enhancing a course's “real-life” applicability.


This fictional case is based on a real specialty tea company in Nova Scotia. Ted’s Teas is a two-part crossover case that illustrates the integration of financial accounting and audit learning outcomes applied to real-world scenarios. In Part 1, students assume the role of an internal accountant and apply knowledge of the Chartered Professional Accountants (CPA) of Canada's CPA Way to identify how to treat leases, changes in policy, and estimates as part of accounting knowledge under both Accounting Standards for Private Enterprises and IFRS frameworks. In Part 2, students “cross over” and change roles, so they are now external auditors for Ted's Teas, tasked to provide an analysis of risk of material misstatement, recommend an audit approach, and develop substantive procedures. This two-part case presents opportunities for students to demonstrate technical competence in multiple areas, either separately in two different courses or combined in one “capstone” or case course. The case and teaching notes, including the marking rubrics, were adapted from principles used to train and evaluate CPA Professional Education Program candidates, tailored to an appropriate level for undergraduate and graduate learners.


Food prices have experienced unprecedented increases in recent times. Simultaneously, grocers are facing allegations of capitalizing on inflation to generate unjustifiable profits. Escalating expenses and a lack of transparency have engendered heightened consumer skepticism. This perceived presence of barriers and excessive profitability gives rise to ethical concerns. Our case study delves into the ethical landscape surrounding Canadian grocers, aiming to probe the public’s demand for accountability. To comprehend the factors responsible for the transformation in consumer perception of Canadian grocers in 2022, we conducted an analysis utilizing data from consumers, corporate watchdogs, and industry sources. We extended the paradox perspective on corporate sustainability framework to include a historical aspect to use as our analytical lens. This study sheds light on the alterations in circumstances that have led Canadian consumers to question entire industries and accounting practices that were previously considered unproblematic. As a remedy, we recommend the establishment of a mandatory code of conduct for grocers and an enhancement in the transparency of financial reporting. Paradoxically, corporate profits may continue to grow when societal needs are no longer perceived as being neglected or, even worse, exploited.

Teaching effectiveness (TE) research impacts educators and their careers, learners and the quality of education they receive, and administrators and the organizations they safeguard. However, there is a lack of consistency in how TE has been conceptualized: many papers used inaccurate or implied definitions of TE, or despite discussing and often measuring TE, did not define TE—other papers defined TE without proposed measures or provided measures of the concept without defining it. We found two dimensions of TE, student-focused (outcome) and educator-focused (input), and an existing TE definition evaluated as the strongest for both dimensions. Further, TE measurements may be summarized in five categories: student evaluation of teaching effectiveness (SETE), objective measures, peer review, administrative evaluation, and self-reflection. To conceptualize TE, our findings suggest pairing the TE student-focused construct with SETE and objective measures, while the educator-focused dimensions of TE should be measured with peer review, self-assessment, and administrator evaluation. By consistently conceptualizing TE, researchers may contribute to rigorous research and work together to consistently add to the body of knowledge, thus furthering the quality of TE research.


In business, shift happens fast. Consequently, the accounting profession, including students, must adapt early and often. Fortunately, students reported improved learning and satisfaction through interactive professional learning experiences (Riley, Eldridge, and Venkatesh 2021). This study introduces a cocreated simulation between our university and Deloitte Canada, a professional services firm. A partnership of academics, auditors, and consultants yielded this information communications technology (ICT) business combination simulation for an advanced financial accounting course. Our simulation aimed to empower learners to focus on communicating technical accounting solutions in a professional environment. We also provided a video simulation, solution, and assessment rubric.


ChatGPT, a language-learning model chatbot, has garnered considerable attention for its ability to respond to users’ questions. Using data from 14 countries and 186 institutions, we compare ChatGPT and student performance for 28,085 questions from accounting assessments and textbook test banks. As of January 2023, ChatGPT provides correct answers for 56.5 percent of questions and partially correct answers for an additional 9.4 percent of questions. When considering point values for questions, students significantly outperform ChatGPT with a 76.7 percent average on assessments compared to 47.5 percent for ChatGPT if no partial credit is awarded and 56.5 percent if partial credit is awarded. Still, ChatGPT performs better than the
student average for 15.8 percent of assessments when we include partial credit. We provide evidence of how ChatGPT performs on different question types, accounting topics, class levels, open/closed assessments, and test bank questions. We also discuss implications for accounting education and research.


Whether you are just starting, halfway through, or close to finishing your CPA PEP program and have questions about the journey, then this is for you! We have compiled the most-read blog post articles from over the years along with situational examples to help you navigate your journey in the CPA PEP program.

Lori Turnbull


[no abstract]

M. Ali Ülkü


Rampant disruptions have probed the fragility of supply chains: Renewed perspectives and comprehensive operational models are needed to enhance resiliency and sustainability in business. This paper proposes a new inventory management model that explicitly integrates process improvement efforts to improve supply chain sustainability through the better use of capital (materials, assets, and technology) and labor (workforce and know-how). Under a desired service-level constraint, we study reducing setup (fixed) costs when they are expressed in terms of economic production functions of two (input) decision variables: the level of capital (e.g., process change, and technology investments) and the level of labor required. This research is motivated by lean manufacturing practices, which rely on shaping the operating environment and operating optimally within that business environment. Based on mathematical modeling and analysis, we provide closed-form optimality expressions and structural results that lend themselves to decision insights. In particular, we provide, along with illustrative numerical examples, results on the sensitivity of setup-reduction efforts to demand rates, variability, and explicit expressions for
determining the required labor and capital resources. A generalization of the model for carbon emissions is also presented.


In the face of climate change (CC), “business as usual” is futile. The increased frequency and intensity of extreme weather events (e.g., hurricanes, floods, droughts, and heatwaves) have hurt lives, displaced communities, destroyed logistics networks, disrupted the flow of goods and services, and caused delays, capacity failures, and immense costs. This study presents a strategic approach we term “Climate-Change Resilient, Sustainable Supply Chain Risk Management” (CCRSSCRM) to address CC risks in supply chain management (SCM) pervading today’s business world. This approach ensures supply chain sustainability by balancing the quadruple bottom line pillars of economy, environment, society, and culture. A sustainable supply chain analytics perspective was employed to support these goals, along with a systematic literature network analysis of 699 publications (2003–2022) from the SCOPUS database. The analysis revealed a growing interest in CC and supply chain risk management, emphasizing the need for CCRSSCRM as a theoretical guiding framework. The findings and recommendations may help to guide researchers, policymakers, and businesses. We provide insights on constructing and managing sustainable SCs that account for the accelerating impacts of CC, emphasizing the importance of a proactive and comprehensive approach to supply chain risk management in the face of CC. We then offer directions for future research on CCRSSCRM and conclude by underlining the urgency of interdisciplinary collaboration and integration of climate considerations into SCM for enhanced resilience and sustainability.


Background: The ramifications of climate change are rampant: All stakeholders must act effectively and swiftly. Unsustainable and increased urbanization adds additional strain on combatting environmental degradation. Since the last decade, urban distribution centers (UDCs) have emerged in response to the steep rise in urban freight transportation and its negative impact on city congestion and air quality. Methods: In this paper, we conduct a comprehensive review of the performance of UDCs and investigate its alignment with the corporate governance (CG) and corporate social responsibility (CSR) initiatives, including the shareholders’ governance strategies and policies, as well as environmental, social, and economic measures. Our systematic literature review consists of multiple phases: In the first one, we utilize bibliometric tools to implement a quantitative analysis of the extant literature. Next, a cluster-based network analysis complements this analysis to describe the evolution of research in this area. Results: Our descriptive analysis categorizes existing research on UDCs based on CG- and CSR-compliant themes. We classify pertinent peer-reviewed articles into topical clusters and offer research opportunities related to improving the performance of UDCs. Conclusions: This study aims to stimulate further scholarly inquiry into sustainable city logistics and provides a knowledge-based guide for academicians and practitioners, logistics service providers, policymakers, and customers.

We study a multimodal logistics network for a multi-echelon supply chain (SC) with multiple products, considering economic and environmental sustainability and shipment consolidation (ShC). The SC logistics network is modelled as a Mixed Integer Linear Program (MILP) and then tested on randomly generated but realistic test instances. The effects of ShC in SC network design on economic and environmental costs are analyzed, showing that consolidation decreases the SC cost, especially when the distance between the shipper and receiver is significant. Moreover, machine learning (ML) approaches for predicting stochastic parameters using historical data are evaluated compared to the more traditional stochastic programming approaches over multiple prediction periods. The three ML models utilized; namely, Attention CNN-LSTM, Attention ConvLSTM and an ensemble of both models using Support Vector Regression, performed significantly better than the stochastic programming approaches considered (simple recourse and chance-constrained) in all scenarios. The numerical examples show that the MILP models using the predictions from the ML algorithms provide the highest value of the stochastic solution and the lowest expected value of perfect information. This study makes a case for the continued integration of ML prediction methodologies into stochastic optimization modelling in the setting of sustainable SC logistics design problems.

Heidi Weigand


Background: The COVID-19 pandemic added significant occupational pressures on community pharmacists. The objective of this research project was to investigate the level of distress and burnout among community pharmacy professionals and its association with their retention within their occupation as well as patient safety outcomes. Method: We conducted a cross-sectional study on 722 community pharmacy professionals from all Canadian provinces using an online survey, including scientifically validated measures. The data were analyzed using multiple regression analysis. Results: In Canada, 85% of community pharmacy professionals reported their mental health had suffered since the COVID-19 pandemic. Younger pharmacy professionals and those paid hourly reported a worsening level of mental health and an increasing level of turnover intention. Pharmacists with more dynamic/disrupted work schedules and those working for a large pharmacy chain (more than 25 pharmacies in Canada) reported lower levels of mental health quality. Pharmacy professionals working in pharmacies that are open more than 70 hours a week reported a lower level of patient safety culture. Pharmacists’ mental health was the significant predictor of their turnover intention, implying a heightened risk to professional effectiveness and retention. Compassion satisfaction was positively associated with patient safety culture and safety.
behaviour, while compassion fatigue and secondary traumatic stress were significantly associated with pharmacists’ level of risk-taking behaviours. Conclusion: This study emphasized the importance of prioritizing the mental health and well-being of community pharmacy professionals and demonstrated individual and systemic factors predicting the well-being and turnover intention of community pharmacists, as well as patient safety culture within their pharmacy. This research makes a case to consider actions to shift the monitoring focus from community pharmacists (also known as “individual responsibility”) to community pharmacies (also known as “operational responsibility”) for managing patient safety. Additionally, community pharmacists should be provided with the professional autonomy to affect their working conditions and alleviate the stress that has the potential to negatively affect the delivery of care.


Purpose: The purpose of this paper is to explore a novel storytelling approach that investigates lived experience at the intersection of motherhood/caregiving and Ph.D. pursuits. The paper contributes to the feminist tradition of writing differently through the process of care that emerges from shared stories. Design/methodology/approach: Using a process called heartful-communal storytelling, the authors evoke personal and embodied stories and transgressive narratives. The authors present a composite process drawing on heartful-autoethnography, dialogic writing and communal storytelling. Findings: The paper makes two key contributions: (1) the paper illustrates a novel feminist process in action and (2) the paper contributes six discrete stories of lived experience at the intersection of parenthood and Ph.D. studies. The paper also contributes to the development of the feminist tradition of writing differently. Three themes emerged through the storytelling experience, and these include (1) creating boundaries and transgressing boundaries, (2) giving and receiving care and (3) neoliberal conformity and resistance. These themes, like the stories, also became entangled. Originality/value: The paper demonstrates how heartful-communal storytelling can lead to individual and collective meaning making. While the Ph.D. is a solitary path, the authors’ heartful-communal storytelling experience teaches that holding it separate from other relationships can impoverish what is learnt and constrain the production of good knowledge; the epistemic properties of care became self-evident.


This paper explores intergenerational perceptions of kindness in the context of Black Lives Matter (BLM) movement and the COVID-19 global pandemic. The purpose of this exploratory study is to investigate perceptions of kindness in the context of traumatic events and its potential value in authentic allyship in organizational environments. Design/methodology/approach: Authors recinterviewed 65 individuals (31 self-identifying as non-racialized and 34 self-identifying as Black, Indigenous and People of Colour aka BIPOC). Participants included Generation Z (Gen Z; born between 1997–2012/5) and Generation Y (Gen Y; also referred to as Millennials, born between 1981 and 1994/6) across North American, Europe and Africa. Millennials currently represent the largest generation in the workplace and are taking on leadership roles, whereas Gen Z are emerging
entrants into the workplace and new organizational actors. Findings: The paper offers insights into how to talk about BLM in organizations, how to engage in authentic vs performative allyship and how to support BIPOC in the workplace. The study also reveals the durability of systemic racism in generations that may be otherwise considered more enlightened and progressive. Research limitations/implications: The authors expand on kindness literature and contribute theoretically and methodologically to critical race theory and intertextual analysis in race scholarship. Practical implications: The study contributes to the understanding of how pro-social behaviours like kindness (with intention) can contribute to a more inclusive discourse on racism and authentic allyship. Originality/value: Authors reveal the potential for kindness as a pro-social behaviour in organizational environments to inform authentic allyship praxis.

Kent Williams


Ethical leadership has been shown to have a positive influence on employees’ moral behavior, but the strength of the relationship likely varies depending on several factors. We apply social learning theory and social cognitive theory to suggest that the association is stronger when the employees involved have high (versus low) moral identity and high (versus low) self-control. By testing the model using 375 supervisor-subordinate dyads at a large Iraqi organization, we demonstrated a separate strengthening role of subordinates’ self-control and moral identity in the positive effect of ethical leadership on their ethical behavior, and that ethical leadership had the strongest positive influence on the ethical conduct of employees with both high moral identity and high self-control. Our findings have important implications as they suggest that harnessing the full benefit of ethical leadership requires attention being paid to the characteristics of both leaders and subordinates.


Governments around the world have issued movement restrictions and quarantines to combat the SARS-CoV-2 (COVID-19) pandemic. However, the Swedish government has not implemented such measures but has depended on individual responsibility. The extent to which individuals have been encouraged to trust in and be satisfied with government strategies and adopt personal health measures, such as social isolation, remains unclear. This study examines the direct effects of trust in the government and risk perception on self-efficacy. Most importantly, this study intends to explore whether satisfaction with government measures strengthens the relationships between 1) trust in the government and self-efficacy and 2) risk perception and self-efficacy. We test our suggested hypotheses using survey data obtained from 403 Swedish citizens living in Sweden. As predicted, the findings indicate that trust in the government and risk perception positively impact individual self-efficacy. Additionally, the findings reveal that satisfaction with government measures strengthens these relationships; more precisely, the impact of trust in the government and risk
perception under a high level of individual satisfaction with government measures is much more positive than that under a low satisfaction level. In practice, a focus on implementing successful policies and excellent individual self-efficacy is required to halt the pandemic, and the findings indicate that combining strictly attentive and adaptive individual strategies with government strategies can minimize the spread of infection.

Wiesława Dominika Wranik


Background: Expenditures on hospitals constitute a large proportion of total health expenditures. In Poland the share of hospital spending is higher than the European Union average. The efficiency of the Polish hospital sector merits investigation. Research goal: The goal of this study is to estimate the relative technical efficiencies of Polish hospital regions, and to measure the impacts of provider contract types, fiscal decentralization, and the 2017 reform on the relative efficiencies. Methods: Using data from 16 hospital regions in Poland for the years 2007 to 2019, we estimate relative technical efficiencies and their determinants using a two-stage approach. In the first stage, we apply Data Envelopment Analysis, in which we assume variable returns to scale and an output orientation. In the second stage we use a truncated regression with double bootstrapping. Results: Our findings are threefold. First, fiscal decentralization may reduce technical efficiency, but the results was not statistically significant. Second, efficiency tended to be higher in regions where a greater proportion of nurses and midwives were offered employment as opposed to consulting contracts. Contract types offered to physicians were not statistically significant. Third, the 2017 reforms seem to have had a positive impact on efficiency to date. Conclusion: Policy makers may wish to consider offering less fiscal autonomy and control to regions and encouraging employment contracts with nurses and midwives.


Background: Cystic fibrosis (CF) contributes a significant economic burden on individuals, healthcare systems, and society. Understanding the economic impact of CF is crucial for planning resource allocation. Methods: We conducted a scoping review of literature published between 1990 and 2022 that reported the cost of illness, and/or economic burden of CF. Costs were adjusted for inflation and reported as United States dollars. Results: A total of 39 studies were included. Direct healthcare costs (e.g., medications, inpatient and outpatient care) were the most frequently reported. Most studies estimated the cost of CF using a prevalence-based (n = 18, 46.2 %), bottom-up approach (n = 23, 59 %). Direct non-healthcare costs and indirect costs were seldom included. The most frequently reported direct cost components were medications (n = 34, 87.2 %), inpatient care (n = 33, 84.6 %), and outpatient care (n = 31, 79.5 %). Twenty-eight percent
(n = 11) of studies reported the burden of CF from all three perspectives (healthcare system (payer), individual, and society). Indirect costs of CF were reported in approximately 20% of studies (n = 8). The reported total cost of CF varied widely, ranging from $451 to $160,000 per person per year (2022 US$). The total cost depended on the number of domains and perspectives included in each study. Conclusions: Most studies only reported costs to the healthcare system (i.e., hospitalizations and healthcare encounters) which likely underestimates the total costs of CF. The wide range of costs reported highlights the importance of standardizing perspectives, domains and costs when estimating the economic burden of CF.


All Canadians benefit from a high quality of public service delivery, which is directly related to the motivation of public servants. A top priority for governments is to attract and retain a public sector workforce that is motivated and enthusiastic to serve the public good. The Public Service Motivation (PSM) theory offers a framework for the analysis of motivations of public servants. Knowledge is lacking on how motivations of public servants change over time and are shaped by the life-course dynamics of identities, roles, inequalities, and experiences. Our goal is to chronicle the motivations of individuals over a life course, specifically from the onset of their career in the public service to their current career stage. We will contribute to PSM theory by combining it with the Life Course Theory (LCT). This will allow for the analysis of change in PSM over time and in relation to other life events. We aim to further our understanding of determinants of motivation of public servants by unveiling the dynamic, gendered, and diverse nature of PSM, and its interconnections with professional and personal lives. Our approach is qualitative. We will interview 100 alumni of graduate public administration programs in four Canadian institutions with reference to their graduate program admissions letter as a point of departure. During reflexive interviews, participants will co-analyse their admissions letters, where our role will be to guide them along the PSM framework. We will hear from study participants how their motivations changed since those expressed in their admissions letter, to what extent motivations over time were influenced by the events in their professional and personal lives, their identities, and roles in the workplace and in society, and their personal characteristics. Interview transcripts will be analysed using reflexive thematic analysis and interpreted jointly with the study participants.

**Bo Yu**


This study integrates expectation disconfirmation theory and cognitive dissonance theory into a model to explain why individual customers choose to return purchased products. The study uses survey results to test the impact of negative expectation disconfirmation and post-purchase
dissonance on consumers’ return intention and confirm that they work as dual mechanisms to independently predict customers’ product returns; importantly, the research emphasizes the multidimensionality of post-purchase dissonance (i.e., cognitive and emotional dissonance) and their joint impact on customers’ intention to return. Moreover, the current study explores the impact of a large group of factors, including online reviews, product-related factors, and shopper-related factors on product returns through the dual mechanisms. Regarding online review factors, the results highlight the critical roles of aggregated indicators (i.e., review consistency) and individual review content (i.e., emotions expressed in reviews) in affecting customers’ return intention, through the mediation of cognitive dissonance and emotional dissonance. Significant effects are also identified between product-related factors (e.g., price) and negative expectation disconfirmation, and between shopper-related factors (e.g., income) and post-purchase dissonance. Theoretical and managerial implications of the findings are discussed.


Every year, billions of prescriptions are dispensed in North America. Shockingly, medication errors result in up to 9,000 deaths annually in the United States alone. However, the current system for tracking service quality during the medication dispensation process is severely limited. It is essential to identify and understand the patterns of these errors to effectively prevent them. In this study, we employ a deep learning model called Bidirectional Encoder Representations from Transformers (BERT) to predict medication errors related to pharmacy services. Our preliminary experimental results demonstrate that our fine-tuned model achieves an impressive accuracy of approximately 88+%, accurately predicting whether a dispensation procedure will result in a nearmiss (caught beforehand) or an incident (caught afterward) error. The attention scores generated by the model parameters offer valuable insights into the data features. We believe that the proposed approach can serve as a vital initial step in uncovering error patterns and ultimately contribute to reducing medication errors.

Wenjun Zhang


We utilize the exogenous intertemporal variation in employment protection across countries and study the impact of employment protection on international equity markets. We find robust evidence that firms located in countries with weak labor protection regulation exhibit a low level of one-year-ahead stock price crash risks relative to those in countries with strong labor protection regulation. It is consistent with the view that when employees face material unemployment risk, they are more incentivized to engage in information search and analysis, thereby curtailing the effectiveness of managerial bad news hoarding activities (i.e., the protection heightening risk hypothesis). Our findings are robust to a battery of sensitivity tests. Further evidence shows that the
impact of employment protection on crash risk is more pronounced for firms with a higher proclivity to suppress bad news and for firms in countries with stronger legal enforcement. Our findings have important implications for policymakers concerning equity extreme risk and labor protection around the globe.

Jun Zhou


This study investigates the stock price pattern around seasoned equity offerings and the response of primary market investors to such a price pattern in an environment with weak investor protection. Using a sample of 1670 auction-style SEOs in China, we find stock prices exhibit an inverted-V pattern around SEO issue dates, increasing significantly before, peaking at, and then declining dramatically after issue dates. Further analysis shows that this price pattern can be explained by the managerial hyping hypothesis. With detailed information on investor bids submitted in the auctions, we find that investors' bid prices decrease while SEO discounts increase with pre-SEO price run-ups, indicating that primary market investors could identify SEO issuers' stock hyping tactic and react by submitting more conservative bid prices. We conclude that SEO issuers condition the market around SEO issue dates but this tactic does not help reduce issuers’ financing costs.


We document changes in the aggregate percentage and number of dividend-paying Canadian firms from 1989 to 2021 and observe a disappearing and partially reappearing dividend phenomenon similar to that in the United States. Unlike the US experience, in Canada, the number and percentage of dividend-paying firms are consistently higher than those of repurchasing firms throughout the sample period. Further, in Canada, the changes are driven by changes in the number of listed firms before and after the bursting of the internet bubble and the effects of the global financial crisis, which we call the new listing effect. The numbers are also affected by a tax change directed at income trusts and the change in the number of firms in the oil, gas, and mining sectors. In predicting a firm's dividend status based on firm-level characteristics, unlike recent US research, we find that the life-cycle theory, as measured by cumulative retained earnings and earnings volatility, plays an important role in explaining dividend status.