BRAD D. SMITH
SCHOOLS OF BUSINESS

Second Annual

MARSHALL BUSINESS RESEARCH CONFERENCE

Friday, November 5, 2021

Featuring the Dean's Distinguished Speaker

MARK J. NIGRINI, Ph.D.

Associate Professor, College of Business and Economics, West Virginia University

Renowned Expert in Benford's Law and Accounting Fraud

WELCOME MESSAGE

Avinandan Mukherjee, Ph.D.

Interim Provost & S.V.P. of Academic Affairs, Marshall University
Professor of Marketing, Brad D. Smith Schools of Business, Marshall University

Welcome to the second annual Marshall Business Research Conference offered by the Brad D. Smith Schools of Business at Marshall University. This conference evolved from our Faculty Research Day that we started in Fall 2017 and have organized every semester since. Last year, our Research Day went beyond our college of business and beyond Marshall partly because of its virtual format that helped invited speakers to present from several US states and even foreign countries. This year celebrates our second annual research conference.In this research conference, we have 36 research presentations making up four tracks. This is almost double the amount of papers in last year's conference. We have an especially eclectic group of presenters representing 8 countries. 4 continents. 13 states, and 34 universities and other institutions. By being an annual Fall conference open to the world, this conference helps foster business research and share new business ideas with the global academic and business community.

The Marshall Business Research Conference is a gathering where researchers come and share their latest ideas and discovery in an environment that is marked by collegiality and homophily. The environment is supportive, the format is informal, the discussion is lively, and the feedback is constructive. The hope is authors will use this experience to fine-tune their work before publishing, and attendees will provide constructive feedback to colleagues to better position their research, and to identify areas of mutual interest and possibilities of collaboration.

Mark your calendars for the Marshall Business Research Conference next November 4, 2022!!

Alberto Coustasse, Dr. PH, MD

Professor of Health Care Administration,
Marshall University
Research Committee & Conference Chair

The Research and Scholarly Activities Committee is proud to introduce the Marshall Business Research Conference as a forum to discuss applied business research that makes an impact on practice and the community. As you will see from the presentations, researchers have addressed important practical implications of various aspects of business, healthcare, the economy, and technology. The collaborations, lively interactions and constructive feedback make this conference special. Thanks to all who have made this conference possible including the presenters, the program and session chairs, and the judges.

Program Committee:
Tyson Ang, Marshall University | Satadru Das, Reserve Bank of India | Bo Feng, Marshall University | Peter Hilsenrath, University of the Pacific | Mohammad Karim, Marshall University | Ray Keener, Marshall University | Neeru Malhotra, University of Essex | Tom Norton, Marshall University | Isha Patel, Marshall University | Monica Wei, Marshall University | Jingran Zhang, Marshall University

Judges:
John Biros, Executive in Residence, Lewis College of Business, Marshall University
Robert Bookwalter, Dean of Liberal Arts, Marshall University
Philippe Georgel, Professor Biological Sciences, Marshall University
Deanna Mader, Professor of Marketing (Retired), Lewis College of Business, Marshall University
Michael Prewitt, Dean of the College of Health Profession, Marshall University
Jim Rorrer, Lewis College of Business Advisory Board Member, Marshall University
Bob Simpson. Former Founding Partner of Simpson and Osbourne, Charleston West Virginia
Anthony Woart, Department Chair and Professor, Department of Public Health, College of Health Professions, Marshall University

Conference Proceedings:
Alena Adkins, Marshall University

SPEAKER BIOGRAPHY

Mark J. Nigrini, Ph.D.

Associate Professor, College of Business and Economics, West Virginia University

Renowned Expert in Benford's Law and Accounting Fraud

Mark J. Nigrini, Ph.D. is an associate professor at the College of Business and Economics at West Virginia University. He is the recipient of the 2020 Outstanding Accounting Educator award of the West Virginia Society of CPAs. His research passion is Benford's Law which gives the expected patterns of the digits in tabulated data.

Mark has published papers on forensic analytics in academic journals and professional publications. These journals include the highly regarded *Journal of Accounting, Auditing, and Finance* and *Auditing: A Journal of Practice and Theory*. He published the lead article on the tendency of fraudsters to use round numbers in the first issue of the newly created *Journal of Forensic Accounting Research*. In 2014 he published an article in the *Journal of Accountancy* that was co-authored with Nathan Mueller, who at the time was incarcerated in a federal prison. Their article subsequently won the Lawler award for the best article in the *Journal of Accountancy* in 2014. His most recent article on fraud's fingerprints was the cover article in the November/December issue of *Fraud Magazine*.

His work has been featured in *The Financial Times*, *New York Times*, and *The Wall Street Journal* and his radio interviews have included the BBC in London, and NPR in the United States. His television interviews have included an interview for the Evil Twins series for the Investigation Discovery Channel and an interview featured in the Digits episode in the Netflix series Connected. He is a regular presenter at conferences and workshops.

In his spare time, he enjoys traveling, recreational sports betting, listening to classical music, watching motorsports, and walking 10,000 steps per day.

MARSHALL BUSINESS RESEARCH CONFERENCE

MARSHALL UNIVERSITY
BRAD D. SMITH SCHOOLS OF BUSINESS

EVENT PROGRAM

bit.ly/plenarymu

9:00 AM **Welcome Remarks**
Alberto Coustasse, Research Committee & Conference Chair, Marshall University
Avi Mukherjee, Interim Provost/S.V.P. of Academic Affairs, Marshall University
Jim Datin, Sponsor, Alumnus, CEO of BioAgilytix Labs

9:20 AM **Dean's Distinguished Speaker**
Mark Nigrini, Associate Professor, West Virginia University
Introduced by Jeffrey Archambault, Interim Dean, Marshall University

TRACK 1 BUSINESS I MORNING SESSION

bit.ly/tbus1mu

Neeru Malhotra, Session Chair, University of Essex

10:15 AM **Insights into Frontline Reward Practices for Service Quality Management in Customer Contact Services**
Neeru Malhotra, University of Essex | Sunil Sahadev, University of Brighton | Avi Mukherjee, Marshall University

10:40 AM **Import Competition and Export Performance of Domestic Manufacturing Sectors**
Erick Kitenge, Prairie View A&M University

11:05 AM **A Review of the Time Banditry Literature**
Jamey Halleck | Kevin Knotts, Marshall University

11:30 AM **Vocational Skills and Entrepreneurship Practice for Improving Entrepreneurial Intentions** *through Perceived Behavior Control*
Michael Brizek | Cherie Rains, Lander University

TRACK1 BUSINESS I AFTERNOON SESSION

bit.ly/tbus1mu

Tyson Ang, Session Chair, Marshall University

1:00 PM **Defense Beyond Support: Consumer-Brand Identification in the Context of Brand Rivalry**
Allison Smarr | Monica Wei | Tyson Ang, Marshall University

1:25 PM **Ensuring Success in Mergers and Acquisitions: Testing a Proposed Dual-Stage Sequence**
Uyi Lawani, Marshall University

1:50 PM **A Pilot Study Using the Baldrige Performance Excellence Framework in Hospitals**
Ron Schulingkamp, University Medical Center New Orleans | Kenneth Maxik, CompleteRx | Craig Kimble | Alberto Coustasse, Marshall University

2:15 PM **The Effects of Marketing Channel Selections on Brand Authenticity: The Role of Perceived Firm Size**
Felix Septianto, University of Queensland | Tyson Ang, Marshall University | Arnold Japutra, University of Western Australia | Pragea Geldoffy Putra, University of Auckland

2:40 PM **Whistleblowing in Accounting: A Meta-Analytic Review**
Mackenzie Festa, University of Wyoming | Megan Jones, Xavier University | Kevin Knotts, Marshall University

MARSHALL BUSINESS RESEARCH CONFERENCE

TRACK 2 BUSINESS II MORNING SESSION

bit.ly/tbus2mu

Tom Norton, Session Chair, Marshall University

10:15 AM **User Cost for Foreign Monetary Assets under Dollarization**
Boniface Yemba, Marshall University

10:40 AM **Money's User-Cost Impact on Private Investment in the U.S.**
Adam Bourgoin-Stone | Biyan Tang, University of Massachusetts at Dartmouth

11:05 AM **COVID-19 Induced Lockdown and Economic Activity: Evidence from Zoning Restrictions in India**
Satadru Das, Reserve Bank of India

11:30 AM **Let's Get Creative: Using Design Thinking to Improve Tax Research *and Planning Skills***
Amanda Thompson-Abbott | Tom Norton, Marshall University

TRACK 2 BUSINESS II AFTERNOON SESSION

bit.ly/tbus2mu

Ray Keener, Session Chair, Marshall University

1:00 PM **A Review of Classical Statistical Corporate Bankruptcy Prediction Models**
Timothy Bryan, Marshall University

1:25 PM **Revenue Classification Shifting: Does CEO Gender Matter?**
Wenjing Ouyang, University of the Pacific | Hongxia Wang, Coastal Carolina University | Thanh Ngo, East Carolina University

1:50 PM **The Effects of Preschool Television Viewing: Can Cable TV Make you Mentally Healthy?**
Yi Duan, Marshall University | Xiao Liu | Yajie Sun, Nanjing Audit University

2:15 PM **Don't Cash That Check! Identifying Risks to Medical Billing and Collection Practices Under the Doctrine of Accord and Satisfaction**
Casey Baker | Kent Willis | Charles Stivason, Marshall University

2:40 PM **Investor Horizons and Corporate Insider Trading**
Keming Li, Texas A&M University at San Antonio| Mohammad Uddin, Marshall University

TRACK 3 HEALTHCARE I MORNING SESSION

bit.ly/thc1mu

Monica Wei, Session Chair, Marshall University

10:15 AM **Marshall Institute of Medical Cannabis and Therapeutics**
Eric Blough | Philippe Georgel |Alberto Coustasse | Ben Eng, Marshall University

10:40 AM **Effects of COVID-19 on Academics and Behavioral Health of Children in Appalachia**
Sandra Strobel | Lanai Jennings, Marshall University

11:05 AM **Presence of Inhibitors and All-Cause Mortality in Patients with Non-Severe Hemophilia A**
Andres Garcia Sierra, University of Central Florida| Juliana Alexandra | Hernández Vargas | Ana María Valbuena García | Lizbeth Acuña Merchán, Columbian Fund for High-Cost Diseases

11:30 AM **My Pathway to Successful NIH Funding**
Brandon Henderson, Marshall University

TRACK 3 HEALTHCARE I AFTERNOON SESSION

bit.ly/thc1mu

Isha Patel, Session Chair, Marshall University

1:00 PM **HPV Vaccination in the Virginia Context**
Isha Patel, Marshall University| George Larry Maxwell, Inova Fairfax Hospital | Fabian Camacho, University of Virginia | Norma Magallanes Benitez, Inova Fairfax Hospital | Rajesh Balkrishnan, University of Virginia

1:25 PM **How can Businesses Support Local Hunger Initiatives?**
Amy Gannon | Mallory Mount, Marshall University

1:50 PM **Classifying Organizations Utilizing Input, Product, Workforce, and Workflow Characteristics**
Scott Stegall | MeriBeth Stegall, Clayton State University

2:15 PM **Assessing Career Pathways and Competency Acquisition: Do They Match?**
Irene Gabutti | Americo Cicchetti, Catholic University of Rome

2:40 PM **Re-Thinking Substance Abuse Reimbursement Payment Models**
Steven Szydlowski, University of Scranton

TRACK 4 HEALTHCARE II MORNING SESSION

bit.ly/thc2mu

Bo Feng, Session Chair, Marshall University

10:15 AM **Utilizing a Hospital At-Home Model to Improve Treatment Outcomes**
Bernardo Ramirez, University of Central Florida | Daniel West, University of Scranton

10:40 AM **Automated Predictive Modelling and Deep Learning Benchmarking for Accurate Classification of Diabetes Patients**
Shrirang Ambaji Kulkarni | Varadraj Gurupur, University of Central Florida

11:05 AM **Community-Based Implementation Research on Opioid and Mental Health in Rural Texas**
Harrison Ndetar | Karan Singh, University of Texas at Tyler

11:30 AM **Risk Factors Associated with Hospitalization for COVID-19 Among School-Aged Children**
Liam O'Neill, University of North Texas at Denton

TRACK 4 HEALTHCARE II AFTERNOON SESSION

bit.ly/thc2mu

Peter Hilsenrath, Session Chair, University of the Pacific

1:00 PM **Healthcare and Macroeconomics: A Prognosis**
Peter Hilsenrath, University of the Pacific

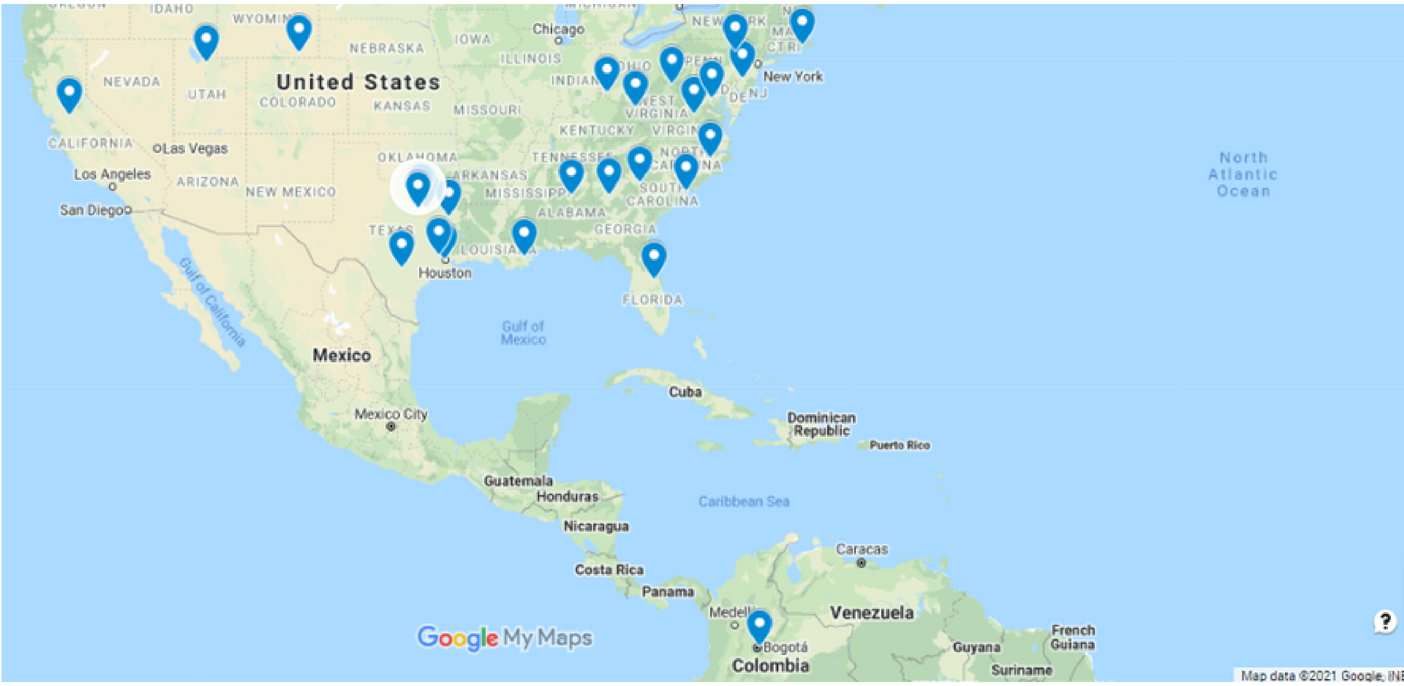
1:25 PM **Prototype of a Harmonized Healthcare Database Across Institutions**
Kim Fulda | Usha Sambamoorthi, University of North Texas at Fort Worth | David Schneider | Imam Xierali, University of Texas Southwestern

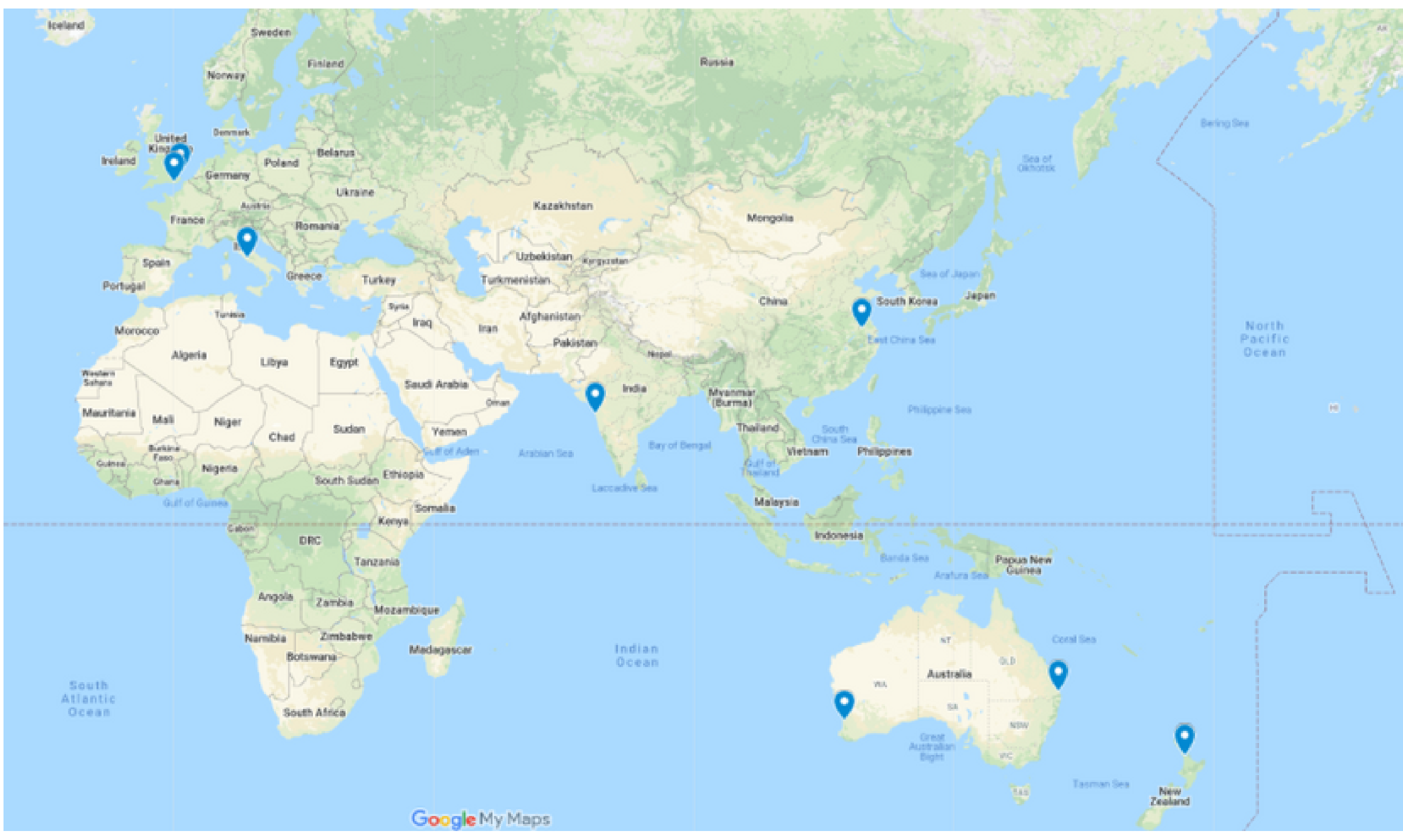
1:50 PM **Forgone Medical Care Among Medicare Beneficiaries During the COVID-19 Pandemic**
James Stimpson | Sungchul Park, Drexel University

2:15 PM **Biostatistician Collaboration in a Team Science Environment**
Sejong Bae, University of Alabama

2:40 PM **Race/Ethnic Disparities in the Impact of COVID-19: Implications for the Healthcare Industry**
Fernando Wilson, University of Utah

See where are authors are from.





ABSTRACTS

Insights into Frontline Reward Practices for Service Quality Management in Customer Contact Services

Neeru Malhotra, University of Essex | Sunil Sahadev, University of Brighton | Avi Mukherjee, Marshall University

Purpose: Although extrinsic rewards are routinely utilized by organizations to motivate employees, empirical evidence for the relationship between extrinsic rewards and employee performance has been mixed, especially with respect to service quality performance in customer contact contexts. Research has yet to empirically understand how extrinsic rewards may be effectively utilized to optimize frontline employee (FLE) outcomes for delivering superior customer service. Drawing on cognitive evaluation theory, this research empirically investigates the direct and indirect (via affective commitment) effects of extrinsic rewards on FLE service quality performance under the moderating influence of intrinsic rewards to develop a better understanding of the extrinsic rewards - service quality relationship.

Study Design and Methodology: Data were collected via two studies using survey methodology. Study 1 utilizes two different samples of FLEs in personal service and phone service encounters in the UK. The telephone encounter findings are further corroborated by Study 2 conducted in an Indian call center context

Findings: Demonstrates that extrinsic rewards can be a double-edged sword as such rewards simultaneously produce both favourable and unfavourable effects, which are further regulated by provision of intrinsic rewards. While direct effect of extrinsic rewards on service quality is negative, their indirect effect is consistently positive across all three samples. This study offers useful insights into the mechanisms and conditions under which extrinsic rewards can be optimally utilised for FLE service quality performance

Originality/Value: This is perhaps the first study that accounts for the influence of extrinsic rewards on FLE service quality performance and sheds light on contextual conditions that regulate both the direct and indirect effects of such rewards.

ABSTRACTS

Import Competition and Export Performance of Domestic Manufacturing Sectors

Erick Kitenge, Prairie View A&M University

Purpose: This paper investigates the impact of import competition on the export performance of domestic manufacturing sectors.

Findings: The theory-consistent general equilibrium estimates fail to provide a unanimous pattern of contemporaneous effects of imports on export performance. However, exporters within domestic manufacturing sectors seem to adapt to import competition over time, leading to either higher positive or lower negative future effects of contemporaneous imports within and across manufacturing industries, reflecting a learning curve type relationship between import competition and export performance.

Originality/Value: The unveiled learning curve type relationship holds when non-high-income countries face import competition in six out of eight industries and when high income countries face import competition in minerals, metals, and machinery. Therefore, harmful effects of imports could be temporary depending upon the income level of the importing country and the manufacturing sector that directly suffers from import competition.

A Review of the Time Banditry Literature

Jamey Halleck | Kevin Knotts, Marshall University

Purpose: There has been a steady rise in scholarly interest in the topic of time banditry, the acts of engaging in behavior that is not related to employee's work tasks, over the last ten plus years. Time banditry research has primarily been found in traditional workplace settings. However, with the advent of the COVID 19 Pandemic, many employees were asked or required to work from home, thus providing an alternative context for time banditry to be studied in.

Study Design and Methodology: The methodology for this review consisted of a thorough review time banditry literature. Considering that time banditry research is still in a nascent stage of development, both published research articles and dissertations were collected for review. The analysis provided several main areas of time banditry research: antecedents, outcomes, measurement, and other relevant findings.

Findings: Much research is still needed to fully understand the time banditry phenomena. Time banditry follows a traditional negative relationship with most antecedents and outcomes, however there are some positive relationships that need to be further examined. Additionally, theoretical, research, and practical implications for the field are discussed with a particular emphasis on relation to remote work settings.

Originality/Value: The current manuscript helps to provide a fuller understanding of the current state of the time banditry field. Time banditry has not been subjected to an all-inclusive literature review and this manuscript takes the first step at providing a synopsis of the information in a single location. This review should serve as a critical foundation as the time banditry literature matures and expands.

ABSTRACTS

Vocational Skills and Entrepreneurship Practice for Improving Entrepreneurial Intentions through Perceived Behavior Control

Michael Brizek | Cherie Rains, Lander University

Purpose: The aim of this study was to determine the effect of vocational skills and entrepreneurship practice to entrepreneurial intentions through perceived behavior control.

Study Design and Methodology: The method used in this research is a quantitative method of 319 technical school students with 175 samples from proportionate stratified random sampling. The analytical technique used in this research is structural equation modeling (SEM). H

Findings: Hypothesis testing with a 5% significance level obtained a significant indirect effect. The coefficient of determination (r-square) for the variable perceived behavior control is 29.2%, which is the variance explained by the variables vocational skills and entrepreneurship practice. The coefficient of determination (r-square) for entrepreneurial intentions is 43.1%, which is the variance explained by the variable perceived behavior control. Based on the data analysis result, it can be concluded that vocational skillset and entrepreneurial practice have a positive indirect effect on entrepreneurial intentions through perceived behavior control.

Originality/Value: The examined conclusion from this study has proved that there is a mediated effect of perceived behavior control to vocational skills and entrepreneurial practice. The result of this research support the existing theory and reinforce previous research related to the field of entrepreneurship education.

ABSTRACTS

Defense Beyond Support: Consumer-Brand Identification in the Context of Brand Rivalry

Allison Smarr | Monica Wei, Marshall University

Purpose: Through the development of mutually supportive relationships between brand and consumer, consumer-brand identification (CBI) brings about many benefits as consumers tie their sense of self to a particular brand. While most existing literature only details the positives of CBI, this work alternatively focuses on the negative aspects of CBI, specifically in the context of rivalries when a rival is performing better than the focal brand. The purpose of this study is to investigate how CBI translates into negative fan behaviors—such as negative word-of-mouth, unethical brand defense, and incivility on social media—through the emotional process highly-identified consumers experience in reaction to rival successes.

Study Design and Methodology: After viewing a flyer detailing a performance achievement of the rival brand, the emotional responses and behavioral reactions of highly-identified consumers—aligned with their current university in Study 1 or either Apple or Samsung in Study 2—were gathered via survey to gauge their likelihood of participating in retaliatory negative fan behaviors. A statistical software called Process Macro was used to analyze the relationship between variables.

Findings: Analysis of these rivalry scenarios reveals a connection between CBI and schadenfreude, describing the emotional progression that motivates consumers to participate in negative fan behaviors against rivals. Our approach to CBI indicates that consumer-brand relationships can involve brand defense that goes beyond standard support, introducing the possibility for consumers who inadvertently represent the focal brand to jeopardize its reputation.

Originality/Value: Ultimately, this research magnifies the significance of CBI's consequences, contributing to marketing literature by indicating that more understanding of its downsides is necessary to mitigate negative fan behaviors while simultaneously strengthening consumer-brand relationships.

ABSTRACTS

Ensuring Success in Mergers and Acquisitions: Testing a Proposed Dual-Stage Sequence

Uyi Lawani, Marshall University

Purpose: Mergers and Acquisitions have evolved as alternative governance structures for organizations looking to combine resources with other firms, acquire strategic assets, or access larger markets. Results regarding post-acquisition performance reported in mergers and acquisitions' (M&A) literature has been mixed. Some studies indicate that M&A researchers may be ignoring variables that can impact significantly on firm post-acquisition performance. To unravel the mixed results regarding post-acquisition performance in organizations, this paper suggests variables that may aid in the further development of the theory and research of the subject. Specifically, this paper proposes that the human resource (HR) function may be strategically involved in enabling the success of mergers and acquisitions by helping to create organizational adaptability.

Study Design and Methodology: A model that shows the involvement of HR at both the pre- and post-acquisition stages is presented with the proposition that ensuring success in acquisitions may involve a sequential pattern.

Findings: The paper suggests that activities at the pre-acquisition stage precede those at the post-acquisition stage, which may in turn stimulate organizational adaptability. At the pre-acquisition stage, the HR activity of due diligence leads to strategic fit, which in turn leads to knowledge transfer and integration. At the post-acquisition stage, knowledge transfer and integration both result in organizational adaptability.

Originality/Value: While the HR practice of training and socialization enables knowledge transfer, the HR practices of selection, reward, and evaluation lead to post-acquisition integration. Hypotheses comprising activities such as those mentioned above are derived from this model and prepared for further analyses.

ABSTRACTS

A Pilot Study Using the Baldrige Performance Excellence Framework in Hospitals

Ron Schulingkamp, University Medical Center New Orleans | Kenneth Maxik, CompleteRx , | Craig Kimble | Alberto Coustasse, Marshall University

Purpose: Most hospitals face budgetary constraints and sustainability concerns in a changing environment increasingly focused on Value-Based Purchasing [VBP]. The VBP program rewards hospitals for improving the quality of care by redistributing Medicare payments so that hospitals with higher performance of quality receive a more significant proportion of the payment than the lower performing hospitals. The healthcare industry has increasingly relied on the Baldrige Excellence Framework for Healthcare [BEFH] as a crucial means to improve patient care and organizational performance.

Study Design and Methodology: This convenience sampling pilot study tests the hypothesis of a positive relationship between hospitals using the BEFH as a business model and high-performance levels as measured by CMS performance data in Detroit, Michigan. It examined the 2019 Hospital Consumer Assessment of Healthcare Providers and Services [HCAPS] surveys of patients for 39 measures reported by CMS within 25 miles from a BEFH award winner, a Detroit Health system, and competitors' hospitals within 25 miles. The measures included 23 for healthcare processes, ten for patient experience, and six for outcomes of healthcare provided. The research question was, do hospitals that have received the BEFH award perform better than hospitals in their geographic markets (non-BEFH) based on comparisons of the same CMS performance measures? The research design utilized was a cross-sectional, observational, and retrospective quantitative correlational design to explore these relationships. Due to the small sample size, N=25, the Kruskal-Wallis nonparametric test was used for mean comparison analysis using SPSS statistical software.

Findings: Preliminary data indicated higher means in BEFH hospitals in four variables with statistical significance. Two measures were in patient experience metrics: Patients "usually" received help as soon as they wanted; Patients "usually" received call button help as soon as they wanted and two were related to nursing experience Nurses "usually" communicated well; Nurses "usually” treated patient with courtesy and respect.

Originality/Value: We will continue analysis with healthcare processes and healthcare outcomes, and we will expand to 50 miles to increase the sample size. The BEFH may influence quality improvement in hospitals. Further research with all 50 BEFH wards winners should be performed.

The Effects of Marketing Channel Selections on Brand Authenticity: The Role of Perceived Firm Size

Felix Septianto, University of Queensland | Tyson Ang, Marshall University | Arnold Japutra, University of Western Australia | Pragea Geldoffy Putra, University of Auckland

Purpose: Perceived firm size could influence whether a product is perceived to be more natural or not. The focus of this study is on the marketing channel selections and perceived firm size toward brand authenticity. Do consumers infer about the size of the firm (small vs. big) based on the marketing channel selections? Do marketing channel selections and perceived firm size affect the perceptions of brand authenticity? Additionally, this study examines the moderating role of skepticism.

Study Design and Methodology: Based on experimental design, study 1 and study 2 display the relationships between marketing channel selections, firm size and brand authenticity. Study 3 shows that the moderating role of skepticism on the effect of marketing channel selections and purchase likelihood. All of the studies were analyzed using a statistical analysis called Process Macro.

Findings: Firms that utilized online channels are perceived to be smaller compared to firms that utilized hybrid channels (online and offline). When consumers perceived the firms to be smaller, they considered the brands to be more authentic, which in turn increase the purchase likelihood. Finally, for consumers with low skepticism, the effects of marketing channel selections on purchase likelihood is higher.

Originality/value: This research advances the literature on the associations between firm characteristics and brand perceptions.

ABSTRACTS

Whistleblowing in Accounting: A Meta-Analytic Review

Mackenzie Festa, University of Wyoming | Megan Jones, Xavier University | Kevin Knotts, Marshall University

Purpose: Whistleblowing is generally understood as when employees of an organization disclose that actions and practices taken by the organization are illegal or unethical. It is critical for the whistleblowing and accounting research fields to understand the impacts and potential reasons that individuals may choose to engage in whistleblowing. The following meta-analysis seeks to further explore the relationships that exist between whistleblowing and the antecedents of it. In particular, this meta-analysis empirically analyzes relationships for both internal and external whistleblowing. Specifically, the relationships between several key determinants of internal and external whistleblowing are studied.

Study Design and Methodology: Articles for inclusion were found from two prior qualitative reviews, journal searches, and ongoing emails to researchers in the area. These follow traditional meta-analytic search procedures. The meta-analysis was conducted following recommended procedures from Schmidt and Hunter.

Findings: The findings of the meta-analytic review are consistent with work that has been previously done. In particular, positive relationships to whistleblowing (internal and external) were found for personal responsibility and perceived seriousness, while a negative relationship was found for perceived cost. Mixed results were found for age and gender. This meta-analytic review goes beyond those works to push the stream of research forward. Future research and implications are discussed at the end of manuscript.

Originality/Value: This builds upon prior research by quantifying estimates for how different antecedents relate to both forms of whistleblowing. Recently, two qualitative reviews have summarized experimental studies and synthesized research using various methods However, the current meta-analysis goes beyond these reviews by empirically examining the relationship and provide more substantive estimates of the relationships studied.

ABSTRACTS

User Cost for Foreign Monetary Assets under Dollarization

Boniface Yemba, Marshall University

Purpose: This paper extends the literature on user cost of monetary asset under uncertainty by providing a formula of user cost for foreign monetary assets whose rate of return are subject to not only to exchange rate risk, but also to currency risk.

Study Design and Methodology: To reach our goal, we use an international Capital Asset Pricing Model (CAPM) to derive the user cost of foreign monetary assets and provide condition under which the formula hold. Researchers show that user cost risk adjustments can be measured easily by its beta. They also show that any risky non-monetary asset can be used as the benchmark asset if its rate of return is adjusted in accordance with their formula. The latter could be especially useful when own rates of return are subject to exchange rate risk. However, they did not provide any formula for the latter case. This paper fills this gap in the literature.

Findings: Our formula applies better when the purchasing power parity (PPP) does not hold because the exchange rate and the currency risks often represent a significant fraction of the total risk premium in the international financial market. The formula applies also better for economies that face dollarization (diversification of international portfolio with heavy preference in foreign currency denominated assets). Moreover, our formula shows that only domestic non-monetary asset can be used as the benchmark asset due to the effect of dollarization of the financial market. In fact, under dollarization the local currency denominated assets offer a higher risk premium and return over the foreign currency denominated ones because the latter are wanted and preferred over the first for hedging motives.

Originality/Value: Unlike prior research, our formula does not depend on intertemporal no separability of the household’s representative utility function because the exchange rate and currency risks are incorporated in the model in form of time varying risk premium.

Money's User-Cost Impact on Private Investment in the U.S.

Adam Bourgoin-Stone | Biyan Tang, University of Massachusetts at Dartmouth

Purpose: It is important to understand the factors that encourage, promote, or discourage investment because of the fundamental impact of investment on GDP. This paper investigates the relationship between the user-cost of money and the level, as well as growth rate of private investment in the U.S. Traditional production theory states that interest rates are one of the key determinants of the level of investment firms are willing to make, and that investment and interest rates are negatively related. However, in the recent extremely low-interest-rate environment since 2008, interest rates have become less relevant. Therefore, using a general interest rate like the Federal Fund Rate to research the impact of money on investment has become less informative.

Study Design and Methodology: This paper investigates the impact of the user-cost of money on investment using fixed effects OLS methodology with Divisia Monetary Aggregates and the user-cost associated with them. The user-cost of Divisia money can be either (a) specific to each monetary asset or, (b) as broad as an aggregate, such as user-cost for M1, or M2, M3. These unique traits make Divisia based analysis very informative for research into the relationship between investment and user-cost of money.

Findings: Our research shows that Divisia money supply's user-cost negatively impact the investment and the impacts are statistically significant.

ABSTRACTS

COVID-19 Induced Lockdown and Economic Activity: Evidence from Zoning Restrictions in India

Satadru Das, Reserve Bank of India

Purpose: On May 01, 2020 a list of districts was announced categorizing them in to three zones: red, orange and green. This categorization was based on the number and concentration of COVID-19 cases reported in each district. Since the lockdown restrictions varied across these three zones, we use this classification to measure the relative impact of the lockdown restrictions on economic activity.

Study Design and Methodology: First, we use Google Mobility Index to estimate the impact of the restrictions on mobility for different purposes (work, transit, grocery, retail etc.) to check if the heterogeneity in terms of restrictions across the zones had an impact on mobility.

Findings: Our results show that in red zones, mobility decreased significantly during the months of April-May-2020 compared to the green districts. Second, we estimate the impact of lockdown restrictions on consumption demand proxied by ATM and POS transactions. We find that ATM transactions in the red zone declined sharply in April and May-2020 relative to the green zone districts and remained in the negative zone until Aug-2020. POS transactions on the other hand declined sharply in the red zone districts in April and May-2020 relative to the green zone districts but have recovered from June-2020. For both ATM and POS transactions, however, we do not find any significant impact in the orange zone districts relative to the green zone districts. Third, we use data on household income and consumption expenditure and find that income recovered in the red and orange districts relative to green districts by July 2020, while consumption expenditure in red districts had not fully recovered till August 2020. Lastly, we comment on the distribution of unemployment during the lockdown months. We find that unemployment increased between the months of May and Aug-2020. We also show that the concentration of COVID-19 cases in a district affected economic activities and therefore, unemployment.

ABSTRACTS

Let's Get Creative: Using Design Thinking to Improve Tax Research and Planning Skills

Amanda Thompson-Abbott | Tom Norton, Marshall University

Purpose: The United States Internal Revenue Code is a complex and lengthy document that is estimated to contain well over 2,600 pages. Given these facts, the ability to conduct tax research and planning becomes vital for the success of tax professionals. Teaching accounting students tax research and planning skills can often be a daunting and cumbersome task. The aim of this research proposal is to explore how incorporating design thinking might improve accounting students' abilities to become better at tax research and planning. According to the Stanford University Design School, design thinking contains six key steps: understand, observe, define, ideate, prototype, and test. We propose that teaching this model in our undergraduate tax classes will help students conduct more accurate tax research that will lead to innovative tax planning ideas.

Study Design and Methodology: There are two undergraduate tax classes at our institution: Individual Taxation (ACC 348) and Business Entity Taxation (ACC 448). Each class contains approximately 15-25 students and accounting majors are required to take both classes. Students will be administered a pre-test to assess their proficiency in accessing relevant tax authorities to generate tax planning strategies. After the pre-test, the class will be introduced to the design thinking model and asked to complete a post-test assessing their proficiency in accessing the relevant tax authorities to generate tax planning strategies. The pre and post tests will be compared in each class and also compared across both classes.

Findings: In Progress

Originality/Value: The field of taxation constantly changes. Technology is starting to play a pivotal role. As lower-level tasks become automated, there will be an increased demand for tax professionals to be trusted advisors. This new role will require excellent tax research and planning skills. We want to arm students with the tools necessary to step into the role of trusted adviser. We postulate that design thinking models can ultimately lead to more accurate tax research and result in more creative tax planning solutions.

ABSTRACTS

A Review of Classical Statistical Corporate Bankruptcy Prediction Models

Timothy Bryan, Marshall University

Purpose: The purpose of this research is to test the validity of various classical statistical corporate bankruptcy prediction models during the pandemic. Secondarily, the paper will create a new model for predicting corporate bankruptcy by introducing new variables. The paper is in process with no data retrieved as of the date of this abstract.

Study Design and Methodology: The research starts with a literature review of classical statistical corporate bankruptcy prediction models from 1968 to 2019. The initial research question is, are the models useful in identifying bankruptcies that occurred during the pandemic in industries hardest hit such as retailing, restaurants, and hospitality? Panel financial data for related will be selected from Compustat for the ten years prior to the pandemic through June 30, 2021, for public companies that have filed for bankruptcy and others within their standard industry classification code. Stata will be utilized to analyze the company data using prior statistical corporate bankruptcy prediction models.

The second research question will be, is there a better model for predicting corporate bankruptcy? An initial new variable will be "fixed costs." Fixed costs are not disclosed in financial statements prepared under generally accepted accounting principles. However, they can be estimated utilizing a mixed cost estimation. Other variables will be selected based on the results of the initial model testing.

Findings: In Progress

Originality/Value: Prediction of corporate performance is a growing area after the 2008 financial crisis and currently in the pandemic. New models are being developed; however, little research has been done to test models' validity. This research will test the validity and possibly create a new model for predicting corporate failure. No research in bankruptcy prediction has attempted to identify fixed costs as a possible contributor to failure.

ABSTRACTS

Revenue Classification Shifting: Does CEO Gender Matter?

Wenjing Ouyang, University of the Pacific | Hongxia Wang, Coastal Carolina University | Thanh Ngo, East Carolina University

Purpose: Instead of managing bottom-line earnings, firms may use revenue classification shifting to inflate core earnings due to its less risky, less costly, but viable features. Female CEOs, being more risk averse, may engage in more revenue reclassification. On the other hand, female CEOs may engage in less revenue reclassification given they are more ethically sensitive.

Study Design and Methodology: Using a sample of 36,427 US firm-year observations from 1993-2019, we show that female CEO-led earnings management suspect firms, i.e., those that just beat important earnings threshold, engage in less revenue reclassification in the pre-SOX period, but significantly increase revenue reclassification afterwards. These results are robust to controlling for both accrual and real earnings management, endogeneity tests, sample selection bias, and additional control variables. Further analyses indicate that these firms use revenue reclassification as a substitute for real earnings management, a more costly earnings management tool.

Originality/Value: Our findings suggest that female CEOs choose a less costly and harder-to-detect earnings management tool under a stricter monitoring environment after SOX, providing new evidence that female CEOs are more risk-averse rather than ethical than male CEOs.

The Effects of Preschool Television Viewing: Can Cable TV Make you Mentally Healthy?

Yi Duan, Marshall University | Xiao Liu | Yajie Sun, Nanjing Audit University

Purpose: There has been a lot of controversy regarding the pros and cons of children watching television. For example, watching television, especially at early ages, can affect individual cognitive capacity, linguistic ability, and school performance.

Study Design and Methodology: We investigate the impact of early exposure to cable television (cable TV or CATV) on individual's mental health and depression status in China.

Findings: Using instrumental variables, our results indicate that exposure to cable TV before attending primary schools tends to exacerbate individual mental health and depression status even in their adulthood. Among all demographic groups, females are the most likely to be affected. Early exposure to cable TV also seems to make individuals work less and enjoy more leisure.

Originality/Value: Our findings suggest exposure to cable TV in the earliest years tends to have long-lasting effects on individuals, and early intervention can be adopted to reverse the negative impact on mental health.

ABSTRACTS

Don't Cash that Check! Identifying Risks to Medical Billing and Collection Practices under the Doctrine of Accord and Satisfaction

Casey Baker | Kent Willis | Charles Stivason, Marshall University

Purpose: To identify potential risks to health care provider billing and collection practices under the doctrine of accord and satisfaction

Methodology: Literature and law review

Findings: We examine the doctrine of accord and satisfaction in the context of common hospital billing and collection practices, identifying key aspects of the doctrine for health care administrators to consider. We conclude with recommendations to health care organizations for structuring payment processing systems to reduce the risk that medical bills will be legally uncollectable.

Value: Medical billing practices have been the subject of controversy in recent years, prompting calls for additional regulation. But the existing commercial law doctrine of accord and satisfaction, which is well-established in forty-nine states, presents a risk to the collection practices of hospitals and other health care-related businesses that has, thus far, been ignored by existing scholarship.

ABSTRACTS

Investor Horizons and Corporate Insider Trading

Keming Li, Texas A&M University at San Antonio | Mohammad Uddin, Marshall University

Purpose: We study the effect of investor horizons on corporate insider trading. We argue that longer investor horizons attenuate opportunistic trades by corporate insiders by exercising their monitoring role.

Study Design and Methodology: Following prior research, we use investors' portfolio turnover as a proxy for a firm's investor horizon. Once we estimate investors' portfolio turnover, we then classify investors into two groups: short-term and long-term investors. Finally we obtain a firm's investor horizons by combining the ownership of their long-term investors. Insider trading data is from Thomson Financial Insider Research Services Historical Files. We follow similar methodology to disentangle CEO trades into two groups: opportunistic and routine trades. Our sample period ranges from 1993 to 2011.

Findings: Consistent with our argument, we find that longer investor horizons inhibit opportunistic insider trading within corporations. Among these trades, opportunistic insider sales are negatively and significantly affected by longer investor horizons. We do not find similar findings for opportunistic insider purchases. Our findings remain strong after using alternative variable specifications, addressing the potential endogeneity problem, and additional robustness checks.

Originality/Value: The finding presented in this study has useful practical implications as naïve investors should carefully consider investment horizon before mimicking corporate insiders' trades.

ABSTRACTS

Marshall Institute of Medical Cannabis and Therapeutics

Eric Blough | Philippe Georgel |Alberto Coustasse | Ben Eng,,Marshall University

Purpose: Cannabis is the world's most commonly cultivated, trafficked, and used drug in the United States. Thus far, thirty-five states, and the District of Columbia, Puerto Rico, and Guam, have legalized cannabis in some form (CBD and medical cannabis), including sixteen who have legalized marijuana for recreational use. In West Virginia, medical marijuana has been legal since 2017. However, several barriers have delayed the implementation of this program which have included the need to: (i.) determine the safety of cannabis-containing products, (ii.) obtain business planning / entrepreneurial support, (iii.) enhance education/workforce training, and (iv.) conduct cannabis-related research to determine physiological mechanisms of action and therapeutic potential.

Study Design and Methodology: The purpose of the proposal is to focus and refine institutional research capacity and outreach to help the State of West Virginia develop and innovate its nascent medical cannabis industry and to serve the needs of the state's population. To better position the state and Marshall University to take advantage of the potential cannabis market, we propose to develop the Marshall Institute of Medical Cannabis and Therapeutics (MIMCaT).

Findings: This Institute will specifically target each of these barriers to implementation and leverage prior investments made by the university, the National Institute of Health, and the National Sanitation Foundation to improve Marshall University's biomedical research infrastructure. The MIMCaT will function as a revenue-generating testing laboratory to support the cannabis industry in the state, a resource for small businesses to assist business plans/marketing studies, educational outreach, and innovative and impactful research on cannabis.

Originality/Value: This Institute will serve as a "hub" for the university and state to bring together scientists, business professionals, scholars, and clinicians from different schools involved in research related to medical cannabis at Marshall University. In addition, to ensure sustainability, industry partnership options will be developed and marketed to West Virginia cannabis growers.

ABSTRACTS

Effects of COVID-19 on Academics and Behavioral Health of Children in Appalachia

Sandra Strobel | Lanai Jennings, Marshall University

Purpose: The COVID-19 pandemic required the closure of schools in the United States, resulting in a shift to remote online learning for most students. Additionally, the country was placed under varying levels of lockdown, with events canceled, stores and services shuttered, and social gatherings prohibited. While these measures were necessary to control the spread of the virus, potential negative consequences have emerged, most notably academic difficulties and declining mental health.

Study Design and Methodology: In order to determine the extent of the impact on families and determine which children were most vulnerable; faculty, graduate students, field supervisors, alumni, and others, with contacts in schools, were asked to request permission from administrators to send emails to parents. Participants included 1600 parents of school age children, ages 2-22. Surveys required parents to provide information regarding their children's emotional difficulties, academic struggles, interpersonal issues, and physical problems. Parent participants collectively reported on nearly 3000 children and adolescents in Appalachia.

Findings: Initial data was analyzed with frequency counts and review of qualitative responses. Future data analysis will include ANOVA to determine differences between groups, such as type of school attendance, gender and disability status. It is hypothesized that children who were able to attend in person will have fewer academic and mental health difficulties. A second hypothesis is that children with disabilities will show greater academic and mental health issues. Dependent variables measured include, academic difficulties, mental health difficulties and disruption of family routine.

Originality/Value: To the researchers' knowledge, this is the only study examining the effects of COVID on the academic and mental health of Appalachian children from a parent's perspective.

ABSTRACTS

Presence of Inhibitors and All-Cause Mortality in Patients with Non-Severe Hemophilia A

Andres Garcia Sierra, University of Central Florida| Juliana Alexandra | Hernández Vargas |,Ana María Valbuena García| Lizbeth Acuña Merchán, Columbian Fund

Purpose: Orphan diseases are a group of chronically debilitating conditions that severely threaten life quality and are highly complex to manage medically. Hemophilia is a congenital coagulation disease that has been classified as one of them. Additionally, the presence of factor VIII inhibitor in patients with non-severe hemophilia A is a serious complication since it modifies the bleeding pattern of these patients. Some studies suggest that the inhibitor development worsens clinical outcomes and may increase mortality risk from serious bleeding complications. Accordingly, we aimed to analyze the relationship between the presence of inhibitors and all-cause mortality in non-severe hemophilia A patients in Colombia from 2015 to 2019.

Study Design and Methodology: We performed a retrospective cohort study from the Colombian hemophilia registry. We compared demographic and clinical data according to inhibitors' presence or absence. We assess the association of interest by estimating a Poisson regression model (counted events as deaths) with panel data and incidence rate ratios (IRRs), representing the mortality rates/person-years.

Findings: We obtained 3,673 patients with non-severe hemophilia A and 22 deaths were identified across the 5 years of follow-up. A total of 350 patients out of 3,673 (9.52%) developed inhibitors during the study period. Furthermore, we found that non-severe hemophilia A patients who developed inhibitors had mortality rates 5% lower than non-severe hemophilia A patients who did not develop inhibitors.

Originality/Value: Our results come from a hemophilia risk management cohort in Colombia and, to our knowledge, are the first in the Latin American region. These findings are in line with previous American and European studies that mention that mortality rates of patients with inhibitors decrease significantly over time. Healthcare administration, public health, and public policy programs should offer comprehensive care to these patients since adequate risk management seems to offer better health outcomes.

ABSTRACTS

My Pathway to Successful NIH Funding

Brandon Henderson, Marshall University

Purpose: The use of electronic nicotine delivery systems (ENDS) is growing worldwide among multiple age groups. Prior evidence shows the use of flavor additives increases smoking and vaping initiation. But no clear evidence is available regarding their ability to alter brain circuits relevant to addiction. The purpose of my lab's research is to investigate the precise neurobiological changes that occur due to chemical flavorants in a model translationally relevant to ENDS use. The purpose of this presentation is to present key features that led to the success of having this research funded by the NIH and details related to NIH submissions.

Study Design and Methodology: We utilize a mouse model of vapor-inhalation self-administration. Here we train mice to self-administer vaporized solutions that contain chemical flavors that match human ENDS usage. We then use fluorescence microscopy and electrophysiology to examine changes in neuronal function and organization in brain areas key to addiction-related behavior.

Findings: To date, we have determined that while nicotine is the well-known key addictive component of all tobacco products, chemical flavorants can alter brain pathways to trigger addiction-related behavior. Data such as this is key to establishing scientific premise that is critical for the success of extramural funding.

Originality/Value: The potential value of this directly relates to public health. Specifically, increasing knowledge of harmful or potentially harmful constituents of ENDS (vaping) products will improve public health. Additionally, a goal of this presentation is to provide an example blueprint for a pathway of success in procuring extramural funding from the NIH.

HPV Vaccination in the Virginia Context

Isha Patel, Marshall University| George Larry Maxwell, Inova Fairfax Hospital | Fabian Camacho, University of Virginia | Norma Magallanes Benitez, Inova Fairfax Hospital | Rajesh Balkrishnan, University of Virginia

Purpose: Despite its effectiveness in preventing several cancers, there are marked disparities in HPV vaccination initiation and series completion. The present study sought to understand disparities in HPV vaccinations among patients in northern Virginia (ages 9-26) and the impact of patient and provider gender concordance, in lieu of CDC's vaccine recommendation changes in 2016, which reduced the recommended doses from three to two, in this population.

Study Design and Methodology: Electronic medical records from a large healthcare system in Northern Virginia were analyzed from 2012 to 2017. Odds of initiating vaccination, completing vaccination at 6 months, completing vaccination at 12 months and clinical completion were examined respectively. Patient and provider characteristics associated with initiating vaccination and vaccination completion at different durations were also examined. The data was analyzed using SAS 9.4. Findings were considered statistically significant at $p<0.05$.

Findings: A total of 37,427 patients, ages 9 to 26, were included in the analyses. Racial minorities had higher odds of getting vaccinated, relative to non-Latino whites. Each additional year between the patient's first and last visit was associated with higher odds of initiating vaccination, completing vaccination at both 6 and 12 months, and clinical completion. Compared to female patients who were 19 years and older, female patients aged 9-18 years had higher odds of initiating vaccination and clinical completion. Compared to male patients who were 19 years and older, female patients aged 9-18 years had higher odds of clinical completion Female and male patients had better outcomes when seen by female primary care providers than male primary care providers.

Originality/Value: Further research should investigate the observed benefit of female providers and to understand the long-term impact of changes in CDC recommendations.

ABSTRACTS

How can Businesses Support Local Hunger Initiatives?

Amy Gannon | Mallory Mount, Marshall University

Purpose: The Marshall University Food Pantry serves the greater Tri-State community and University students. In 2017, the Department of Dietetics assumed responsibility of the pantry. The pantry's primary focus is to provide sustenance to needy individuals. Services also include nutrition education and promotion of nutrient-rich foods through a Smarter Pantry. Securing nutrient-rich foods and resources is a continuous goal for Smarter Pantries. Research affirms the value of collaboration between pantries and local businesses to enhance resources. The conceptual framework of this presentation evaluates the process and synthesis of the Marshall Smarter Pantry movement as part of the behavioral economics theory.

Study Design and Methodology: This presentation will examine how the business community can support a Smarter Pantry movement.

Findings: Collaborative research through Cornell University and Feeding America identified the theory of behavioral economics as a precipitator for food pantry environmental change. Nudges and cues to influence food choice increase the likelihood of selecting healthier items by pantry clients. Hunger + Health (2016) noted nudge interventions increased the likelihood of a client selecting one healthy food item by 46%. There is, however, a downside to Smarter Pantry implementation in terms of cost. A Smarter Pantry depends on generous donations from both on- and off-campus sponsors. The intersect of business and hunger can benefit corporate philanthropic missions while helping the local community.

Originality/Value: This session will describe the Marshall Smarter Pantry movement and examine how pantries and businesses can collaborate to build a Smarter Pantry.

ABSTRACTS

Classifying Organizations Utilizing Input, Product, Workforce, and Workflow Characteristics

Scott Stegall | MeriBeth Stegall, Clayton State University

Purpose: Contingency theory predicts widespread poor management and organizational outcomes when management is practiced in a manner that reflects the idea that "management is management." Contingency theory is based upon the observation that one activity is successful in one system state and not another and challenges management practitioners to align type of management practice to the type of organization to increase effectiveness. Organizations vary in type as they operate with different external and internal environments that include different levels of standardization in inputs, transformation processes, and outputs. The type of workflow interdependence (i.e., sequential, reciprocal, and team) utilized in the transformation process addresses the types of standardization of organizational inputs and outputs. Alignment of the appropriate workforce maturity dependent, independent, and interdependent model) with workflow interdependence type is suggested to be critical for successful transformation processes.

Study Design and Methodology: Two organizational forms, the machine bureaucracy, and the professional bureaucracy (i.e., hospital), are discussed to demonstrate why management is different for different types of organizations.

Findings: The framework presented suggests configurations of management specialization based upon organizational types.

Originality/Value: From this framework of contingency and other organizational theories, both at the micro and macro levels, there is a case that health administration is different from traditional administration.

ABSTRACTS

Assessing Career Pathways and Competency Acquisition: Do They Match?

Irene Gabutti | Americo Cicchetti, Catholic University of Rome

Purpose: The evolution of patients' needs, ageing, and technological innovation are some of the reasons behind deep re-configurations of healthcare systems worldwide. Evolving systems, in turn, imply the emergence of new professional roles. In this scenario, two crucial questions arise: 1) Which professional profiles (and competencies) best meet the new roles emerging in the healthcare sector? 2) Which training and professional career pathways are coherent with the acquisition of the competencies needed to cover these roles effectively?

Study Design and Methodology: To address these two issues, an online survey was administered to key managerial figures of hospitals in Italy, Greece, Portugal, Spain, and Jordan. The survey included a first section concerning career pathways and a second one built on a simplified version of the International Hospital Federation's (IHF) Competency Directory, aimed ad providing a self-assessment of key competencies.

Findings: From a pilot phase of the study addressed to hospital CEOs only, it has emerged that these are mainly physicians or economists, with a career developed nearly entirely in the public sector. Although similarities emerge in terms of the typical formal steps of their career, prevailing competency profiles seem to differ considerably within and across countries.

Originality/Value: Assessing whether training and career pathways are coherent with the set of competencies needed to carry out key managerial roles in the healthcare sector is urgent in an era of deep organizational transformation. Comparing different countries can support the creation of solid strategic interventions to clearly re-define both training and career pathways of hybrid roles worldwide.

Re-Thinking Substance Abuse Reimbursement Payment Models

Steven Szydlowski, University of Scranton

Purpose: To assess payment models for substance abuse treatment patients needed access to services along the continuum of care. The goal of the addiction recovery system is to support individuals in sustaining sobriety. However, statistics show that relapse is a common problem. The presentation reviews the components of the recovery system, its behaviors, and provides insight on payments models that may improve access to needed services along the continuum. Health care payments systems are examined. Possible solutions are discussed.

Study Design and Methodology: The qualitative research design relies upon two sets of interviews: Five (5) aftercare/discharge planners, Five (5) alumni sponsors. The results of the interviews are then applied to a health care framework for payments systems. The conceptual framework for re-inventing payment systems in substance abuse is examined.

Findings: Gaps in the continuum of recovery care system exist. 2)Lack of insurance contributes to relapse rates. 3) Care coordination post-discharge from an acute treatment setting is fragmented

Originality/Value: Payment systems in the recovery system remain antiquated and do not support comprehensive episodic needs of patients. The presentation examines potential payment models for covering more comprehensive care.

Utilizing a Hospital At-Home Model to Improve Treatment Outcomes

Bernardo Ramirez, University of Central Florida | Daniel West, University of Scranton

Purpose: Determine if the Hospital-At-Home (HaH) model of care is being used in the USA under the Medicare innovation grants.

Study Design and Methodology: Renew of the literature to determine the origins of the HaH model, examine the use in other countries, and determine the reported research outcomes for cost and quality of care.

Findings: Hospital at Home (HaH) is an innovative model of healthcare. The effective use of this model is examined along with cost benefits and quality improvement. The model provides acute and subacute treatment for conditions normally requiring hospital admission in a patient's residence. A review of the literature suggests that the HaH model was developed in the United Kingdom in the late 1970s, and since then, other countries with government-run health systems have adopted this model of care. The emergence of technology in today's world and the impact of COVID-19 have increased the demand for the HaH model of care. It is hard to convince patients to select HaH care especially the older senior citizen group. Various types of education are needed to make this model work efficiently. Many safety concerns need to be addressed and communication between patients and clinicians and family is a significant factor. Research studies reported cost savings, enhanced quality of care, reduced readmissions, improved patient satisfaction, and a reduction in hospital-acquired infections.

Originality/Value: The future directions for expanded use of the HaH model are discussed and how the model of care addresses the social and environmental determinants of health.

ABSTRACTS

Automated Predictive Modelling and Deep Learning Benchmarking for Accurate Classification of Diabetes Patients

Shrirang Ambaji Kulkarni | Varadraj Gurupur, University of Central Florida

Purpose: Diabetes is a serious healthcare issue and there are approximately 463 million adults who are suffering from diabetes worldwide. In the present work the authors are considering the Automation of predictive analysis of diabetes patients through the application of Automated Machine Learning (AutoML) and benchmarking the results with Deep Learning Multi-Layer Perceptron (DeepMLP) algorithm.

Study Design and Methodology: The dataset used for classification analysis was the Pima Indians Diabetes Database from University of California, Irvine (UCI), Machine Learning Repository, which consists of 768 records and 9 columns. The diabetes dataset used for regression analysis was from scikit-learn built-in datasets and it was used to measure the prognosis of diabetes after 1 year. It consisted of 442 records and 10 features. The library used to implement AutoML was Auto-SKLearn 0.13 version, which builds an optimal pipeline based on meta-learning, Bayesian optimization and ensemble of models. The benchmarking was performed on DeepMLP known for higher accuracy in classification and regression tasks.

Findings: Auto-SKLearn algorithm and DeepMLP algorithms were fine-tuned and their performance was measured for different metrics. In terms of classification accuracy, AutoML achieved a performance of 78.3% and DeepMLP achieved 77.87%. In terms of regression metric mean absolute error (MAE), AutoML achieved a score of 43.248 and DeepMLP 41.622.

Originality/Value: AutoML outperformed DeepMLP by 0.57% in terms of classification. In terms of Regression DeepMLP outperformed AutoML by 3.7%, which leads to the conclusion that Automation of Machine Learning Algorithms is relatively beneficial for limited size datasets.

ABSTRACTS

Community-Based Implementation Research on Opioid and Mental Health in Rural Texas

Harrison Ndetar | Karan Singh, University of Texas at Tyler

Purpose: Although Texas seems to fare better when compared to the nation and some states, opioid use is the primary driver, fueling drug overdose premature deaths. The rate of opioid overdose death and the number of Texas adults reporting non-medical use of pain relievers continue to increase at alarming rates. The issue is even more devasting in the rural communities of the state where one in seven high school students takes prescription drugs without a doctor's prescription. This program purpose to reduce substance disorder mortality and morbidity using a multifaceted approach.

Study Design and Methodology: The community-based study is a longitudinal study for 24 months with a baseline time point and 7 follow-up time points. Data Collection Procedure: At the time of the recruitment, an initial set of questionnaires will be given to participants. Then, 6 additional questionnaires will be completed online at 2-month intervals. Additional data will be collected via chart review. Data Analysis: Methods for Survey data analysis are to be used. Potential Outcomes:

Findings: We briefly discuss a HCSC funded community-based study aiming at reducing disparate mental health care in underserved populations across the Northeast Texas region. We also discuss a HRSA funded community-based implementation program in a rural county of East Texas. In addition, findings will assess work absenteeism, alcohol use, barriers to health care access, quality of life, as well as health care utilization for untreated or undertreated depression.

Originality/Value: The findings from this study can be used to facilitate program development efforts aimed at reducing disparate mental health care in underserved populations across the Northeast Texas region.

Risk Factors Associated with Hospitalization for COVID-19 Among School-Aged Children

Liam O'Neill, University of North Texas at Denton

Purpose: In recent months, there has been a rapid increase in the number of Covid-19 cases among school-age children and adolescents. The objective of this study was to identify underlying conditions and relevant demographic traits that may increase the risk of hospitalization for children and adolescents with severe Covid-19.

Study Design and Methodology: A cross-sectional cohort study that utilized the Texas Hospital Inpatient Discharge Data was conducted. The study included 1,187 patients (ages 5 to 19) who were hospitalized during 2020 with the primary or secondary ICD-10CM diagnosis code U07.1 (COVID-19, virus identified). The baseline comparison group included 38,838 pediatric inpatients who did not have Covid-19. Multivariable logistic regression, controlling for patient characteristics and payor status, was used to estimate the adjusted risk of hospitalization for Covid-19.

Findings: Hispanic patients accounted for more than one-half (52%) of all hospitalizations for COVID-19. Among children (5 - 12 years), Type 1 diabetes was associated with an increased risk for hospitalization with COVID-19 (OR = 1.73; p<0.01). Adolescents with morbid obesity were 10 times (6.65-15.05) more likely to have severe COVID-19. Among adolescents, both Type 1 Diabetes (OR = 2.44; CI: 1.75-3.40) and Type 2 Diabetes (OR – 2.18; CI: 1.53-3.11,) were risk factors for hospitalization for COVID-19. Other covariates that were associated with severe Covid-19 included male gender, Black race, Hispanic ethnicity, Medicaid and charity care.

Originality/Value: As the COVID-19 pandemic continues to adversely affect children and adolescents, this study found a higher risk of severe Covid-19 among school-age children with underlying conditions (diabetes (Type 1 and 2) and obesity), type of payor (Medicaid and charity care), and specific demographic characteristics (male, Black race and Hispanic ethnicity). Pediatric providers and public health officials should consider the need to tailor clinical management and pandemic planning for children and adolescents with these risk factors for severe Covid-19.

ABSTRACTS

Healthcare and Macroeconomics: A Prognosis

Peter Hilsenrath, University of the Pacific

Purpose: The late health economist, Uwe Reinhardt quipped that it is the prices stupid when asked why American health care costs so much. The economics peer-reviewed journal literature is rich with studies examining prices in the health sector but there is surprisingly little published in books for college students and wider audiences.

Study Design and Methodology: This presentation is part of a book slated for 2022 by Taylor and Francis that hopes to fill this void.

Findings: Market power in the health sector is amplified by widespread asymmetric information. Asymmetric information between providers and consumers as well as between insurers and beneficiaries is one of the most important distinguishing characteristics of health care compared to other parts of the economy. It helps explain many of the prevailing institutions and problems. Lack of information on the part of patients and more proactive healthcare consumers explains the deference accorded providers. This deference augmented by third party payment where consumers bear little, if any cost, along with tax favored treatment of health spending leads to high prices and excessive expenditure.

Originality/Value: Over the long run, competition in health care has tended toward nonprice variants where rivals compete on quality, or at least perceived quality. Such competition, commonly seen as monopolistic competition, incentivizes technical innovation to develop new products and services perceived to be at least marginally better than incumbent products and services. Problems of consolidation, monopsony and price discrimination are discussed.

ABSTRACTS

Prototype of a Harmonized Healthcare Database Across Institutions

Kim Fulda | Usha Sambamoorthi, University of North Texas at Fort Worth | David Schneider | Imam Xierali, University of Texas Southwestern

Purpose: The purpose of this study was to describe the process of data harmonization for research using EHR data from three healthcare systems.

Study Design and Methodology: Adult patients from family medicine clinics at three academic medical centers in North Texas between January 1, 2019 and December 31, 2019 were included. These institutions do not use the same EHRs. Project teams from each institution met bi-weekly to discuss key data elements, standardized schemes, and tasks at hand. Teams included clinical researchers, clinicians, IT representatives, and coordinators.

Findings: We extracted EHR data (calendar year 2019- prior to COVID-19). Key challenges included: 1) lack of data dictionary (i.e., a codebook with descriptions of variable names and value labels, variable type, format, and missing values); 2) differing coding systems; 3) differing choice-pick list; 4) differing documentation policies; 5) differing sources of data; and 6) differing user interface. Key data elements were determined by working with multiple stakeholders (physicians, database architects, database analysts, and primary care researchers). Key data elements met the following criteria: a) important to all engaged stakeholders; b) feasible; c) relevant to primary care; d) relevant to public health; e) actionable; and f) meaningful to clinicians, public health officials, and policy makers. Key elements included patient-level biological factors, social determinants of health (e.g., employment), encounter-level clinical outcomes, medications, laboratory values, and procedures.

Originality/Value: There was very strong stakeholder support, reflecting the perceived value of harmonizing data for disparities and outcomes research. Our work suggests that data harmonization from primary care EHRs is feasible.

Forgone Medical Care Among Medicare Beneficiaries During the COVID-19 Pandemic

James Stimpson | Sungchul Park, Drexel University

Purpose: Evidence suggests that the coronavirus disease 2019 (COVID-19) pandemic has adversely affected medical care access. As prior studies mainly focused on the initial stage of the COVID-19 pandemic, less is known about how trends in forgone medical care change over time. The purpose of this study is to examine trends in and reasons for forgone medical care due to COVID-19 among Medicare beneficiaries during the pandemic.

Study Design and Methodology: This cross-sectional study analyzed Medicare beneficiaries using data from three waves of survey data from the Medicare Current Beneficiary Survey COVID-19 Supplement.

Findings: Forgone medical care due to COVID-19. We included 23058 Medicare beneficiaries (weighted N=128732575). The rates of forgone medical care due to COVID-19 decreased over time. However, the largest decrease was found between June 7 and July 12, 2020 (22.1% [95% CI: 19.9-24.4] to 15.8% [95% CI: 11.2-20.4]). The decreasing trend continued between October 4, 2020 and April 25, 2021, but the magnitude of the decrease was modest (8.8% [95% CI: 7.0-10.6] to 5.2% [95% CI: 3.2-7.1]). Provider-driven factors accounted for about 70% of the forgone medical care. The proportion of those who forwent medical care due to provider-driven factors tended to decrease over time (66.2% in the week of July 7, 2020 to 44.7% in the weeks of April 4-25, 2021). The adjusted rates of forgone medical care due to COVID-19 were substantially higher among those who reported feeling more stressed or anxious than those who did not, among those who reported feeling more lonely or sad than those who did not, and among those who reported feeling less socially connected than those who did not. Although the adjusted rates of forgone medical care due to COVID-19 decreased over time in all groups, the gaps in the likelihood of forgone medical care persisted.

Originality/Value: Our findings suggest that the COVID-19 pandemic may exacerbate existing barriers to care and lead Medicare beneficiaries to delay needed care. Policymakers must continue to identify effective means of meeting the foregone care backlog and maintaining continuity of care, especially for those with mental health problems.

ABSTRACTS

Biostatistician Collaboration in a Team Science Environment

Sejong Bae, University of Alabama

Purpose: The Biostatistics and Bioinformatics (BSBI) Shared Resource biostatistician are leaders and collaborators, from whom O'Neal Comprehensive Cancer Center (O'Neal) at the University of Alabama at Birmingham (UAB) researchers obtain statistical and bioinformatics expertise in the design, execution, and thorough evaluation of their cancer studies, from bench to bedside and beyond. The BSBI provides comprehensive, state-of-the-art support to ensure scientific rigor and reproducibility of O'Neal research, resulting in high impact publications and awarded grant funding.

Methodology: BSBI biostatisticians and O'Neal investigators work in tandem, thereby ensuring statistical considerations align closely with research study hypotheses and specific aims. For study data analyses, BSBI personnel apply innovative utilization of conventional, as well as recently-developed, statistical methods and maintain data accuracy and integrity of statistical programming.

Findings: Specialized Program of Research Excellence (SPORE) clinical trials for cervical vaccines, a notable observation was made, necessitating the adaptation of an existing method, Simon's two-stage design, for the incorporation of batch effect in cancer treatment vaccine trials. BSBI and cervical SPORE colleagues numerically explored the impact of batch effects on Simon's two-stage design, proposed and demonstrated a batch-effect adjusted Simon's two-stage design by both simulation study and therapeutic HPV trial example. Findings: As batch size increases, the mass function diverges from the true distribution function. Introduced a software that implements the proposed design addressing Batch effects.

Originality/Value: Together and thus synergistically, O'Neal and BSBI researchers advance cancer research through a vast array of basic, translational, clinical/investigator-initiated, and population-based studies, which has resulted in long-standing partnerships within and among O'Neal programs, and across geography.

ABSTRACTS

Race/Ethnic Disparties in the Impact of COVID-19: Implications for the Healthcare Industry

Fernando Wilson, University of Utah

Purpose: To discuss trends in the impact of COVID-19 on race/ethnic minorities and the likely secondary effects of the pandemic on healthcare.

Study design/methodology/approach: We review research on the differential impact of the pandemic on Hispanics, Blacks and other minorities. We discuss how social determinants of health and poor access to care may have contributed to race/ethnic disparities from COVID-19. Finally, we present trends and recent analyses of vaccinations by race/ethnicity using causal impact modeling.

Findings: From April to September 2020, COVID-19 deaths per capita increased substantially faster among Black, Hispanic, Pacific Islander and Indigenous compared to White non-Hispanic communities. Race/ethnic minorities experience substantial rates of uninsurance and poverty, and may be less likely to be able to work remotely or socially distance than non-minorities. Pandemic assistance policies such as the mortgage forbearance and eviction moratoriums mitigated some of the economic impact of the pandemic on minority communities. Despite the differential impact of the pandemic on minority communities, there is a complex relationship between vaccination policy and minority take-up. For example, causal impact analysis suggests that the recent FDA approval of the Pfizer vaccine has had a mixed impact for vaccinations of minority communities.

Originality/value: Increasing our understanding of recent trends of the pandemic’s impact on race/ethnic minorities and the role of social determinants is critical in order to create targeted, effective interventions and policies for treatment and vaccination within their communities.

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