SPEARS SCHOOL OF BUSINESS

RESEARCH ABSTRACT REPORTS 2021

**School of Accounting**

**Charitable CEOs and Earnings Management**

CEOs of public companies may serve of boards of non-profit organizations out of intrinsic motivation, reflecting a preference for the well-being of others. Alternatively, CEOs may serve on non-profit boards to increase moral reputation or manage their public image. We find that firms with CEOs serving on boards of non-profit organizations are associated with higher discretionary accruals, consistent with these firms engaging in more income-increasing earnings management. We also find these firms engage in more tax avoidance activities. Our findings suggest that on average, CEOs service on non-profit boards is driven by public image concerns and not intrinsic motivation.

**Sponsors:** Oklahoma State University, Northeastern University

**PI/PDs:** Bryan G. Brockbank

Northeastern University: Jaehan Ahn

**Do Non-GAAP Exclusions Impact the Extent to Which Current Returns Reflect Future Earnings Information?**

Motivated by regulators’ concerns about non-GAAP financial measures and building on research that finds more informative disclosures allow current stock returns to better reflect future earnings, I examine whether non-GAAP earnings exclusions enhance or garble the future earnings news captured in current stock returns. Utilizing Amazon Mechanical Turk (MTurk), I collect non-GAAP earnings data from 2003 to 2012 and measure managers’ non-GAAP exclusions relative to three comparable earnings: 1) GAAP earnings before extraordinary items, 2) GAAP earnings from operations, and 3) analyst-adjusted “street earnings. Finally, I find that consistent non-GAAP reporting is associated with more future earnings information reflected in current stock returns.

**Sponsor:** Oklahoma State University

**PI/PD:** Bryan G. Brockbank

**Cutting R&D to Meet Earnings Benchmarks: The Effect of Firm-Level Innovation**

This study examines whether innovation affects the likelihood of firms cutting research and development (R&D) spending to meet earnings benchmarks. We find that more innovative firms are less likely to cut R&D in order to meet earnings benchmarks. Consistent with R&D cuts being used to signal stronger future performance, we find that innovative firms that cut R&D to meet benchmarks have higher future earnings and operating cash flows. Results are concentrated among firms with greater R&D intensity and for firms operating in poor information environments. Overall, results suggest that managers of innovative firms have a long-term focus and are unwilling to sacrifice long-term performance to meet short-term benchmarks.

**Sponsor:** Oklahoma State University

**PI/PDs:** Bryan G. Brockbank, Kent Hu

**The Effect of Analyst Conservatism on Meeting the Consensus Via Earnings Management**

Conservative analysts react more to negative news than positive news. Consequently, firms followed by more conservative analysts should have a lower consensus earnings forecast. We find that firms followed by more conservative analysts engage in less earnings management in order to meet the consensus forecast. Results are stronger in settings where an individual analyst has more influence on the consensus forecast. Our findings suggest that management’s reporting behavior is impacted by the conservatism of the firm’s analyst following.

**Sponsors**: Oklahoma State University, University of Nebraska-Kearney  
**PI/PDs:** Bryan Brockbank, Jaclyn Prentice

University of Nebraska-Kearney: Matt Bjornsen

**Audit Market Structure and Audit Quality: Evidence from Financial Analysts’ Information Environment**

Audit market structure remains a concern for both regulators and academics due to the potential impact of competition (or lack thereof) on audit quality. We find that audit market concentration improves analysts’ forecast accuracy and decreases dispersion, which is consistent with studies suggesting that higher audit market concentration improves audit quality. Additionally, we find that despite being associated with decreased auditor independence (consistent with regulators’ concerns), audit market concentration appears to benefit analysts’ information environment. Our results further our understanding of audit market structure and its impact on financial disclosure quality.

**Sponsors:** Oklahoma State University, University of Nevada, Reno

**PI/PDs:** Bryan Brockbank, Bradley P. Lawson

University of Nevada, Reno: Chuong Do

**Bridging the Gap: Responding to a Reduction of Accounting Principles in the Business Core**

We use the natural experiment provided by a curriculum change to analyze assessments of students’ financial accounting understanding. A new “bridge” course was created for accounting and finance majors in response to the reduction in principles of accounting courses from two courses to one. Compared to students who had completed the traditional two principles courses, students who completed this new course sequence scored higher on a financial accounting assessment than their peers who completed a traditional financial accounting and managerial accounting course sequence. We also find that the combination of adaptive learning software and live instruction is superior to adaptive learning software alone.

**Sponsor:** Oklahoma State University

**PI/PDs:** Bryan G. Brockbank, Craig A. Sisneros, Angela Wheeler Spencer

**Remediation of Knowledge Gaps for Underrepresented Minority Students: Insights from a Natural Experiment in Financial Accounting**

A curriculum change from the traditional two semesters of accounting down to a one semester survey course leading to intermediate financial accounting provided a natural experimental setting to examine the efficacy of several methods of alleviating a significant gap in knowledge created by the change. Our results suggest that a “bridge” course combining an adaptive learning tool with traditional classroom instruction resulted in no significant differences in assessed performance between underrepresented minority students and the broader student population. However, the adaptive learning tool alone resulted in significantly lower scores on assessed performance for the underrepresented minority students in this study.

**Sponsor:** Oklahoma State University

**PI/PDs:** Bryan G. Brockbank, Craig A. Sisneros, Angela Wheeler Spencer

**Mindsets as an enhancement of 21st century accounting education**

We propose complementing competency-based frameworks of accounting education with the cultivation of relevant mindsets. A mindset is a combination of cognitive filters and processes through which professionals interpret their professional environments and execute their professional responsibilities. We identify five key mindsets relevant for accounting graduates. We treat the "public interest mindset" (focus on "we" vs. "I," integrity, and professionalism) as foundational. The four other key mindsets include: 1) growth, 2) professional skepticism, 3) analytical/digital, and 4) global. We define and discuss each of these mindsets and suggest potential pedagogical approaches for integrating these mindsets into 21st-century accounting education.

**Sponsors:** Oklahoma State University, University of Dayton, University of Cincinnati

**PI/PDs:** Audrey Gramling

University of Dayton: Sridhar Ramamoorti

University of Cincinnati: Natalia Mintchik

**The Relevance of non-income tax relief**

Governments regularly offer non-income tax relief to attract business interests. However, it is unclear whether markets impound information about the relief into security prices. We use novel data from retrospective public records to examine the information content of non-income tax relief. We find that non-income tax relief is strongly associated with future accounting performance and future abnormal returns. Overall, our evidence suggests the receipt of non-income tax relief reflects relevant information but investors have difficulty impounding the information into security prices in a timely way.

**Sponsors:** Oklahoma State University, Brigham Young University, Iowa University, University of Texas at Austin

**PI/PDs:** Ryan Hess

Brigham Young University: Michael S. Drake

Iowa University: Jaron Wilde

University of Texas at Austin: Braden Williams

**Government assistance: A growing, undisclosed financing source**

We investigate whether firms treat government assistance as an additional source of external capital to provide standard setters evidence on a distinct impact of assistance on a firm’s financial statements. We find corporations in the highest decile of size-adjusted government assistance received have meaningfully lower leverage ratios than those in the bottom decile. We also find firms with lower debt ratios have higher investment commitments to governments, implying government assistance often creates off balance sheet obligations. These findings are relevant to the FASB as it deliberates requiring additional disclosure on government assistance under Topic 832.

**Sponsors:** Oklahoma State University, University of Texas at Austin

**PI/PDs:** Ryan Hess

University of Texas at Austin: Lillian F. Mills

**Cash and Tax Evasion**

Economists and public policy experts contend that paper currency facilitates tax evasion. However, due to the illicit nature of tax evasion, limited empirical evidence exists to document or quantify this claim. I use the staggered implementation of the Electronic Benefit Transfer (EBT) program to identify a decrease in local cash circulation that holds constant the level of income to provide empirical evidence on the role of cash in tax evasion and offer magnitude estimates. My results suggest that cash transactions are an economically significant means by which small businesses evade income taxes.

**Sponsor:** Oklahoma State University

**PI/PD:** Ryan Hess

**The Feedback Loop of FDIC Insurance Premiums**

There is a broad awareness about the potential for feedback effects in insurance premium pricing. Increasing (decreasing) deposit insurance premiums when a bank is performing poorly (well) has the potential to further constrain bank lending ability. We examine this feedback loop using confidential, archival bank data from the Federal Deposit Insurance Corporation (FDIC). Using credit unions as a suitable control group we estimate the impact of insurance premiums on bank lending. We empirically document a feedback loop between insurance premium and bank lending and further show that community banks are disproportionately affected by this feedback mechanism.

**Sponsors:** Oklahoma State University, Center for Financial Research Federal Deposit Insurance Corporation

**PI/PDs:** Ryan Hess

Federal Deposit Insurance Corporation: Jennifer S. Rhee

**Does audit committee reporting need to be improved? Evidence from a large-scale textual analysis?**

The SEC is considering expanding audit committee reporting requirements to include greater disclosure of the audit committee’s oversight of the external auditor. To provide insight into whether additional reporting requirements are needed we: 1) perform a large-scale textual examination of the characteristics and time trends of over 35,000 US firms’ audit committee report disclosures issued between 2004 and 2015 and, 2) explore whether investors find such reports useful. In sum, our findings suggest that there is a need to improve the usefulness of audit committee report disclosures.

**Sponsors:** Oklahoma State University, Colorado State University, University of Texas

**PI/PDs:** Bradley P. Lawson

Colorado State University: Michelle Draegar

University of Texas: Jaime J. Schmidt

**The Consequences of Audit Market Structure on Financial Analysts’ Information Environment**

Audit market structure remains a concern for both regulators and academics due to the potential impact of competition (or lack of) on audit and financial reporting quality. However, studies of audit market structure and financial reporting quality provide mixed results. Testing this association provides evidence on the topic without having to separate the constructs of financial reporting quality and audit quality. We find that concentration improves analysts’ forecast accuracy and decreases dispersion, which is consistent with studies suggesting that higher audit market concentration improves audit and financial reporting quality. Our results further our understanding of audit market structure and its impact on financial disclosure quality.

**Sponsors:** Oklahoma State University, Texas State University, University of Las Vegas, Nevada

**PI/PDs:** Bradley P. Lawson

Oklahoma State University: Bryan Brockbank

University of Las Vegas, Nevada: Chuong Do

**Audit Partner Masculinity, Audit Pricing, and Audit Quality**

Biology research finds that more masculine faced men are associated with greater ambition, a stronger desire to win, and less interpersonal trust. We examine the consequences of this trait for both audit pricing and audit quality. We find that audit partners with more masculine faces are associated with higher audit fees. We also find that partner facial masculinity is associated with higher fraud risk. Finally, we find that more masculine faced partners are associated with a lower likelihood of restatement announcements, but only for clients with high fraud risk. Therefore, masculine faced partners earn a fee premium, but are associated with lower audit quality. These results hold for only non-Big 4 partners, consistent with quality control mechanisms at the Big 4 mitigating individual auditor effects.

**Sponsors:** Oklahoma State University, Stoney Brook University, Rutgers, the State University of New Jersey

**PI/PDs:** Bradley P. Lawson

Stoney Brook University: Keval Amin

Rutgers, the State University of New Jersey: John Daniel Eshleman

#### **Do Breaches of Public Trust Influence Nonprofessional Investors’ Perceptions of Auditor Credibility?**

Audit quality is challenging to observe. Therefore, investors must rely on publicly available indicators such as PCAOB inspection reports. Source credibility theory suggests that the auditor’s inspection deficiency rate could signal perceived expertise, while an attempt to breach the inspection process could signal perceived trustworthiness. We find an interactive effect whereby participants were least likely to maintain their investment when the auditor had a higher deficiency rate and attempted to circumvent the inspection process. Supplemental analyses show that expertise influences the financial statements’ perceived accuracy, and trustworthiness influences the audit opinion’s perceived trustworthiness—and both influence investing decisions.

**Sponsors:** Oklahoma State University, University of Louisville, DePaul University

**PI/PDs:** Leah Muriel University of Louisville: Dereck Barr-Pulliam DePaul University: Stephani A. Mason

**Where to Whistleblow? The Consequences of Reward and Retaliation Provisions for Intrinsically Motivated Individuals**

Differing provisions in the EU and US exist to encourage whistleblowing. We examine how individuals with self-reported high intrinsic motivation (financial audit experience), respond to retaliation protection measures and an external reward opportunity. We observe that only visible protection provided by the subjects’ organization was associated with higher internal reporting intentions and do not find evidence that external retaliation protection or external reward are associated with higher external reporting intentions. Furthermore, we find evidence of an unintended consequence within this setting of highly intrinsic motivated individuals. The presence of an external reward was associated with lower intent to report internally.

**Sponsors:** Oklahoma State University, Universidad Adolfo Ibanez, The University of Tennessee

**PI/PDs:** Leah Muriel

Universidad Adolfo Ibanez: Nelson Carrasco

The University of Tennessee: Robert M. Fuller

**Is the reporting of critical audit matters associated with information overload and does that affect nonprofessional investors’ perceptions of audit quality and investment risk?**

The Public Company Accounting Oversight Board (PCAOB) recently adopted a new standard that requires the auditor to report critical audit matters (CAMs) within the audit report. We find that the presence of a CAM is associated with higher perceptions of auditor credibility, but also an increased in perceived information overload. Despite the perceived higher information load to process, the presence of a CAM is associated with an increased in perceived audit quality and a decrease in perceived investment risk. Increasing the readability of CAM’s may help reduce feelings of information overload for individuals utilizing audit reports.

**Sponsors:** Oklahoma State University, Clemson University, Iowa State University

**PI/PDs:** Leah Muriel

Clemson University: Brian T. Carver

Iowa State University: Brad S. Trinkle

**A Cross-Language Analysis of Disclosure Properties: Evidence from Hong Kong**

Using the setting of Hong Kong, we examine how the linguistic properties of financial disclosure differ across languages. Firms listed on the Hong Kong Stock Exchange publish annual reports in both English and Chinese. We find that English reports are more positive, convey more uncertainty, and focus more on the past and present and less on the future, than Chinese reports. We also find that English (Chinese) reports are more likely to manage their tone by varying the frequency of positive (negative) words. Finally, the stock market only reacts positively to tone management in Chinese reports.

**Sponsors:** Oklahoma State University; University of Nevada, Reno

**PI/PDs:** Sandeep Nabar, Kent Hu

University of Nevada, Reno: Chuong Do

**CFO Characteristics and Accruals Earnings Management**

We examine the association between CFO characteristics and accruals earnings management (AEM). We find that the CFO’s internal power and the CFO’s career horizon are both negatively related with AEM.

**Sponsor:** Oklahoma State University

**PI/PDs:** Sandeep Nabar, Yahya Abdullah

**The Impact of Benefit Plan Audits on the Financial Statement Audit**

We explore the implications of benefit plan audits for the financial statement audit. We find that performing a benefit plan audit increases the likelihood that the firm will be selected as a company’s financial statement auditor. Further, we find that companies that engage the same audit firm for both their benefit plan and financial statement audits have a lower likelihood of misstatements, shorter audit report lags, and a lower likelihood of switching the financial statement auditor. Our findings speak to the continued debate over effective market expansion of financial statement audit providers, audit quality determinants, and audit efficiencies.

**Sponsors**: Oklahoma State University, Michigan State University, University of Arkansas

**PI/PDs**: Jaclyn Prentice

Michigan State University: Kenneth L. Bills

University of Arkansas: Gary F. Peters

**The Effect of Analyst Conservatism on Meeting the Consensus Via Earnings Management**

Little is known about the impact of conservative analysts on firm management. We examine the effect of analyst conservatism on firms meeting the consensus via accrual-based earnings management. We find that firms with a more conservative analyst following engage in less accrual-based earnings management to meet the consensus, with this effect being strongest in poor information environments. We also find that firms followed by more conservative analysts are more likely to meet the consensus forecast via accruals-based earnings management. Collectively, our results suggest that management’s reporting behavior is impacted by the conservatism of the firm’s analyst following.

**Sponsors**: Oklahoma State University, University of Nebraska-Kearney  
**PI/PDs:** Matt Bjornsen, Bryan Brockbank, Jaclyn Prentice

University of Nebraska-Kearney: Matt Bjornsen

**Does Insider Trading Affect Auditors’ Risk Assessments? Evidence from Audit Pricing**

Audit regulations require auditors to consider insider trading as part of their risk assessment. Companies file Form 4 with the SEC when insiders trade. We find that the number of requests for Form 4 in the SEC EDGAR online system is positively associated with audit fees. In addition, audit fees are higher among companies with net insider selling, relative to companies with net insider buying. We find that officer net selling drives this relation. These results suggest that auditors’ risk assessments are sensitive to information reflected in insider trading, consistent with regulatory requirements for auditors to consider non-traditional risk characteristics.

**Sponsors**: Oklahoma State University, Texas Tech

**PI/PDs**: Jaclyn Prentice

Texas Tech: Sabrina Chi

**Tax Aggressiveness and the Tax Risk Disclosure**

We examine the variation of the Tax Risk disclosure that companies include in their 10K (Item 1A - risk factors). We examine the influences and determinates for disclosing taxes as a business risk and investigate the relation between the Tax Risk disclosure and tax aggressiveness. In addition, we analyze whether management adds this disclosure in response to an event such as, Tax Cuts and Jobs Act, a tax-related restatement, or material weakness.  Also, we examine whether companies that employ their auditors as their tax provider are more likely to disclose less than if the company employs another firm.  
**Sponsors**: Oklahoma State University, San Francisco State University  
**PI/PDs:** Jaclyn Prentice

San Francisco State University: Bing Luo

**Goodbye and hello: audit quality, the Big 4, and acquiring consulting practices**

The largest accounting firms have been acquiring consulting practices for the last decade. I find that the audit quality of the companies being audited by the accounting firm acquiring a large consulting practice decreases in the year of the acquisition, but this result reverses in the subsequent period. This finding suggests accounting firm management may be distracted in the year of the acquisition and then in the subsequent year audit quality improves as accounting firms are better able to utilize consulting practices’ specialized knowledge.

**Sponsor**: Oklahoma State University

**PI/PD**: Jaclyn Prentice

**Are Analysts’ Forecast More Informative than a Random Walk Model of Earnings Before Extraordinary Items in the Presence of Special Items?**

The purpose of this study is to determine whether analysts’ forecasts outperform a simple random walk model in the presence of special items, both positive and negative. Prior research shows that special items have market and future earnings implications on their own as well as affect the implications of adjusted (for special items) earnings. We test this by comparing the strength of association between these constructs and cumulative abnormal returns at earnings announcement dates.

**Sponsor:** Oklahoma State University

**PI/PDs:** William C. Schwartz, Jr. and Craig A. Sisneros

**Multiemployer Pension Plans: Disclosure and Recognition Requirements, Recent Legislation, and Firm Responses**

Multiemployer pension plans provide retirement benefits to retired employees of all firms that contribute. However, the assets in the fund are combined and the obligation to pay an employee remains even if that specific employee’s former employer leaves the plan. If all other firms withdraw, the last remaining firm could be left with the obligation to fund the benefits for all retirees, regardless of their former employer. Firms are consistently withdrawing from these plans to avoid being the last firm standing and a significant portion of these multiemployer plans do not have the funds to pay current and future retirees.

**Sponsor:** Oklahoma State University

**PI/PDs:** Bryan Brockbank, William C. Schwartz, Jr., Craig A. Sisneros

**Empirical Implications of Incorrect Tax Rate Assumptions**

The objective of this study is to explore the empirical consequences of assuming an incorrect tax rate in adjusting special items. Our evidence suggests extreme tax rate assumptions, in particular the highest statutory rate, are especially problematic and yield dramatically biased estimates. Our review of the tax consequences of special items suggests that in almost all circumstances the marginal tax rate is the theoretically correct rate to apply to these items when adjusting for tax. Consistent with this view, our empirical evidence, with a limited exception, suggests that marginal tax rates represent the best estimate of the “true” tax rate.

**Sponsors:** Oklahoma State University, University of Texas at Dallas, University of Alabama

**PI/PDs:** Craig A. Sisneros

University of Texas at Dallas: William M. Cready

University of Alabama: Thomas J. Lopez, Shane R. Stinson

**Bridging the Gap: Responding to a Reduction of Accounting Principles in the Business Core**

We use the natural experiment provided by curriculum change to analyze assessments of students’ financial accounting understanding given alternate paths into the first intermediate financial course. A new “bridge” course was created for accounting majors in response to the reduction in principles of accounting courses from two courses (six semester hours) to one (three semester hours). As compared to students who had completed the traditional six hours of principles courses, the students who completed this new course sequence scored higher on a financial accounting assessment than their peers who completed a traditional financial accounting and introductory managerial accounting course sequence.

**Sponsor:** Oklahoma State University

**PI/PDs**: Bryan G. Brockbank, Craig A. Sisneros, Angela Wheeler Spencer

**Toward Equitable Remediation: Insights from a Natural Experiment in Financial Accounting**

A curriculum change provided a natural experimental setting to examine the efficacy of several methods of alleviating a significant gap in knowledge created by the change. Students were given three options: Self-study and a "gateway" examination; a self-paced adaptive learning software and examination, or opting into a "bridge" course combining the adaptive learning software and proctored exams. Our results suggest the latter method resulted in no significant differences in assessed performance between underrepresented minority students and the broader population. However, the adaptive learning tool alone resulted in significantly lower scores on assessed performance for underrepresented minority students in this study.

**Sponsor:** Oklahoma State University

**PI/PDs**: Bryan G. Brockbank, Craig A. Sisneros, Angela Wheeler Spencer

**An Analysis of the Historical Analysis and Future Outlook for Sustainability Reporting**

Sustainability reporting holds the promise to significantly improve the decision-relevant information set available to capital providers and other stakeholders of firms and organizations. However, the current set of sustainability information is often unstandardized, lacking comparability, and potentially lacking reliability. In this paper, we explore the history of sustainability reporting, examine the need for reporting about sustainability issues, and examine shortcomings in the current sustainability landscape. Drawing upon the historical and theoretical underpinnings of financial reporting, we conclude with recommendations about the prospects for the accounting profession to provide value-added information related to sustainability issues.

**Sponsors:** Oklahoma State University, The University of Mississippi

**PI/PDs:** Angela Wheeler Spencer

University of Mississippi: Zach Webb

**Special Purpose Vehicles and Audit Fees**

In this paper, we investigate the relationship between audit fees and special purpose vehicles (SPVs). SPVs are separate entities that inherently increase the underlying complexity of firm operations. Further, during the period examined here (2000-2009), many of these structures were reported off-balance sheet. Overall, our results suggest that auditors price the additional work and risk associated with client utilization of these structures. Evidence provided here is essential to understand better the total costs related to SPVs and the effects of unique forms of complexity on audit fees.

**Sponsors:** Oklahoma State University, The University of Mississippi

**PI/PDs:** Angela Wheeler Spencer

University of Mississippi: Zach Webb

**Remediation of Knowledge Gaps for Underrepresented Minority Students: Insights from a Natural Experiment in Financial Accounting**

A curriculum change from the traditional two semesters of introductory accounting to a one semester survey course provided a natural experimental setting to examine the efficacy of several methods of alleviating a significant gap in knowledge created by the change. Our results suggest that a bridge course combining the adaptive learning tool with traditional classroom instruction resulted in no significant differences in assessed performance between underrepresented minority students and the broader student population. However, use of the adaptive learning tool alone resulted in significantly lower scores on assessed performance for the underrepresented minority students in this study.

**Sponsor:** Oklahoma State University

**PI/PDs:** Bryan G. Brockbank, Craig A. Sisneros, Angela Wheeler Spencer

**The Impact of Increased Managerial Discretion and of Adoption Disclosure Transparency on the Usefulness of Reported Revenues: Evidence from Accounting Standard Updates for Multiple-Deliverable Sales Arrangements**

Research suggests that revenue recognition accounting standards which restrict management discretion resulted in improved faithful representation but reduced relevance of revenues. We use the adoption of Accounting Standards Updates 2009-13 and 2009-14 to examine the effects of increased management discretion to accelerate revenue recognition. We find that this increased discretion results in an increase in the relevance of reported revenues without reducing faithful representation. These results provide evidence in assessing whether standards that allow greater discretion affect the usefulness of financial statement information.

**Sponsors:** Oklahoma State University, University of Tennessee, Brigham Young University

**PI/PDs:** Michael Stuart

University of Tennessee: Linda Myers, Roy Schmardebeck

Brigham Young University: Timothy Seidel

**CEO Partisan Bias and Management Earnings Forecast Bias**

Political science research finds individuals exhibit overly favorable economic expectations when their partisanship aligns with that of the US president. We examine whether this partisan bias is present in management earnings forecasts. We find that firms with CEOs whose partisanship aligns with that of the US president issue more optimistically biased forecasts than firms with CEOs who are not aligned. Our results suggest CEOs fall prey to partisan bias, resulting in suboptimal forecasting behavior. Additionally, we find that investors fail to discount the news in forecasts issued by partisan-aligned CEOs and that post-forecast abnormal returns are lower for these firms.

**Sponsors:** Oklahoma State University, Queen’s University, Vanderbilt University

**PI/PDs:** Michael Stuart

Queens University: Jing Wang

Vanderbilt University: Richard Willis

**The Effect of Voluntary Accounting Policy Changes on Earnings Informativeness**

While voluntary accounting policy changes (VAPCs) enable managers to better present the firm’s financial position and results as circumstances change, they may be used to opportunistically influence earnings. We examine the impact of the method of accounting for VACPs (retrospective and modified retrospective methods) on earnings informativeness. While the retrospective method arguably improves comparability over time, it allows firms to record the same earnings twice or avoid reporting expenses. We find that earnings informativeness is lower and opportunism is greater for VACPs accounted for using the retrospective method compared with those accounted for under the modified-retrospective method.

**Sponsors:** Oklahoma State University, Queen’s University, Vanderbilt University

**PI/PDs:** Michael Stuart

Queens University: Jing Wang

Vanderbilt University: Paul Chaney, Rita Gunn

**CEO Political Alignment and Corporate Tax Avoidance**

We investigate the impact of CEOs’ sentiment towards the government on firms’ tax avoidance behavior. We proxy for CEOs’ attitudes toward the government using their political alignment with the US president, where a politically aligned CEO is expected to possess more favorable views of the government. We find that effective corporate tax rates are lower for firms with politically aligned CEOs, suggesting that CEOs who have more trust in the current administration engage in less tax avoidance behavior. Our research contributes to literature suggesting that top managers’ experiences, values, and personalities significantly influence a firm’s choices and actions.

**Sponsors:** Oklahoma State University, Queen’s University, University of Texas at El Paso

**PI/PDs:** Michael Stuart

Queens University: Jing Wang

University of Texas at El Paso: Yun Ke

**The Substance of Enduring Relationships: Interpreting Auditor Tenure**

A public company’s auditor must now disclose in the audit report the year it began serving as the company’s auditor. Yet the interpretation of auditor tenure is unclear. We address this gap in understanding by examining what characteristics of an auditor-client relationship affects its persistence. Using survival analysis, we find that enduring relationships are characterized by sustained conservative financial reporting choices, choices evident since the inception of a relationship.

**Sponsors:** Oklahoma State University, Vanderbilt University

**PI/PDs:** Michael Stuart

Vanderbilt University: Paul Chaney, Karl Hackenbrack, Catherine Lee

**Does How Managers Answer an Analyst’s Questions during an Earnings Call Matter?**

Earnings calls are quarterly interactive conference calls in which firm managers present corporate financial information and address questions from call participants. We examine whether, and, if so, in which direction, the tone of managers’ responses to an individual analyst’s questions during an earnings call are associated with the analyst’s subsequent earnings forecast revision for the company on whose call the analyst participated. We are analyzing data to study these relationships, and we believe that our research will be the first archival study to directly study the direct interchanges between analysts and managers on earnings calls.

**Sponsors:** Oklahoma State University, Vanderbilt University

**PI/PDs:** Michael Stuart

Vanderbilt University: Craig Lewis, Richard Willis

**The Effects of Independent Director Litigation Risk**

The unexpected *In re Investors Bancorp* decision in 2017 by the Delaware Supreme Court lowered the liability threshold only for directors in derivative litigation over their own equity grants, increasing their future litigation risk. Investors and firms reacted to the decision. Overall, results are consistent with director litigation concerns having a significant effect on firm value and firm and director behavior.

**Sponsors:** Oklahoma State University, University of Iowa, Texas A&M University

**PI/PDs:** Elizabeth Tori

University of Iowa: Dain C. Donelson

Texas A&M University: Christopher G. Yust

**Rival Firms’ Response to a Competitor’s Bankruptcy: Can Press Releases Facilitate a Competitive Advantage?**

I investigate how rival firms alter their voluntary disclosures, specifically their press releases, following a competitor’s bankruptcy. I find that rival firms increase their product-related, but not their earnings-related press releases following a bankruptcy. I also investigate the change in market share for disclosing rivals and find that market share increases, consistent with press releases affecting product market conditions. The results suggest that bankruptcy provides an opportunity for rival firms to gain a competitive advantage through disclosure of product-related information, highlighting a benefit of voluntary disclosure.

**Sponsors:** Oklahoma State University, Texas A&M University

**PI/PD:** Elizabeth Tori

**Non-Financial Government Violations and Financial Voluntary Disclosures**

Non-financial violations are enforcement actions brought by government agencies relating to operational failures, such as environmental damages. In this study, we examine whether a non-financial violation affects managers’ voluntary disclosure decisions and the capital market’s perception of managerial credibility. We find that managers tend to reduce the likelihood, frequency, and precision of management forecasts and that investors respond less strongly to forecasting news following a non-financial violation. Although prior literature finds no reputation damage in the capital markets, our results suggest managers experience a loss of credibility that may reduce their incentives to provide management forecasts from non-financial violations.

**Sponsors:** Oklahoma State University, Texas A&M University, University of Connecticut

**PI/PDs:** Elizabeth Tori

Texas A&M University: Sean McGuire, Sarah Rice

University of Connecticut: Nina Xu

**Non-Financial Violations and the Credibility of Voluntary Disclosures: Evidence from Employee Discrimination Violations**

I examine whether firms’ non-financial violations lead to a loss of credibility in the capital markets. Specifically, I examine whether investors change the magnitude of their reaction to management earnings forecasts and product press releases following an employee discrimination violation. Despite growing interest in firms’ non-financial performance, prior studies have found no evidence of capital market reputation damage from these failures. This study provides the first evidence of the capital market reputation damage caused by non-financial violations as measured by voluntary disclosure credibility.

**Sponsors:** Oklahoma State University, Texas A&M University

**PI/PD:** Elizabeth Tori

**Negative Net Debt Firms’ Voluntary Disclosure Practices**

NND firms have fewer constraints from creditor monitoring and higher operating variability and higher returns on their operating assets than their financial assets. Does this fact mean NND firms’ management forecast guidance is less useful? If so does media step in and take over the monitoring role for these firms? This study provides evidence that NND firms have weaker information environments and that the media serves an alternative monitor when creditors and financial intermediaries are less effective.

**Sponsors:** Oklahoma State University, Texas A&M University, University of Connecticut

**PI/PDs:** Elizabeth Tori

Texas A&M University: Senyo Tse

University of Connecticut: Nina Xu

**Mutual Fund Disclosure and Board Monitoring**

Mutual funds are required to disclose their fund performance and fees relative to their peers and the board is required to review and approve this disclosure. We find that firms truthfully disclose low fees, but avoid disclosing high fees. We also examine the effect of director monitoring on the truthfulness of the disclosures.

**Sponsors:** Oklahoma State University, Texas A&M University, University of Houston

**PI/PDs:** Elizabeth Tori

University of Houston: Minjae Koo

**How Managers Respond to the Effects of Bright-Line Rules: Evidence from Management Forecasts and the Valuation Allowance for Deferred Tax Assets**

Firms record a deferred tax assets (DTA) if they expect sufficient taxable income to realize the asset in the future. Management records a valuation allowance (VAA) against the DTA if they believe their firm will generate insufficient taxable income to realize the asset. Prior research argues that the VAA represents management’s forecast of future taxable income and contains information relevant to the capital markets. However, in practice audit firms frequently apply a bright-line test to DTAs that forces a firm to record a full VAA. We investigate the consequences of this bright-line test on firms’ information environment.

**Sponsors:** Oklahoma State University, Texas A&M University

**PI/PDs:** Elizabeth Tori

Texas A&M University: Brad Hepfer

**Can FinTech Competition Improve Sell-Side Research Quality?**

We examine how competition from FinTech influences analyst research quality. We find that firms added to Estimize, a platform that crowdsources short-term earnings forecasts, experience a substantial reduction in consensus bias and a limited increase in consensus accuracy. Long-term forecasts and recommendations remain similarly biased, alleviating the concern that the documented reduction in bias is a response to broad economic forces. At the individual analyst level, bias reduction is more pronounced among close-to-management analysts, and more biased analysts respond by reducing their coverage of Estimize firms. The evidence suggests that competition from Estimize improves research quality by discouraging strategic bias.

**Sponsors:** Oklahoma State University, University of Kentucky, University of Texas at Dallas

**PI/PDs:** Michael C. Wolfe

University of Kentucky: Russell Jame

University of Texas at Dallas: Stanimir Markov

**Corporate Codes of Ethics and Cash Holdings**

We examine the relation between corporate codes of ethics and cash holdings. We find a negative association between code of ethics quality and cash holdings which suggests that managers hold less cash when the firm has a strong code of ethics in place. The effect is greater when agency costs are elevated due to weaker country-level investor protections. We also find that payouts and the marginal value of cash holdings to investors are increasing in code quality. Overall, our results are consistent with ethics codes helping to limit opportunistic behavior from managers when determining the firm’s level of cash holdings.

**Sponsors:** Oklahoma State University, University of Texas at El Paso, University of Nebraska, Korea University

**PI/PDs:** Michael C. Wolfe

University of Texas at El Paso: Giorgio Gotti

University of Nebraska: Tony Kang,

Korea University: Yong K. Yoo

**Earnings Attributes and Credit Ratings**

We investigate the association between different earnings attributes and credit ratings. We examine seven attributes - discretionary accruals, accruals quality, persistence, predictability, smoothness, timeliness, and conservatism. We find that six of the seven attributes are associated with credit ratings and that accrual quality and predictability dominate the other attributes, including accounting conservatism. Additional analysis shows that accruals quality is relatively more important to credit rating agencies than equity investors. This study provides comprehensive evidence on the relative importance of different earnings attributes to credit rating agencies.

**Sponsors:** Oklahoma State University, University of Nebraska, Korea University

**PI/PDs:** Michael C. Wolfe

University of Nebraska: Tony Kang

Korea University: Sang Ho Lee, Yong K. Yoo

**Accounting Comparability and the Efficiency of Intra-Industry Information Transfer**

Prior studies find that the market is inefficient in its reaction to the earnings announcements of industry peers. This study contributes to the literature by showing that this overreaction is related to differences in accounting comparability. The evidence also suggests that that this association has diminished in recent years, particularly for firms with the highest levels of comparability. Overall, the results suggest that investors are unable to properly adjust for differences in accounting comparability when responding to the information releases of peer firms.

**Sponsor:** Oklahoma State University

**PI/PD:** Michael C. Wolfe

SPEARS SCHOOL OF BUSINESS

RESEARCH ABSTRACT REPORTS 2021

**Department of Economics**

**The Effect of Land Size and Market Distortions on Bolivian Farmers**

Access to more land may not lead to income gains for smaller farms in Bolivia. Restrictions on the use of land as collateral cause imperfections in credit and labor markets that lead to lower income as farms reach the institutional threshold for the land’s collateralization.

**Sponsors**: Oklahoma State University, Oklahoma Department of Human Services

**PI/PDs:** Lee C. Adkins, Bidisha Lahiri

Oklahoma Department of Human Services: Naneida Lazarte-Alcala

**Unauthorized Immigration: the theoretical effects of a dual labor market**

The effects on wages, employment, and output in an economy where unskilled labor is employed solely in labor intensive occupations are explored using a two-sector general equilibrium model.

**Sponsor**: Oklahoma State University

**PI/PD:** Lee C. Adkins

**A Shrinkage Estimator for Endogenous Regressor Models and Weak Instruments**.

A shrinkage estimator is proposed that takes a convex combination of two-stage least squares and efficient 2-step GMM estimators. Shrinkage is controlled based on FEFF (see Andrews, 2018).

**Sponsor**: Oklahoma State University

**PI/PD:** Lee C. Adkins

**Promoting Economic Literacy: Combining News Articles and Clicker Questions in a Large Introductory Microeconomics Course**

The author of this article presents a brief introduction to the use of current events news articles in an introductory microeconomics course for business students. Popular press articles are integrated with small-group peer instruction, and student understanding is assessed using student response system, or clicker, questions. Examples of lesson learning objectives are presented, along with a discussion of how news articles and clicker questions are combined to promote student interest and engagement. Sample clicker questions are also provided.

**Sponsor:** Oklahoma State University

**PI/PD:** Laura J. Ahlstrom

**Gender and Performance in Intermediate Microeconomics: Does the Format of the Principles of Microeconomics Course Matter?**

This study analyzes the effect that completing an introductory microeconomics course online or face-to-face has on student performance in intermediate microeconomics, paying particular attention to the gender question in online education. We find no significant correlation between completing the principles course online and men’s intermediate microeconomics course grades. However, female students who complete principles of microeconomics online perform significantly better in intermediate microeconomics, though the marginal benefit diminishes the higher the principles grade. Additionally, the grades students of both genders receive in face-to-face principles of microeconomics courses have a significant, positive effect on their intermediate microeconomics performance.

**Sponsor:** Oklahoma State University

**PI/PD:** Laura J. Ahlstrom

**Instructor Gender and Student Performance in Introductory Economics Courses: Is There a Role Model Effect?**

Past research in economic education has revealed a gender gap in undergraduate economics. Studies also show that the quality of the instructor leads to better outcomes for students and that instructors can act as role models for students. Our study examines the role model effect in the context of the gender gap in achievement in introductory collegiate economics courses. Using an ordered regression, we find that female students perform significantly better in introductory economics courses when taught by female instructors while controlling for other variables.

**Sponsor:** Oklahoma State University

**PI/PD:** Laura J. Ahlstrom

**Are Instructors Role Models Indirectly? Testing the Relationship between Instructor Gender, Course Performance and Undergraduate Economics Major Selection**

Prior research has found student performance in introductory economics courses is positively correlated with choosing economics as a major. Although the association between instructor gender and students’ economics major selection is less evident, students may earn higher grades in courses taken with same-gender instructors. As a result, students’ economics major choice may be indirectly influenced by the gender of their introductory economics course instructors through the assignment of course grades. This study examines the relationship between instructor gender, students’ introductory economics course grades and economics major selection.

**Sponsor:** Oklahoma State University

**PI/PD:** Laura J. Ahlstrom

**Grades as Reference Points: Impact on Performance and Motivation**

This study examines how students’ grades on an initial exam affects their future test performance. Students who achieve desirable grades on their first tests may not exert less effort on the next test compared to students who earn an initial test grade that is lower than their “goal grade”. We hypothesize that a student who receives a score of 72 (narrowly earning a C) on the first test may perform differently on their next test relative to a student who has received a score of 68 (narrowly missing a C) on the first exam.

**Sponsor:** Oklahoma State University

**PI/PD:** Laura J. Ahlstrom

**Women in the Finance Major: Gender Disparities in Finance Course Completion and Degree Attainment**

This study assesses the gender gap in undergraduate students’ finance course persistence, defined as taking an additional finance course after completing an initial course, as well as gender disparities in students’ finance degree selection. The research is guided by the following question: How do student, instructor, and structural (class) characteristics differentially affect gender persistence in taking finance courses and the propensity to earn a finance degree?

**Sponsor:** Oklahoma State University

**PI/PD:** Laura J. Ahlstrom

**Quiet Restaurants near Political Power Centers: How Has the Anti-Corruption Campaign Changed a Consumer City?**

China's 2012 Eight-point Regulation, imposed harsh austerity measures on the spending of government officials. The effect of the regulation remains an open question. Using data from a large online review platform for retail stores, we take a spatial difference-in-differences approach to investigate the impact of the regulation on restaurant consumer spending in Beijing. Establishment-level regressions document a substantial post-regulation decline in the consumer spending of the restaurants close to power centers. The impact is greater for the restaurants in government-designated hotels, for those in proximity to the power centers with higher political accountability, and on weekdays.

**Sponsors:** Oklahoma State University, Central University of Finance and Economics, Chinese Academy of Sciences, Massachusetts Institute of Technology

**PI/PDs:** Rui Du

Central University of Finance and Economics: Weizeng Sun

Chinese Academy of Sciences: Jianghao Wang

Massachusetts Institute of Technology: Siqi Zheng

**High-stakes Examinations and Educational Inequality: Evidence from Transitory Exposure to Air Pollution**

This paper provides the first evidence of the educational inequality that arises from air quality degradation and a minimum-passing-score exam policy. Using unique data on a large-scale high-stakes college English test in China, we study the impact of random disturbances to cognitive performance on access to graduate education. Tracking repeat exam takers over multiple exams, a panel model with individual fixed effects documents significant adverse cognitive effects of transitory air pollution exposure. The adverse effects vary considerably by the severity of air pollution, exam section, student academic ability, and gender. We further show that the harmful cognitive effects reduce students’ chances of getting into graduate school.

**Sponsors:** Oklahoma State University, Tsinghua University, Central University of Finance and Economics, Beijing Jiaotong University

**PI/PDs:** Rui Du

Tsinghua University: Hui Deng

Central University of Finance and Economics: Dongmei Guo, Weizeng Sun

**Higher Education, College Location, and Migration**

Using college enrollment data and nationally representative population census data, this paper examines the impact of college education and college location on later-life migration in China. We take advantage of the in- and out-of-province variation in college enrollment driven by China's massive higher education expansion to identify the effects. Our results show that an increase in either in- or out-of-province college enrollment leads to a higher probability of college attendance. Only out-of-province college expansion increases the likelihood of attending college out-of-province. Using a two-step instrument variable approach, we find a modest negative effect of college education *per se* and a positive effect of college location *per se* on later-life migration.

**Sponsors:** Oklahoma State University, Jinan University, Dickinson College

**PI/PDs:** Rui Du

Jinan University: Shu Cai

Dickinson College: Xiaozhou Ding

**The Network Effect of Air Pollution: Evidence from the Housing Market in China**

This paper examines the housing market reaction to changes in the non-local housing investor attention due to the degraded air quality. Based on a sample of 39 prefectural-level cities in China, we document a strong positive effect of local air pollution on housing prices in other cities, which reflects investors’ propensity to make out-of-town purchases. A city’s out-of-town housing attention increases dramatically following heavily polluted days in the local area.

**Sponsors:** Oklahoma State University, Central University of Finance and Economics, Massachusetts Institute of Technology, Zhejiang University

**PI/PDs:** Rui Du

Central University of Finance and Economics: Weizeng Sun

Massachusetts Institute of Technology: Siqi Zheng

Zhejiang University: Zhaoyingzi Dong

**International Travel Cost and Entrepreneurship Comovement**

Despite the rapid advances in digital communication tools, information exchange and the transmission of tacit knowledge via in-person interactions are still of great importance to entrepreneurs and venture capitalists. Using new international non-stop flight routes as a natural experiment, this article examines whether a reduction in international travel cost increases the comovement of new firm formation in connected cities across different countries. Using panel data at the US-China city-pair level from 1990-2017, we demonstrate that a reduction in information frictions induced by geography has a substantial positive impact on business matches between entrepreneurs and investors of the two countries. The evidence confirms the importance of efficient transportation networks in facilitating information exchange and long-range business matches.

**Sponsors:** Oklahoma State University, Massachusetts Institute of Technology

**PI/PDs:** Rui Du

Massachusetts Institute of Technology: Wang Jin

**Proximity, Knowledge Diffusion, and Technology Similarity: Evidence from the High-speed Rail in China**

Using the high-speed rail (HSR) expansion in China as a natural experiment, this paper identifies the effect of travel cost reduction due to HSR connection between cities on technology similarity. We are able to identify similar effects using a wall-city instrumental variable approach based on the minimum cost spanning tree. The effect is stronger for cities that are farther away to each other in distance but closer to each other in technology space. Our findings highlight the role of travel cost in influencing regional knowledge diffusion and technology space integration.

**Sponsors:** Oklahoma State University, Southeast University

**PI/PDs:** Rui Du

Southeast University: Yingcheng Li

**State Business Incentives, Firm Demographics, and Innovation**

Technology-based, innovation-driven startups are central to regional productivity, economic development, and job creation in the United States. State and local governments offer numerous and varied programs, financial incentives, and tax breaks to promote innovation-driven entrepreneurship and attract high-growth startups. This paper examines how the dynamics in the state governmental provision of financial and tax incentives influence the age distribution of innovation-driven startups. We further investigate the distributional effects of the firm age distribution on innovation activities.

**Sponsors:** Oklahoma State University, Southeast University

**PI/PDs:** Rui Du

Southeast University: Yingcheng Li

**College Location and Migration: Evidence from China’s Higher Education Expansion**

Using college enrollment data and the 1% national sample-census population data, this paper examines the impact of college education expansion on individual decisions about education and mobility. Our findings suggest that college location impacts college graduates’ geographic mobility in an equally important way as college education does.

**Sponsors:** Oklahoma State University, Jinan University, Dickinson College

**PI/PDs:** Rui Du

Jinan University: Shu Cai

Dickinson College: Xiaozhou Ding

**The effect of trade liberalization on marriage and fertility: Evidence from Indian Districts**

We examine the medium-run (1991-2001) and long-run (1991-2011) impacts of the 1991 trade liberalization in India on marriage and fertility rates among young women aged 15-34 years. We exploit the fact that the countrywide tariff reductions varied across industries creating exogenous local labor market shocks based on the initial industrial composition of the district. We find that districts that were more exposed to tariff cuts witnessed a larger increase in the marriage rate, especially in urban areas. On average, the trade reform had no negative impact on the employment of young men and women.

**Sponsor:** Oklahoma State University

**PI/PDs:** Mehtabul Azam, Shruti Sengupta

**Trade Liberalization and Human Capital Accumulation: Evidence from Indian Census**

We use the 2011 Indian census data, and exploit the exogeneous nature of Indian trade liberalization and cohorts that attended school before and after the reforms to implement a Difference-in-Difference strategy to estimate the impact of trade-liberalization on human capital accumulation. We also construct a district-level panel data that covers 1981-2011, and use a Difference-in-Difference strategy to get an alternative estimate of the impact of Indian trade liberalization on human capital accumulation. We find that no evidence of trade-liberalization on attainment of different stages of schooling.

**Sponsor:** Oklahoma State University

**PI/PD:** Mehtabul Azam

**Household Cooking Fuel Choice in India, 2004-2012: A Panel Multinomial Analysis**

Using household level panel data, we examine factors driving the cooking fuel choice in urban and rural India, separately. We find that a clean-break with the use of traditional fuels is less likely in rural areas, but more probable in urban areas. The household characteristics (e.g. income, education) that are positively correlated with use of clean fuel also increases the probability of fuel stacking for rural households. We also find that access to paved road is an important determinant for rural household adopting clean fuel, and there exists evidence of social spillover effects in rural areas.

**Sponsor:** Oklahoma State University

**PI/PDs:** Mehtabul Azam, Ying-Min Kuo

**Household Income Mobility in India, 1993-2011**

Using longitudinal data, we examine income mobility among rural Indian households over 1993-2004 and 2004-2011. Absolute measures of mobility suggest higher income mobility during 2004-2011 compared to 1993-2004, and each social group witnessed higher income mobility over 2004-2011. Importantly, significant differentials in income mobility exist across the Hindu castes in both the time intervals. We also find that conditional on having similar rankings in base period national income distribution, urban households have higher probability to improve their rankings in national income distribution. We find similar patterns in social group differentials in mobility over 2004-2011 using the consumption expenditure as a measure of well-being.

**Sponsor**: Oklahoma State University

**PI/PD**: Mehtabul Azam

**Does access to clean energy reduces women household burden?**

Access to modern energy is one of the most basic requirements for development. In rural areas of developing countries, there are a large number of people who do not have access to LPG and depend on traditional biomass such as wood, crop, and dung for cooking. One of the reasons for low labor force participation is women’s time spent on domestic works. In this paper we look at the question whether access to clean energy reduces time spent in domestic work, and free up women for labor force.

**Sponsor**: Oklahoma State University

**PI/PDs**: Mehtabul Azam, Su Qinghe

**Trade Liberalization and its impact on Social Group Welfare Gap**

We examine the causal impact of the 1991 Indian trade liberalization on the evolution of conditional welfare gaps across social groups. We hypothesize that the trade reforms would induce foreign competition and thus, reduce the inherent taste-based employer discrimination in the Indian labor market. While we find medium-run (transitional) effects of trade openness on caste-based labor market discrimination, the impact dies out in the long-run. This indicates the existence of discrimination against the marginalized groups in spite of increased competition.

**Sponsor**: Oklahoma State University

**PI/PDs**: Mehtabul Azam, Shruti Sengupta

**Tax Increment Financing and Spatial Spillovers in Oklahoma City: Estimating the Localized Marginal Effects of Proximity to TIF Districts**

Tax increment finance (TIF) is a critical component of local economic development policy. In contrast to previous research, we recognize the limitation of a linear spatial specification. Instead, we adopt a Gaussian-process regression specification to estimate the functional form that defines the relationship between a dependent variable and its functional arguments. Our findings suggest that much care should be taken when drawing TIF boundaries, recognizing that a small but potentially important subset of parcels could be relegated to the outside of the development zone and left without access to the public support that similar parcels inside the TIF are afforded.

**Sponsors:** Oklahoma State University; Oklahoma City University

**PI/PDs:** Mary N. Gade

Oklahoma City University: Russell Evans

**A Localized Analysis of Property Tax Incidence Across Space and Time**

This paper explores the hypothesis that the incidence of the property tax may vary across jurisdictions. We pool observations from 17 independent school districts in Oklahoma County, Oklahoma across 27 years (1982-2008) and investigate the responsiveness of the tax base to changes in the jurisdiction’s tax rate relative to the county average. Using a Finite Mixture Model approach that allows for estimation of distinct and heterogeneous components, we find evidence that the economic incidence varies across jurisdictions, across time within a jurisdiction, and across specific property tax levies within a jurisdiction.

**Sponsors:** Oklahoma State University, Oklahoma City University

**PI/PDs:**  Mary N. Gade

Oklahoma City University: Russell Evans

**Child Marriage and the Role of Brides: Descriptive Evidence from Six West African Countries**

Although almost universally banned, child (under the age of 18) remains a pervasive issue throughout the world. In this study, we quantify the importance of the child marriage problem, on which evidence remains surprisingly scarce. To do so, we use data we collected in Burkina Faso, Chad, Côte d’Ivoire, Mali, Mauritania, and Niger – six West African countries where child marriage rates are particularly high. This extensive dataset allows us to compare the characteristics of girls based on their age when they first married.

**Sponsors:** Oklahoma State University, Paris-Dauphine University, Paris School of Economics, The World Bank

**PI/PDs:** Harounan Kazianga

Paris-Dauphine University: Olivia Bertelli, Elise Huillery

Paris School of Economics: Bastien Michel

C4ED: Markus Olapade

The World Bank: Estelle Koussoubé, Léa Rouanet

**Exposure to Agricultural Technologies and Adoption: The West Africa Agricultural Productivity Program in Ghana, Senegal and Mali**

We estimate the effects of increased exposure to agricultural technologies on farmers’ adoption and economic well-being in Ghana, Mali, and Senegal. The program, known as the West Africa Agricultural Productivity Program (WAAPP), aimed at improving agricultural productivity to enhance economic growth, food security and to reduce poverty and ran in two phases. We focus on the second phase of the program, which ran between 2012 and 2019. We use ex-ante matching at the village and household levels to select the estimation sample. We find that the treatment raised technology adoption by 0.32 percentage points and the adoption of improved seeds by 0.20 percentage points.

**Sponsors:** Oklahoma State University, University of Ouagadougou, Burkina Faso

**PI/PDs:** Harounan Kazianga

University of Ouagadougou, Burkina Faso: Anurag Deb

**Pathways out of Extreme Poverty: Tackling Psychosocial and Capital Constraints with a Multi-faceted Social Protection Program in Niger**

This analyzes a four-arm randomized evaluation of a multi-faceted economic inclusion intervention delivered by the Government of Niger to female beneficiaries of a national cash transfer program. All three treatment arms include a core package of group savings promotion, coaching, and entrepreneurship training, in addition to the regular cash transfers from the national program. The first variant also includes a lump-sum cash grant and is similar to a traditional graduation intervention (“capital” package). The second variant substitutes the cash grant with psychosocial interventions (“psychosocial” package). The third variant includes the cash grant and the psychosocial interventions (“full” package). The control group only receives the regular cash transfers from the national program.

**PI/PDs:** Harounan Kazianga

**Sponsors:** Oklahoma State University, Northwestern University, Catholic University of Louvain, Paris School of Economics, The World Bank

Northwestern University: Dean Karlan, Chris Udry

Catholic University of Louvain: William Parenté

Paris School of Economics: Kelsey Wright

The World Bank: Thomas Bossuroy, Patrick Premand, Julia Vaillant

**Agricultural Transformation and Farmers' Expectations: Experimental Evidence from Uganda** This paper uses a randomized control trial to study Ugandan subsistence smallholders' decisions to adopt cash crops. A unique way of eliciting farmers price and yield expectations allows us to investigate the role of farmers' ex-ante beliefs about crop profitability on adoption decisions. We find that the provision of extension services increases oilseeds adoption by 15%, and farmers who under-estimate oilseeds price at baseline are the most likely to adopt the new crops. The results suggest that changes in expectations drive agricultural technology take-up.

**Sponsors:** Oklahoma State University, University di Milano--Bicocca, Centro Studi L.d'Agliano,

**PI/PDs:** Harounan Kazianga

Universita di Milano--Bicocca, Centro Studi L.d'Agliano: Jacopo Bonan, Mariapia Mendola

**The Effects of Old Age Pension Program on African Young Adults’ Labor Force Participation and Schooling**

We examine the effects of South Africa’s Old Age Pension (OAP) program on labor force participation and schooling of African young adults aged 15-34 using a regression discontinuity design. The results suggest that OAP Program has a significant secondary effect on African young adults and could help address inter-generational poverty in South Africa.

**Sponsors:** Oklahoma State University, Ministry of Finance, Liberia

**PI/PDs:** Harounan Kazianga

Ministry of Finance, Liberia: Mounir Siaplay

**A Decade Later: The Long-Term Effects on Education and Young Adults Outcomes of School Infrastructure**

We evaluate the long-term effect of a “girl-friendly” primary school program in Burkina Faso, using a regression discontinuity design. The intervention consisted in upgrading existing three-classroom schools to six-classroom schools in order to accommodate more grades.  After 6 years, the program increased enrollment by 15.4 percentage points and increased test scores by 0.29 standard deviations. Students in treatment schools progress farther through the grades, compared to students in non-selected schools. These upgraded schools are effective at getting children into school, at getting children start school on time and at keeping children in school longer.

**Sponsors:** Oklahoma Stata University, University Texas, Mathematics Policy Research

**PI/PDs:** Harounan Kazianga

University of Texas: Leigh Linden

Mathematics Policy Research: Nicholas Ingwersen, Arif Mamun, Ali Protik, Matt Sloan

**Evidence from a Randomized Evaluation of the Household Welfare Impacts of Conditional and Unconditional Cash Transfers Given to Mothers or Fathers.**

We conducted a randomized control trial in rural Burkina Faso to estimate the impact of alternative cash transfer delivery mechanisms on education, health, and household welfare outcomes. The two-year pilot program randomly distributed cash transfers that were either conditional or unconditional and were given to either mothers or fathers. Conditionality it was linked to older children enrolling in school who were attending regularly and younger children receiving preventive health check-ups. Compared to the control group, cash transfers improve children’s education and health and household socioeconomic conditions. For school enrollment and most health outcomes, conditional cash transfers outperform unconditional cash transfers.

**Sponsors:** Oklahoma Stata University, The University of Illinois at Urbana Champaign, The World Bank

**PI/PDs:** Harounan Kazianga

University of Illinois at UC: Richard Akresh

The World Bank: Damien de Walque

**Uncertainty Shocks, Asymmetric Dynamics, and Inflation Targeting: A Nonlinear Approach**

This study investigates the impact of uncertainty shocks on macroeconomic activity in developed and emerging economies. A Smooth Transition VAR model is employed to document the state-dependent dynamics of two distinct types of uncertainty shocks, financial market based and news-based. When nonlinearity is allowed to play a role in our model, quantitatively very different asymmetric dynamics are observed. Following inflation targeting, the responses tend to be smoother and less pronounced. Our empirical results support the view that the link between uncertainty and macroeconomic activity is clear over both recessions and expansions.

**Sponsors**: Oklahoma State University, Bank of Ozark, AR

**PI/PDs:**  J.B. Kim

Bank of Ozark: Kevin Larcher

**Oil Price Shocks and Macroeconomic Dynamics: A Nonlinear Approach**

We study the business cycle-dependent nonlinear effects of global oil price shocks on US aggregate economy. For this purpose, we decompose the oil price changes into supply and demand shocks and assess the state-dependent dynamics of structural shocks on U.S. industrial production, employment, and inflation using a Smooth Transition VAR model. We find evidence that declines in employment and industrial production conditional on recessions are shown to have quantitatively larger and more persistent. Headline inflation is found to display substantially greater reactions during economic contractions.

**Sponsors:** Oklahoma State University, National Assembly Research Service

**PI/PDs**: J.B. Kim

National Assembly Research Service: Inwook Hwang

**FDI, Economic Growth and Convergence Clubs: A Nonlinear Approach**

To study the relationship between FDI and growth with more homogeneous countries we employ an array of convergence tests designed to capture nonlinear transitional dynamics with 62 countries spanning the period of 1987-2016. Our new empirical evidence therefore suggests that there is a potential maximum financial development threshold beyond which the positive effect of FDI on economic growth becomes negligible, suggesting that more finance is not necessarily better for the nexus in each convergence club. The nonlinearity and homogeneity in the convergence club may actually reflect the kick in effect at the beginning and the vanishing effect in the end.

**Sponsors:** Oklahoma State University, Millikin University

**PI/PDs**: J.B. Kim

Millikin University: Michael Osei

**Financial Development, Innovation, and Market Structure: Evidence from Industry Level Data**

We study the nonlinear effects of financial development on innovation as well as the potential mechanism, using a unique Research Quotient database. Our findings can be summarized as follows. 1) Significant inverted-U effects of financial development on innovation. 2) The effects of both markets are sector-specific. Specifically, the nonlinear effect of the equity market works by influencing the high technology industries, while that of the credit market mainly affects the non-high technology industries. 3) We find that the nonlinear effect of financial development on market competition serves as a potential channel through which finance affects innovation nonlinearly.

**Sponsor**: Oklahoma State University

**PI/PDs**: J.B. Kim

Wichita State University: Xiaoyang Zhu

**Effect of India's De-monetization on its Exports**

The Indian economy has a large segment of small businesses as well as a significant informal sector which were primarily cash based. The government’s surprise move to invalidate existing currencies overnight in an attempt to clear unaccounted cash flows affected the day to day operations for a large segment of domestic producers. We examine the impact of this policy on exports and imports with the expectation of the effect to be stronger in the short run than the long run as the economy adjust to the new system.

**Sponsor:** Oklahoma State University

**PI/PDs:** Bidisha Lahiri, Anurag Deb

**Effect of Prenatal Care visits on Antenatal Outcomes: A survival model analysis**

The number of weeks of pregnancy at which antenatal care was first received, the number times of antenatal care was received and whether antenatal care was received in the last three months of pregnancy are three important but similar indicators of antenatal care received during a given pregnancy. We examine the impact of each of these variables on several outcomes such as whether the delivery was at home or medical institution, the presence of skilled birth attendant during delivery, birth weight of the baby and use of postnatal care.

**Sponsors:** Oklahoma State University, University of Kalyani, India

**PI/PDs:** Bidisha Lahiri

University of Kalyani, India: Prasenjit Sarkhel

**Entrepreneurial Effect of Income Program in India**

We examine the impact of on an ambitious employment and income guarantee program for the poor in India on family entrepreneurial activities. We find that participation in this program affects family entrepreneurship both at the extensive and intensive margins, and the effect is heterogenous across the scale of the family business endeavor.

**Sponsor:** Oklahoma State University

**PI/PDs:** Bidisha Lahiri, Richard Daramola

**Role of product life cycle in tempering international trade's impact on Indonesian Firms**

Our paper empirically examines how the effect of international trade on Indonesian firms varies by the length of product life cycle and R&D activities of different industries. Our exploration is based on theoretical models that predict trade and outsourcing/FDI affect firms in developing countries differently compared to firms in developed countries like the USA.

**Sponsors:** Oklahoma State University, University of Texas at Arlington

**PI/PDs:** Bidisha Lahiri

University of Texas at Arlington: Mahmut Yasar

**Low level equilibrium trap for women**

Women are less likely to pursue a job if the cost of child-care exceeds the salary earned. While this might seem optimum in the short run, there are long run costs in terms of experience forfeited. Women who start at a lower wage job are more likely to get stuck in the equilibrium described above, while women who start at higher paid jobs circumvent the above situation. This widens the experience gap and in turn the income gap. This child-care-cost driven 2-equilibrium phenomenon should be expected to be weaker (more likely absent) for men.

**Sponsor:** Oklahoma State University

**PI/PD:** Bidisha Lahiri

**The Multi-Headed Effects of Corruption on SMEs**

We examine how informal payments to government officials reduce tax and fees payment, and number of inspections for small and medium sized firms, while at the same time relax credit constraints and make access to technology easier. While payment of bribes is also often considered necessary for the survival of firms, few studies have explored this. We take a unique empirical approach and find strong evidence of higher rate of firm deaths among firms that do not or cannot pay bribes.

**Sponsor:** Oklahoma State University

**PI/PDs:** Bidisha Lahiri, Haider Ali

**Effect of ICT on Product Quality**

Product quality, which is an important dimension of research in economics, is combined with the consideration of firm level access to information and communication technology. Using a recent econometric technique, we find that even for firms without market power, firms with ICT capabilities produce products with higher unit values, compared to otherwise similar firms within the same industries. This supports the hypothesis that ICT facilitates product quality. These results are robust to alternate specifications and estimation methods.

**Sponsors:** Oklahoma State University, Temple University

**PI/PDs:** Bidisha Lahiri, Ramesh Sharda

Temple University: Taha Havakhor

**Household Debt and Meeting Fertility Intentions**

This study examines how housing and non-housing debt impacts the probability that women meet their fertility intentions. Housing debt increases fertility for those planning to have children soon and decreases fertility for those not planning to. Housing debt also decreases the probability women have fewer children than they intended. Greater non-housing debt, on the other hand, reduces the probability of having children in the short-term, but only noticeably for non-married women. However, this reduction is not generally related to a higher probability that women have fewer total children over their lifetime than originally intended - unless those debts persist into their mid-thirties.

**Sponsor:** Oklahoma State University

**PI/PDs:** Michael Morris, Karina Shreffler

**Neighborhood Violence, Family Stress and College Intentions**

Student intentions regarding college attendance not only strongly predict earning a higher degree, but also has been found to differ by income and race. We suggest that exposure to neighborhood violence and family stress have negative impacts on college intentions. Using data collected from an in-depth interview of 206 largely minority (70%) 4th through 12th grade students, and their parents. In estimating indirect effects of neighborhood violence and family stress on college intentions, we find that neighborhood violence has a negative effect through school GPA. Family stress has a negative indirect effect through how much an adolescent enjoys school while parental involvement has a positive impact.

**Sponsor:** Oklahoma State University

**PI/PDs:** Michael Morris, Michael Criss

**Improved IV Estimation of Vertical Property Tax Inequity**

In this paper we propose a new IV estimator to be used in detecting vertical property tax inequity. We conduct Monte Carlo experiments to evaluate the bias of this estimator in comparison to traditional linear and log-linear regression based estimators. We find that the new estimator is more robust to bias across alternative average assessment ratios, even in the presences of errors-in-variables, than the IV estimator suggested by Clapp (1990) and frequently used for such purposes. Furthermore, the new instrument allows for an investigation into how strong the measurement error in sales prices relative to that in assessed values must be for the results to change from those of the traditional methods.

**Sponsor:** Oklahoma State University

**PI/PDs:** Michael Morris, Bill Dare

**Increasing the Learning Effectiveness of Economics Education**

This study develops, implements, and evaluates a new economics teaching pedagogy based on the U.S. Army’s systems approach to training model. Using the approach, tasks are identified that compose the task domain for the Principles’ of Microeconomics course. From the 130 identified tasks, 73 are used by Economics of Socials Issues classes for the evaluation phase. Next each task is expanded to include task conditions, task standard, task performance steps, and task performance measures. The developed document is called a teaching, learning, and evaluation outline (TLEO). The same process identifies 53 tasks used in unit 3 of Money and Banking classes. An experiment is used to assess the impact of using the TLEO documents to enhance learning.

**Sponsor:** State of Oklahoma

**Pl/PD:** William McLean

**Estimating the Economic Effects of US State and Local Fiscal Policy: The Continued Quest for Robust Policy Recommendations**

In this paper we attempt to address limitations of previous research to provide further guidance on US state and local fiscal policy making. We implement the synthetic control method (SCM) to create pairwise matches for states in subsequent regression analysis. Several economic indicators and principal component analysis are used to construct broader narratives of state economic performance and we provide updated evidence. We compare the results with those obtained from using neighbors as matches and from standard growth regressions. The SCM-based analysis produces a number of useful findings, some robust, though insufficient to provide universal policy recommendations.

**Sponsor:** Oklahoma State University

**PIs/PDs:** Dan Rickman, Hongbo Wang

**Industry Aggregation and Assessment of State Economic Development from Motion Picture and Television Production Incentives**

Studies of the economics of state fiscal incentives for the motion picture and television industry use differing levels of industry aggregation. This study unpacks aggregate sector multipliers for 48 states and shows how the use of aggregated measures for the motion picture and television industry may lead to inaccurate input-output multipliers and empirical estimates of the role of incentives in the location of the industry. We conclude that the Motion Picture and Video Production (North American Classification System Code 51211) most corresponds to incentivized activity in the industry. A hypothetical case study demonstrates practical alternatives to modifying regional input-output models to obtain more accurate economic impact multipliers.

**Sponsor:** Oklahoma State University

**PIs/PDs:** Dan Rickman, Hongbo Wang

**Fiscal Implications of Interest Rate Normalization in the United States**

We study the fiscal implications of interest rate normalization from the zero lower bound (ZLB) in the United States. At the ZLB, falling tax revenues and real bond prices increase government debt accumulation. During normalization, interest payments remain above the path without the ZLB, and government debt can increase further despite the recovery of output and tax revenues. Against the yardstick of ability to pay, interest rate normalization is unlikely to threaten federal debt sustainability at the current net federal debt level about 100% of GDP. If the government fails to reform Social Security and major healthcare programs, sovereign default risk can rise more quickly when debt reaches 150% of GDP.

**Sponsors:** Oklahoma State University, Federal Reserve Bank of Kansas City, Institute of Economics, Academia Sinica

**PI/PDs:** Wenyi Shen

Federal Reserve Bank of Kansas City: Huixin Bi

Institute of Economics, Academia Sinica: Shu-Chun Yang

**Uncertain Policy Regime and Government Spending Effects**

The literature generally suggests that money-financed government spending has much bigger multipliers than debt-financed spending. Most analyses, however, assume that policy regimes are fixed. Using a fully nonlinear New Keynesian model with endogenous policy regime uncertainty, we show that inflation-driven expectations about switching to the debt-financing regime reduce money-financed spending multipliers. When interacting with high government debt, policy regime uncertainty decreases money-financed multipliers below one. This conclusion holds at the zero lower bound and with a large spending increase. Also, policy regime uncertainty similarly decreases multipliers under active fiscal and passive monetary policies, in which seigniorage is implicitly used to finance government spending.

**Sponsors:** Oklahoma State University, Grinnell College,Institute of Economics, Academia Sinica

**PI/PDs:** Wenyi Shen

Grinnell College: Ruoyun Mao

Institute of Economics, Academia Sinica: Shu-Chun Yang

SPEARS SCHOOL OF BUSINESS

RESEARCH ABSTRACT REPORTS 2021

**School of Entrepreneurship**

**The Effects of Neurodiversity on Cognitive Attributes of Early-Stage Entrepreneurs**

Utilizing a neuropathology perspective and conservation of resources theory, we investigated the relationship between neurodiversity and entrepreneurial cognition. Specifically, we introduce the resource-induced coping heuristic (RICH) as a mechanism to explain the relationship that ADHD has with entrepreneurial alertness, cognitive adaptability, and entrepreneurial intent. Our findings indicate that RICH fully mediates the relationship between ADHD has with entrepreneurial alertness, cognitive adaptability, and entrepreneurial intent.

**Sponsors**: Oklahoma State University, University of Memphis, West Virginia University

**PI/PDs**: Curt B. Moore

University of Memphis: Stephen Lanivich

West Virginia University: Nancy McIntire

**External Corporate Governance Mechanisms: Considering Markets and Networks**

External corporate governance mechanisms are forces that promote governance structures and practices by top executives and board directors that emanate from outside of the organization. Institutions, industries, markets, and networks all work to influence governance decisions and behaviors both directly and indirectly through interactions with internal corporate governance mechanisms. These mechanisms may induce behaviors that are desirable to external stakeholders or intervene when internal mechanisms are compromised or ineffective.

**Sponsors**: Oklahoma State University, Louisiana State University

**PI/PDs**: Curt B. Moore

Louisiana State University: G. Tyge Payne

**An Introductory Guide to the use of Social Network Analysis in Family Business Research**

We present a practical, introductory guide on the use of social network analysis to examine social structures (e.g., family and organization) in family business research. We present an overview of social networks coupled with a taxonomy of social ties. Then, we discuss the basics of designing social network research with a focus on data collection and management. **Sponsors**: Oklahoma State University, Boise State University

**PI/PDs**: Curt B. Moore

Boise State University: Karen Nicholas

**Network Safeguards to Knowledge Spillovers in Strategic Alliance Networks**

Firms gain from their strategic alliance networks, both in terms of resources and knowledge. Knowledge spillovers have traditionally been viewed in terms of benefits to recipient firms. From the perspective of a firm with valuable knowledge assets, the potential expropriation of rents may be avoided by implementing network. Therefore, once a firm has generated knowledge assets externally through its strategic alliance network, it may subsequently seek to safeguard knowledge assets by altering their network of alliance relations.

**Sponsors**: Oklahoma State University, Boise State University

**PI/PDs**: Curt B. Moore

Boise State University: Karen Nicholas

**Women’s Collective Entrepreneurship: Catalyzing Innovation in Emerging Markets**

Studies show that women make significant contributions to innovation in developed economies, but less is known about their contributions in emerging markets where institutional factors often restrict women’s entrepreneurial activities. Thus, we investigate how women contribute to innovation in emerging markets despite contextual constraints. We recognize the benefits of women’s collective entrepreneurship and integrate transactive memory theory to hypothesize that when more women are represented and more frequent communication exists in the SME, innovation is enhanced.

**Sponsors**: Oklahoma State University, Texas State University

**PI/PDs**: Kristen Madison, Curt B. Moore, Joyce Nabisaalu

Texas State University: Joshua Daspit

**Opaque Costly Signals and Debt Contracts**

New Ventures that are unable to fund expansion using internal equity and prefer to maintain complete firm ownership may supplement existing cash flow by accessing external funds in the form of debt contracts (Berger & Udell, 1998). These firms send signals to external stakeholders that represent a sufficient level of legitimacy and worthiness of investment. However, many new ventures are unable to send preferred costly signals because they do not possess them. In this study, I examine specific signals that carry the preferred costly weight needed to gain a stakeholder’s perception of legitimacy.

**Sponsors:** Oklahoma State University, Baylor University

**PI/PDs:** Matt Rutherford, Curt B. Moore

Baylor University: Lee Grumbles

**Will Crypto Become Actual? An Institutional Approach to Cryptocurrency**

How can cryptocurrency gain legitimacy in the eyes of users? We propose that cryptocurrency firms, through evasive entrepreneurial actions reflected by rhetorical strategies, can acquire legitimacy in the market that will ultimately reduce institutional uncertainty. Drawing from Williamson’s (1998, 2000) hierarchical model of institutional systems, we propose that legitimacy acquisition at the market level via evasive action will attenuate uncertainty in the formal institutional environment; which will beget additional legitimacy for cryptocurrencies, and thus higher performance to those firms, on average.

**Sponsor:** Oklahoma State University

**PI/PDs:** Matt Rutherford, Duygu Phillips, Per Bylund, Curt B. Moore

**New Venture Legitimacy Diffusion: The Role of Storytelling and Social Networks**

Legitimacy diffusion is critical for new venture success, survival, and growth. Storytelling is a powerful technique to acquire legitimacy as well as to diffuse it. The focus of the current study is to analyze the role of storytelling in social media, specifically on Twitter. We also investigate the moderating effects of social networks based on network density and eigenvector centrality. Results indicate that storytelling in social media can be effective in legitimacy diffusion and that storytelling elements influence the extent on diffusion, specifically cognitive, pragmatic, and emotional elements as well as network density and eigenvector centrality. Implications and limitations are discussed.

**Sponsor:** Oklahoma State University

**PI/PDs:** Matt Rutherford, Duygu Phillips, Curt B. Moore

**When Family Business Meets Social Enterprise: An Integrative Review and Future Research Agenda**

Family businesses and social enterprises are typically examined as distinct organizational forms, yet scholars in these domains often study similar phenomena. While both domains acknowledge the significant role of family in hybrid organizational missions, findings vary in emphasis and rhetoric. Our review of 117 articles, published in 59 journals between 1996 and 2020, capitalizes on this connection and attempts to integrate the varying perspectives. We consider the common underlying research motivations, illuminate the role of family in advancing social missions and creating social value, and provide a foundation for future research that can extend family business and social enterprise domains.

**Sponsors:** State of Oklahoma, Kennesaw State University, California Polytechnic State University, Ryerson University

**PI/PDs:** Kristen Madison

Kennesaw State University: Robert V. Randolph

California Polytechnic State University: Benjamin N. Alexander

Ryerson University: Francesco Barbera

**Women’s Collective Entrepreneurship: Catalyzing Innovation in Emerging Markets**

Our study investigates how women contribute to innovation in emerging markets despite the institutional constraints prevalent in this context. We recognize the benefits of women’s collective entrepreneurship and integrate transactive memory theory to hypothesize that when more women are represented and more frequent communication exists in the venture, innovation is enhanced. Data from 805 SMEs in 34 emerging markets support our theorizing; although, results reveal different effects based on the innovation type. Overall, findings indicate that women catalyze innovation when they have strength in numbers, which highlights the importance of women’s collective entrepreneurship in gender-restrictive contexts.

**Sponsors:** State of Oklahoma, Texas State University

**PI/PDs:** Kristen Madison, Curt B. Moore, Joyce Komakech Nabisaalu

Texas State University: Joshua J. Daspit

**Parenting Legacy: How Parenting Style Affects Family Business Successors and their Employees**

Transferring leadership across generations is a defining characteristic of family firms. Yet many successors underperform, and little is known about why. We extend parental control theory to develop a model of parenting legacy in family firms. Primary dyadic data from successors and subordinates in 119 family firms, supplemented with 24 interviews with family firm leaders, shows that predecessors’ parenting style affects successors’ psychological functioning, which impacts employees’ citizenship and counterproductive behaviors. Among firms that make it to the second generation, the seeds of success are partially sown long before succession takes place, drawing attention to the important role of parenting.

**Sponsors:** State of Oklahoma, Middle Tennessee State University, University of Central Florida, Northeastern University

**PI/PDs:** Kristen Madison

Middle Tennessee State University: Kristen K. Shanine

University of Central Florida: James G. Combs

Northeastern University: Kimberly A. Eddleston

**Employer Branding in Family Firms: The Influence of Category-Based Beliefs on Applicant Attraction**

Family firms often face challenges attracting employees. We theorize and test a parallel mediation model that highlights the importance of the family firm brand in the recruitment process. Results indicate that job seekers have opposing category-based beliefs about family firms that influence their level of attraction: they have negative perceptions of family firm HR systems but positive perceptions of family firm brand authenticity, with authenticity exhibiting a stronger positive influence on applicant attraction. These findings provide nuanced insight into how employer branding can fit into the overall HR system and strategy of family firms to reap advantages over nonfamily firms.

**Sponsors:** State of Oklahoma, University of Witten-Herdecke, University of Bern, University of North Carolina-Charlotte

**PI/PDs:** Kristen Madison

University of Witten-Herdecke: Sandra Wolf

University of Bern: Andreas Hack

University of North Carolina-Charlotte: Franz W. Kellermanns

**Linking the Entrepreneur’s Childhood Communication Patterns to the Innovativeness of their Ventures**

This study integrates human communication and imprinting theories to advance our understanding of family firm innovation. Using primary triadic data from leaders, family employees, and nonfamily employees in 38 U.S. family firms, results demonstrate the more effective the human communication within the family, the more effective the organizational communication within the family firm and subsequently, the greater the innovativeness. However, due to differing perceptions of family and nonfamily employees, results indicate founder communication patterns do not fully imprint on the family firm. This implies the relationship between founder imprinting and organizational outcomes is more nuanced than theory would suggest.

**Sponsors:** State of Oklahoma, Mississippi State University

**PI/PDs:** Kristen Madison

Mississippi State University: Emily G. Marett

**Entrepreneurial Response to Interstate Regulatory Competition: Evidence from a Discrete Choice Experiment**

How do entrepreneurs decide between specific entrepreneurial opportunities? We conduct a discrete choice experiment (DCE) with a population of entrepreneurs/small business owners how they perceive and decide between specific opportunities in the food industry. Using latent class logit analysis, we separate our sample based on entrepreneurs’ revealed utility functions and are so able to distinguish two distinct types of entrepreneurial decision-making. Our findings suggest that not only are entrepreneurs different from non-entrepreneurs, but there are different types of entrepreneurs who perceive opportunities differently. This decomposes the entrepreneurship concept and suggests that we should predict different types of entrepreneurs to act differently.

**Sponsors**: Oklahoma State University, Michigan State University

**PI/PDs**: Per Bylund

Michigan State University: Trey Malone

**Overcoming Uncertainty, Resilience, & Overconfidence in Entrepreneurship**

We use conjoint experiments to provide empirical evidence regarding how individuals in the early stages of the entrepreneurial process and under different levels of uncertainty are influenced by the individual’s resilience and overconfidence in their propensity to pursue entrepreneurial action. Results support the view that higher levels of individual resilience will partially mitigate the hindrances to entrepreneurial action associated with higher levels of uncertainty, while, counterintuitively, the results of overconfidence were not significant. Consequences of these findings for these theory of entrepreneurship under uncertainty are discussed.

**Sponsor:** Oklahoma State University

**PI/PDs:** Per Bylund, Fernando D’Andrea,Steven Trost

**Effectuation and The Logic of Action: A Critical Assessment from a Praxeological Perspective**

Building on recent discussions about the veracity of effectuation research, we analyze the theoretical structure of effectuation. We rely on a rarely used method for reasoning about social phenomena prevalent in the contemporary Austrian School – formalized as praxeology – to systematically probe into effectuation challenging its core tenets, identifying critical issues that need to be addressed, and offering possible actionable remedies. Based on our analyses, we question the novelty and usefulness of effectuation principles for entrepreneurship research and practice, and highlight avenues for constructive scholarship in this area. Implications and directions for future research are discussed.

**Sponsors:** Oklahoma State University, University of Alabama Birmingham

**PI/PDs:** Per Bylund

University of Alabama Birmingham: Vishal Gupta

**Where do factor markets come from? Toward a Resource-Based Theory of the Entrepreneurial Firm**

We argue that the firm as a precondition to and a creator of factor markets. We suggest that the firm is the means through which such advantages are established, an island of entrepreneurial innovation, that provides the means through which goods otherwise not possible in the market are brought into being. The firm is the entrepreneur’s means of realizing an imagined competitive advantage. We contribute to a rich literature exploring the roots of entrepreneurial strategy, and our exploration of entrepreneurial factor markets provides an essential theoretical link necessary for a creation-infused account of entrepreneurial firm formation.

**Sponsors:** Oklahoma State University, University of Utah

**PI/PDs:** Per Bylund

University of Utah: Robert Wuebker

**Boundaries of Strategic Theory and Its Implications for Entrepreneurship**

Entrepreneurship draws on theories in strategy to answer its central questions, and strategy increasingly looks at the origins of new value, disclosing a mismatch between canonical strategic theories and their application where value creation, rather than discovery or exploitation, are the focus. We claim that there are important and often-neglected boundary conditions for strategic theories applied to entrepreneurial settings. This misapplication of strategic theories in entrepreneurship has important implications for the program of research in entrepreneurship, strategic entrepreneurship, and strategy, and calls for new theory at the intersection of entrepreneurship and strategy focused on the origins of new value.

**Sponsors:** Oklahoma State University, University of Utah

**PI/PDs:** Per Bylund

University of Utah: Robert Wuebker

**Crypto vs. Fiat: An institutional approach**

We propose that cryptocurrency firms can acquire market legitimacy that will ultimately reduce institutional uncertainty and propose a process model in which that legitimacy acquired at the market level via evasive action will reduce uncertainty in the formal institutional environment, which will beget additional legitimacy for cryptocurrencies, and thus higher performance to those firms, on average. This study (1) extends our understanding of the evolution of an innovation and its diffusion under institutional uncertainty, (2) elucidates how cryptocurrency can become a medium of exchange, and (3) contributes to the development of institutional theory.

**Sponsor:** Oklahoma State University

**PI/PDs:** Duygu Phillips, Per Bylund, Curt B. Moore, Matt Rutherford

**The Effects of Country-level Institutional Configurations on the Entrepreneurship Process**

This research performs an exploratory comparative institutional analysis to understand how country-level institutional configurations may shape the entrepreneurship process. The study uses fsQCA to examine how different characteristics of institutional contexts (i.e., informal institutional support, formal institutional strength, and formal institutional efficiency) generate distinct national institutional configurations with varying advantages for entrepreneurial activities performed at the early vs. the late stage of the entrepreneurship process, thereby affecting the productivity of entrepreneurship in countries. The study’s findings are discussed to form new theory on why certain institutional profiles are more or less effective in promoting entrepreneurial activities throughout the entrepreneurship process.

**Sponsors:** Oklahoma State University, Mississippi State University

**PI/PDs:** Per Bylund

Mississippi State University: Sohrab Soleimanof, Hessamoddin Sarooghi

**A Process Theory of Value and its Implications for Entrepreneurship and the Market Process**

We advance a conception of value as a process, and formalize an integrative theory of subjective value—phenomenal value theory—that depicts value in terms of an experiential learning process. We build upon dualist philosophy to explain how the term ‘value’ describes both the experience of subjective benefit as well as the ascription of benefit (expected or realized) to specific sources. We then leverage phenomenal value theory to revisit market process theory. Our entrepreneurial market process theory offers important and previously unrecognized implications regarding the nature and costs of regulatory policy in fettering the value learning process.

**Sponsors:** Oklahoma State University, University of Nevada Reno

**PI/PDs:** Per Bylund

University of Nevada Reno: Mark Packard

**New Venture Social Media Legitimacy: The Role of Antenarratives and Social Networks**

Can online fragments of stories—antenarratives—influence legitimacy judgments of audiences? While the work on fully formed narratives and legitimacy is advancing, we know very little about online antenarratives and their legitimacy inducing impact. Drawing on cultural entrepreneurship theory, we offer an empirical analysis of a large, unique dataset and develop a novel dictionary to analyze the new ventures’ tweets. Our results indicate that tweets containing legitimating content positively affect social media legitimacy, while emotive content is negatively related to social media legitimacy. We further find the size of an actor’s social media network moderates our antecedents in somewhat unexpected ways.

**Sponsor**: Oklahoma State University

**PI/PDs**: Duygu Phillips, Matt Rutherford, Curt B. Moore

**Optimally Distinctive or Optimally Isomorphic? A Quasi-Experimental Investigation of New Venture Names**

How do organizations saddled with extreme liabilities of newness choose a name that will assist in the difficult process of emergence? Drawing on optimal distinctiveness theory and literature from marketing, we propose that new ventures whose names communicate both distinctiveness and conformity will attain elusive legitimacy judgments from audiences. We find that; indeed, both are important; but the connotations of distinctiveness of a venture’s name are more strongly associated with legitimacy and subsequent performance than the connotations of conformity. Moreover, while names conveying conformity have curvilinear relation with legitimacy, names transmitting distinctiveness possess a linear relationship.

**Sponsor**: Oklahoma State University

**PI/PDs**: Duygu Phillips, Matt Rutherford

Department of Management: Bryan Edwards

**Legitimate Distinctiveness via Cultural Entrepreneurship in New Ventures**

“To be different or to be the same?” Adopting a cultural entrepreneurship process model, we submit that both competitive distinctiveness and institutional conformity can individually serve as legitimating strategies in identity development by forming *propriety judgements* and that legitimacy mediates their relationships performance. Moreover, we suggest that these relationships will be contingent upon *validity judgments* of category appeal. We develop theory around, and test, the relationship between distinctiveness and pragmatic legitimacy and challenge the longstanding path-dependent assertion that prioritizes conformity. Using a mixed methods approach, we test the hypotheses through two separate studies.

**Sponsor**: Oklahoma State University

**PI/PDs**: Duygu Phillips, Matt Rutherford

**Crypto vs. Fiat: An Institutional Approach**

How can cryptocurrency gain legitimacy in the eyes of users? We propose that cryptocurrency firms can acquire market legitimacy that will ultimately reduce institutional uncertainty, through rhetorical strategies that circumvent the existing institutional framework. Drawing on recent theory of institutional uncertainty, we propose a process model in which that legitimacy acquired at the market level via evasive action will reduce uncertainty in the formal institutional environment, which will beget additional legitimacy for cryptocurrencies, and thus higher performance to those firms. This study extends our understanding of the evolution of an innovation under institutional uncertainty, elucidates how cryptocurrency can become a medium of exchange, and contributes to the development of institutional theory.

**Sponsor:** Oklahoma State University

**PI/PDs:** Duygu Phillips, Per Bylund, Matt Rutherford, Curt B. Moore

**What do we “Know” about New Venture Legitimacy: A Meta-Analytic Review of the Relation between New Venture Legitimacy and Firm Performance**

We present insights, based on the sum total of the accumulated empirical knowledge in the literature, regarding the relation between legitimacy and firm performance in new entrepreneurial ventures. Our meta-analysis that captured legitimacy in new, as well as mature, ventures illustrates four primary insights that we could not have otherwise inferred from the extant literature. We discuss the implications of these findings—both theoretical and practical—and we explore multiple avenues for future research to advance the literature with regards to legitimacy in new ventures.

**Sponsor:** Oklahoma State University

**PI/PDs:** Duygu Phillips, Matt Rutherford

**Opaque Costly Signals and Debt Contracts**

New Ventures that are unable to fund expansion using internal equity and prefer to maintain complete firm ownership may supplement existing cash flow by accessing external funds in the form of debt contracts (Berger & Udell, 1998). These firms send signals to external stakeholders that represent a sufficient level of legitimacy and worthiness of investment. However, many new ventures are unable to send preferred costly signals because they do not possess them. In this study, I examine specific signals that carry the preferred costly weight needed to gain a stakeholder’s perception of legitimacy, however are difficult to fully verify.

**Sponsors:** Oklahoma State University, Baylor University

**PI/PDs:** Duygu Phillips, Matt Rutherford, Curt B. Moore

Department of Management: Bryan Edwards

Baylor University: Lee Grumbles

**An Introduction and Clarification of *Ex Nihilo* *Propriety***

Organizational legitimacy attainment is one of the most important precursors to the success of new ventures. However, an underrepresentation within the entrepreneurship literature—describing and examining the actual attainment of legitimacy—has been apparent. To address this omission, we present a discussion of the earliest of all legitimacy types to be attained, which we term *ex nihilo* *propriety*. We provide a brief review of the theoretical framework. We then discuss the nomological network of this novel construct. In conclusion, we offer multiple theoretical propositions to serve as guidance for the empirical testing of this newly conceptualized legitimacy construct.

**Sponsor:** Oklahoma State University

**PI/PDs:** Matt Rutherford, Duygu Phillips

**Bootstrapping: Complementary Lines of Inquiry in Entrepreneurship**

Bootstrapping is a term, a construct, and a paradigm that has attracted substantial attention from both popular press writers and scholarly researchers. However, insights from existing theory (e.g., signaling, cultural entrepreneurship) as well as the relatively recent development of closely related bases (e.g., effectuation, bricolage) can complement and advance bootstrapping by adding theoretical breadth and depth. When understood alongside these related lines of research in entrepreneurship, researchers are better equipped to create, catalog, and accumulate knowledge regarding bootstrapping. In turn, educators will be more effective in communicating how entrepreneurs are able to launch in resource poor environments, and ultimately achieve success.

**Sponsor:** Oklahoma State University

**PI/PDs:** Matt Rutherford, Duygu Phillips

**The Bootstrapping-Bricolage Interface**

The entrepreneurial frameworks of bootstrapping and bricolage both address the broad challenge of surviving and thriving under conditions of resource scarcity. However, while similar in this regard, these frameworks also possess distinct attributes. Bootstrapping has been traditionally more focused upon exploring issues concerned with financing choices, whereas bricolage considers a broader range of, mostly improvisational, activities. These improvisational activities can be considerations of financial capital, but may also include social, human, and institutional capital. In this work, we outline the similarities and divergences between the two frameworks, and cast them as opportunities for developing scholarly work in entrepreneurship.

**Sponsor:** Oklahoma State University

**PI/PDs:** Matt Rutherford, Duygu Phillips, Jorge Arteaga

**Nonresponse Bias in Family Business Research**

How do response rates influence outcomes in family business studies? Relatedly and perhaps more importantly, how do they influence the collective quality of family business research? Although there is wide consensus that response rates—and the resultant nonresponse bias—matter in scientific research, there is considerable debate regarding their substantive effect on the studied relationships. Here, we address this issue in family business research. Our broad purpose is to take up on a well-accepted issue in research and provide a guide on strategies to reduce nonresponse bias, enhance study quality and advance the growing field of family business research.

**Sponsor:** Oklahoma State University

**PI/PDs:** Matt Rutherford, Duygu Phillips

**Building Durability Capabilities**

**New Venture Navigation of the Great Recession**

Results from an analysis of 2,500 firms that were founded just prior to the start of the Great Recession indicate that new ventures which display a commitment towards “durability resources” are more likely to survive a recession—and thrive afterword. With regard to combinations of these resources, we found that firms could be described in one of four ways: 1) Resource-Constrained, 2) Bootstrappers, 3) Adequate, and 4) Beneficent. With the exception of the Resource-Constrained, all types demonstrated some association with elevated performance during a recession; but the Beneficent firms were the most strongly associated.

**Sponsors**: Oklahoma State University, DePaul University, Samford University

**PI/PDs**: Matt Rutherford

DePaul University: Paul Sanchez-Ruiz

Samford University: Matt Mazzei

**Deliberate Practice as Entrepreneurship Curriculum: A Study of Middle School Girls in Economically Challenged Regions**

Can the deliberate practice process be employed to swiftly improve individual entrepreneurial performance? To address this question, a curriculum was developed based on the deliberate practice model and administered to middle school girls from economically challenged regions to determine whether deliberate entrepreneurial skills practice could lead to the *expeditious* acquisition of enhanced entrepreneurial performance. Our findings confirmed the conceptual relationship between deliberate practice and entrepreneurial performance. It is hoped that the results of this study can be used by researchers, educators, and policy makers to address a general lack of entrepreneurship in economically challenged regions with knowledge and skills to create a new business.

**Sponsors:** Oklahoma State University, ARDX, Southwestern Oklahoma State University

**PI/PDs:** Matt Rutherford

ARDX: Angela Reddix

Southwestern Oklahoma State University: Lincoln Brown

**An Introduction and Clarification of ‘*Ex Nihilo’* Propriety**

Organizational legitimacy attainment is one of the most important precursors to the success of new ventures. Until now, an omission within the entrepreneurship literature describing and examining the attainment of legitimacy has been apparent. Previously, the identification and description of the attainment of legitimacy that occurs in the earliest stages of new venture development have been neglected. Consequently, the following is a description and discussion of the earliest of all legitimacy types to be attained, *ex nihilo* legitimacy. Next, the nomological network of the new construct is discussed.

**Sponsors:** Oklahoma State University, North Carolina State, Samford University, Bradley University

**PI/PDs:** Matt Rutherford

North Carolina State: Jeffrey M. Pollack

Samford University: Matt Mazzei

Bradley University: Brian G. Nagy

**Cronyism and Entrepreneurship: How the Interplay Between Informal and Formal National Institutions Can Impact Country-Level Entrepreneurship?**

Cronyism is the practice of favoritism based on connections. The institutionalization of cronyism as a rational practice within a context promotes rewards for unproductive behaviors at the expense of productive behaviors. This study strives to explain how the prevalence of cronyism can increase unproductive entrepreneurship and decrease productive entrepreneurship in different countries. Moreover, this research examines the moderating role of formal, inclusive institutions—rule of law—on the relation between cronyism and entrepreneurial motives. Analysis of data from 96 countries over 7 years provides empirical support for the notion that productive entrepreneurship and cronyism are inversely related.

**Sponsors:** Oklahoma State University, Louisiana State University

**PI/PDs:** Matt Rutherford

Louisiana State University: Sohrab Soleimanof

**Legitimation in De Novo Firms: A Microfoundational Perspective**

We engaged in a longitudinal multiple case study whereby we followed three firms over a period of five years. The data gathered and analyzed here suggest that stakeholders predominantly make legitimacy judgments about new ventures along two lines: relational and technological appropriateness. With regard to the former, in new ventures, stakeholders prefer to perceive appropriate: 1) board members, 2) partners, 3) human resources, and 4) communications with stakeholders. With regard to the later, we found that stakeholders prefer appropriate: 1) levels of product novelty, 2) levels of product testing and development, and 3) integration with existing technology.

**Sponsors:** Oklahoma State University, The Artic University of Norway, DePaul University

**PI/PDs:** Matt Rutherford

The Artic University of Norway: Elin M. Oftedal, Lene Foss

DePaul University: Paul Sanchez-Ruiz

**The Attracted but Ill-Suited Entrepreneur: The Dark Dyad’s Link to Resource Depletion and New Firm Performance**

Previous studies have shown positive outcomes related to dark characteristics suggesting that they are beneficial for the individual while being detrimental to others and society. This study extends the existing literature by investigating dark dyad’s deleterious outcomes related both to the individual, i.e. individual burnout, as well as to others, i.e. reduced employee and firm performance. A sample of 299 entrepreneurs-employee dyads significantly demonstrated that entrepreneurs’ dark triad traits are positively correlated with burnout, and negatively correlated with their employees’ performance and new venture sales.

**Sponsors:** Oklahoma State University, Ball State University

**PI/PDs:** Jonathan Butler, Imran Syed

**For Better or for Worse: Spousal New Venture Employment, Founder Passion, and Founder Burnout**

Because the startup environment is resource constrained, often entrepreneurs turn to spouses for low or no cost sources of human capital (Blenkinsopp & Owens, 2010; Dyer, Dyer, & Gardner, 2012) without considering how that decision may affect their own well-being. Extending the Sustainable Family Business Theory (SFBT Werbel & Danes, 2010), this paper examines how spouses act as resource gatekeepers, monitoring the flow of resources between the family and business systems.

**Sponsors:** Oklahoma State University, Ball State University

**PI/PDs:** Jonathan Butler, Imran Syed

**Illuminating the Dark: The Dark Triad’s Threat to New Venture Performance and Employee Creativity**

Miller (2014) recently called for increased research into the dark side of entrepreneurship. The dark triad (Machiavellianism, narcissism, and psychopathy), introduced by Paulhus and Williams (2002), were recently found to be over-represented among entrepreneurs and entrepreneurship students (Akhtar et al., 2013; Mathieu & St-Jean, 2013). Founders with dark triad characteristics initially appear to be ideal leaders (Maccoby, 2000). However, the dark triad share attributes of manipulation, superiority, low-empathy, and moral deficit (Wai & Tiliopoulos, 2012, Furnham et al., 2013) which over time undermine social exchanges by violating reciprocity assumptions.

**Sponsor:** Oklahoma State University

**PI/PD:** Jonathan Butler

**Imagination & Entrepreneurial Alertness in the Midst of Adversity: The Influence of Social Capital**

Cognitive Adaptation Theory ([Taylor, 1983](file:///G:\eee\Restricted\Research%20Abstracts\FY2021\Butler%20-%20Jonathan%20-%20Research%20Abstracts%202020.docx#_ENREF_16)) describes how individuals, in response to adversity, use imagination and imagined futures for self-enhancement and to gain control of one’s life. In this study, the authors hypothesize that adversity will be positively related to entrepreneurial alertness when mediated by factors of imagination including prospective thinking, perspective taking, and counter-factual thinking. For nascent entrepreneurs currently suffering from adversity (natural disasters, economic downturn, or adverse events) this study provides hope in that it is expected to demonstrate that adversity may be linked to higher ability to recognize entrepreneurial opportunities.

**Sponsor:** Oklahoma State University

**PI/PD:** Jonathan Butler

**The Nature of Entrepreneurial Imagination: A Process Perspective**

This work-in-progress paper seeks to offer more definitive view of the nature of entrepreneurial imagination and demonstrate the reasons why imagination is directly relevant to entrepreneurship. Taking cues from cognition and economics literatures, the authors seek to develop a theoretical framework concerning the role of imagination is several key aspects of the entrepreneurial process including concept ideation, entrepreneurial alertness, and opportunity recognition. Finally, the implications and potential contributions of the proposed framework will be explored.

**Sponsor:** Oklahoma State University

**PI/PD:** Jonathan Butler

**Antecedents and Consequences of Individual-Level Trust in the Fields of Management and Entrepreneurship**

When an individual has trust in another individual there is always a possibility that the other individual will break that trust. Trust is similar to a bet we take on others. It has an inherent element of risk (DeSteno, 2014). Why then do individuals trust each other? What role does trust play, if any, in management and entrepreneurship? This work-in-progress paper strives to take an initial step towards answering these questions. This paper explores the need and rationale for trust, its biological and chemical foundations, as well as some of the implications of trust for management and entrepreneurship.

**Sponsors:** Oklahoma State University, Ball State University

**PI/PDs:** Jonathan Butler, Imran Syed

SPEARS SCHOOL OF BUSINESS

RESEARCH ABSTRACT REPORTS 2021

**School of Hospitality and Tourism Management**

**Creating an Effective Support System for Small and Medium-Sized Farm Operators to Succeed in Agritourism**

Agritourism has the potential not only to keep small farms in business but also to provide important local economic development spillover effects. However, key barriers prevent many farmers from diversifying to include agritourism. These barriers represent opportunity costs and include not only lack of information among producers, consumers, supporting organizations and policy makers, but also regulatory gaps across states. Project objectives include understanding the roles and educational needs of various organizations in supporting agritourism; understanding the factors that contribute to growth in agritourism across U.S. counties; and delivering educational materials to farmers and supporting organizations and policy makers.

**Sponsors:** National Institute of Food and Agriculture (NIFA) Agriculture and Food Research Initiative (AFRI), Oklahoma State University, Penn State University, University of Vermont

**PI/PDs**: Stacy Tomas

Penn State University: Claudia Schmidt, Stephan Goetz, Sarah Rocker, Suzanna Windon

University of Vermont: Lisa Chase

**Hospitality Training for Wineries**

Increased visitation and sales at Oklahoma wineries can be the result of positive staff interactions through great customer service and wine knowledge. The purpose of this project is to develop a research-based hospitality training program specific to Oklahoma wineries to help staff more fully engage with visitors and to increase tourism in many rural communities across the state. The curriculum will be developed by Oklahoma State University in consultation with an advisory committee comprised of Oklahoma Department of Agriculture, Food and Forestry, the Oklahoma Grape Industry Council and Oklahoma winery owners. The curriculum will be delivered state-wide through regional trainings.

**Sponsors:** Oklahoma Department of Agriculture, Food and Forestry, Oklahoma State University

**PI/PD:** Stacy Tomas

**National Agritourism and Direct Sales Research**

From a national perspective the understanding of agritourism, as both a tourism product and as a strategy for income diversification is limited. While regional research exists across the country, a holistic and comprehensive understanding of this industry segment does not. This multi-state research study is led and orchestrated by the University of Vermont. The Oklahoma portion of this study is being managed by OSU. Results of this project will provide comprehensive data on the industry not only in Oklahoma, but across the country, and will also be used to develop tools and resources to increase the success of agritourism enterprises.

**Sponsors:** Oklahoma State University, University of Vermont, Oregon State University

**PIs/PDs:** Stacy Tomas

University of Vermont: Lisa Chase

Oregon State University: Mary Stewart

**Applying Psycho-Physiological Methods to Comparison of Virtual Reality Visualizations to Traditional Visualizations in Hotel Settings.**

VR visualizations of a hotel room will be compared to 2-D hotel room images in terms of emotional, attitudinal, and behavioral responses utilizing psycho-physiological measurement methods in addition to traditional survey methods.

**Sponsor:** Oklahoma State University

**PI/PDs:** LisaSlevitch, Tilanka Chandrasekera, Luis Meja, Kate Korneva

**Empirical Comparison of Kano Categorization Methods.**

The aim of the study is to conduct a comprehensive empirical comparison of the existing Kano methods. The accuracy of the methods will be tested using a generated dataset simulating the relationships between attribute performance and customer satisfaction as proposed in the original Kano Model. Additionally, bootstrapping technique will be used to compare the generated dataset with a real data set. The findings will assist with choosing the most appropriate method and also help with application in a technically fitting manner.

**Sponsor:** Oklahoma State University

**PI/PDs:** Lisa Slevitch, Mindy McCann, Josephine Acosa, Aisya Larasati

**Optimizing Frontline Shift Composition for Increased Customer Satisfaction and Firm Performance.**

The effects of shift composition on customer satisfaction and firm performance will be examined in OSU dining services using qualitative approach.

**Sponsor:** Oklahoma State University

**PI/PDs:** Tom Arnold, LisaSlevitch

**The Bleisure Travel Experience: Combining Business and Leisure**

The study aims to examine how travelers experience bleisure travel, explore how they balance leisure and business as the two purposes of their trips, and to find out how bleisure travel experience impacts each component individually. Identifying the differences between leisure or business experiences can help tourism companies to respond to the preferences of the different traveler segments. It is vital for tourism practitioners to look beyond the traditional classification of leisure and business travelers and to consider the new growing segment in order to customize their products or services accordingly and by doing so better satisfy bleisure travelers.

**Sponsor**: Oklahoma State University

**PI/PDs**: Bardia Batala, Lisa Slevitch

**Foodservice Mobile Application Quality Determinants’ Impact on Customer Satisfaction and Repeat Usage Intentions: The Role of Perceived Risk**

The current study aims to examine foodservice mobile commerce success model and investigate the relationships among its quality components, customer satisfaction, and repeat usage intentions in the restaurant context. The study can assist practitioners involved in the restaurant industry by showing how to configure quality components to satisfy customers and make them more willing to use food delivery mobile applications in casual dining restaurants.

**Sponsor:** Oklahoma State University

**PI/PDs:** Joo Ahn, LisaSlevitch

**When Employees Feel Envy: The Role of Psychological Capital**

This study explores the relationships between LMXSC, malicious and benign envy, and Psychological Capital (PsyCap) in the hotel industry. This study found that the employees with low LMXSC were likely to experience not only negative envy but also positive envy as the emotional responses towards the unpleasant low LMXSC. The employees’ PsyCap impacted the ability for employees to manage their emotional responses: employees can alleviate hostile emotions towards the envied coworkers (malicious envy) and focus on improving their current situation rather than annoying the envied coworkers (benign envy).

**Sponsors:** Oklahoma State University, Daegu University

**PI/PDs:** Choonghyoung Lee, Bill Ryan

Daegu University, South Korea: Jahyun Song

**Examining the Impact of Artificial Intelligence on Hotel Employees Through Job Insecurity Perspectives**

The purpose was to examine hotel employees’ perception of AI and its impact by identifying the critical role of job insecurity, job engagement, and turnover intention through a pragmatic approach. An explanatory sequential mixed-methods design was used by conducting a quantitative study with an empirical survey method followed by a qualitative study with a case study. Results from the quantitative study demonstrated that perceived job insecurity significantly affected perceived job engagement and perceived job insecurity indirectly affected turnover intention through intermediary variable of perceived job engagement. There were no statistical differences between nonmanagerial positions and managerial positions.

**Sponsors:** Oklahoma State University, Florida Gulf Coast University

**PI/PDs:** Bonhak Koo, Bill Ryan

Florida Gulf Coast University: Catherine Curtis

**Employee Brand Love and Love Behaviors: Perspectives of Social Exchange and Rational Choice**

Marketing scholars study customers’ love for a brand, but little attention has been paid to understanding employees’ love for their brands. The study proposed that forgiveness behavior, supportive voice behavior, and helping behavior are three love behaviors improved through employee brand love. Organizational culture types are shown to moderate the relationship between brand love and these love behaviors. Testing the moderating effects of organizational cultures reveal that forgiveness behavior may be strengthened through a hierarchy culture, that supportive voice behavior can be strengthened via clan culture, and that helping behavior can be strengthened under a hierarchy organizational culture.

**Sponsors:** Oklahoma State University, University of Arkansas, Ling Tung University, Taiwan

**PI/PDs:** Bill Ryan

University of Arkansas: Yao-Chin Wang

Ling Tung University, Taiwan: Chu-En Yang

**Hotel General Managers’ Brand Love: A Thematic Analysis**

Literature has identified support from top managers as one key success factor in internal branding, a knowledge gap remains regarding understanding general managers’ (GMs’) mindset toward their brands. This study conceptualizes brand love and explores factors influencing brand love identified through interviews. Thematic analysis is applied with three raters to code the information collected. This study identifies five dimensions of hotel GMs’ conception of brand love: affinity, experience, pride, loyalty, and reputation. Four dimensions of positive factors (employee benefits, organization, product, community) and four dimensions of negative factors (individual, organization, product, guests) emerged with several sub-dimensions.

**Sponsors:** Oklahoma State University, University of Arkansas, University of New Orleans

**PI/PDs:** Bill Ryan

University of Arkansas: Yao-Chin Wang, Courtney Troxtel, Mackenzie Cvar

University of New Orleans: Han Chen

**Engage More and Burnout Less Through Love! Examining the Mechanism of Hotel Department Managers’ Brand Love and Health**

This research investigates brand love from hospitality managers’ perspective to see whether this concept can also influence their three work-related attitudinal outcomes, namely work engagement, burnout and positive affect. When individuals have a passion or emotional attachment toward their organizations’ brand, they essentially have identified themselves with their organizations. The rationale of organizational identity theory indicates people highly identified with their organizations would exhibit positive work-related attitudes such as increased work engagement and reduced burnout. This study proposes that hospitality managers who develop love emotions toward their organizations’ brand should also be likely to display these positive work-related attitudes.

**Sponsors:** Oklahoma State University, University of Arkansas, National Taiwan Normal University

**PI/PDs:** Bill Ryan

University of Arkansas: Yao-Chin Wang

National Taiwan Normal University: Allan Cheng Chieh Lu

**A Meta-Analysis of Customer Loyalty: A Decade of Empirical Research**

Customer loyalty has long been recognized as a critical driver of business success in the tourism and hospitality industry. Despite extensive research on loyalty formation, findings regarding interrelationships between loyalty and its key drivers are inconclusive and often contradictory. This study aims to synthesize and analyze findings from 71 articles published in eight top-tier tourism and hospitality journals between 2006 and 2020 using meta-analytic structural equation modeling. This study contributes to the literature by reconciling and synthesizing inconclusive findings from prior research.

**Sponsors:** Oklahoma State University, Temple University

**PI/PDs:** Kevin Kam Fung So

Temple University: Yang Yang, Xiang (Robert) Li

**Customer Experience in Tourism and Hospitality Research: Bibliometric Analysis, Topic Modeling and Research Agenda**

Customer experience has attracted significant attention in past two decades. This study aims to provide the evolution of scientific research on customer experience articles published in 12 tourism and hospitality journals between 1998 and 2019. Using the Web of Science database and the PRISMA technique, relevant articles will be retrieved for quantitatively bibliometric and qualitatively thematic content analyses. The results will illustrate publication outlets, trajectories, the most influential papers, co-citation, and keyword co-occurrence of the lexical and temporal networks, as well as proposing a conceptual model of customer experience that includes the theoretical building blocks of customer experience.

**Sponsors:** Oklahoma State University, University of South Carolina

**PI/PDs:** Kevin Kam Fung So

University of South Carolina: Hyunsu Kim

**A bibliometric analysis of customer engagement: A comparison of the marketing and tourism/hospitality fields**

The concept of customer engagement has dominated many industry and practitioner discussions in the tourism industry. Using bibliometric analysis, this study covers an 11-year publication period and targets specific marketing/service and hospitality/tourism journals to systematically assess the structure of research related to customer engagement. By following the recommendations suggested by Koseoglu, Rahimi, Okumus, and Liu (2016) and Zupic and Čater (2015), this study is among the first to conduct all three techniques of bibliometric analysis: 1) systematic literature techniques, 2) evaluative techniques, and 3) relational techniques. This study comprehensively identifies current trends and future research avenues.

**Sponsors:** Oklahoma State University, University of South Carolina, Temple University

**PI/PDs:** Kevin Kam Fung So

University of South Carolina: Hyunsu Kim

Temple University: Ceridwyn King

**Artificial intelligence in service management: Service robots and customer responses**

The emergence of artificial intelligence and the increasing adoption of service robots in service organizations have called for more research on human-robot interactions. This study investigates the role of different attributes of service robots in influencing trust and attitude by adopting a multi-study approach to test the theoretically derived hypotheses. Study 1 adopts Connie to empirically analyze the structural relationships between constructs, while Study 2 adopts Pepper to replicate the model with a different robot to improve external validity. Study 3 and Study 4 provide further investigate the customer responses to service robots and the relevant mechanism through multiple experimental research.

**Sponsors:** Oklahoma State University, University of South Carolina, Ohio State University, National University of Singapore

**PI/PDs:** Kevin Kam Fung So

University of South Carolina: Hyunsu Kim

Ohio State University: Stephanie Liu

National University of Singapore: Jochen Wirtz

**Actor value formation in a peer-to-peer accommodation: Insight from text-mining**

The sharing economy including Airbnb has been described as a disruptive innovation transforming many traditional businesses. To capture actor value formation (AVF) in the context of Airbnb, this study proposes two stages of investigation. Stage One adopts a hybrid approach involving deductive and inductive thematic analyses to evaluate 586,778 existing Airbnb reviews. This study then investigates the effects of AVF on value, communication, accuracy, and overall rating. Stage Two subsequently investigates the linkages through primary consumer data capturing negative and positive Airbnb experience. The moderating effects of valence experienceon the relationships among AVFs, accuracy, communication, value, and satisfaction will also be tested.

**Sponsors:** Oklahoma State University, University of South Carolina, The Hong Kong Polyethnic University

**PI/PDs:** Kevin Kam Fung So

University of South Carolina: Hyunsu Kim

The Hong Kong Polyethnic University: Hailey Shin

**Social influencers and argument quality on online engagement and behavior**

This study focuses on social influencer marketing in tourism. The research draws on the elaboration likelihood model (ELM) and examines social influencers as a peripheral cue and argument quality as a central cue to identify how customers process information differently in different service settings. Through a series of experiments, this study investigates the effects of social influencers and argument quality on online engagement and behavior intention. Follow investigations examines (1) self-esteem and (2) brand familiarity as moderators of the effects of a dual-route on online engagement and behavior intention.

**Sponsors:** Oklahoma State University, University of South Carolina

**PI/PDs:** Kevin Kam Fung So

University of South Carolina: Hyunsu Kim

**Post-disaster recovery strategies in tourism destinations**

Covid-19 has devastated the global travel and tourism industry. The aim of this proposal is four-fold. First, by reconciling the literature on disaster management with the findings from automatic and manual text analysis, this study develops a framework of post-disaster recovery strategies for tourism destinations. Second, this study empirically examines the effects of post-disaster recovery strategies on behavioral outcomes in tourism destinations. Third, this study investigates spatial-temporal behavioral patterns of tourism destinations by using the UNWTO Tourism Recovery Tracker. Fourth, this research uses user-generated contents and cutting-edge big data mining techniques to identify the most frequently mentioned areas and extract main themes in the reviews.

**Sponsors:** Oklahoma State University, University of South Carolina

**PI/PDs:** Kevin Kam Fung So

University of South Carolina: Hyunsu Kim, Bryan Mihalik

**Customer touchpoints with co-creation experience: Scale development and validation**

This study explores the role of the emerging concept of customer touchpoints in building a co-creation experience in the context of tourism and hospitality services (i.e., hotels, restaurants, and airlines). The scale, developed from a restaurant, hotels, and airline customers survey, is further tested to demonstrate strong psychometric properties across multiple samples and service settings. This article contributes to the literature by providing a comprehensive conceptualization of customer touchpoints within the tourism context, developing a scale to measure customer touchpoints with the cocreation experience effectively, and using evaluations of the critical customer touchpoints to predict the co-creation experience.

**Sponsors:** Oklahoma State University, University of South Carolina

**PI/PDs:** Kevin Kam Fung So

University of South Carolina: Hyunsu Kim, Bryan Mihalik, David Cardenas, Simon Hudson

**Customer touchpoints, customer engagement, and co-creation experience: Insight from symmetric and asymmetric approaches**

This study focuses on the empirical relationships between customer touchpoints, customer engagement, and the co-creation experience. From an analytical standpoint, this study uses symmetric structural equation modeling (SEM) and asymmetric fuzzy-set qualitative comparative analysis (fsQCA) to test the research hypotheses. In addition to using SEM to examine the effects of the transactional and relational antecedents of the co-creation experience, this study uses fsQCA to reveal general patterns and synergy effects of several equifinal configurations, which contribute to the co-creation experience. The findings uncover the important customer touchpoint dimensions and their combinational synergy effects, which in turn affect business performance.

**Sponsors:** Oklahoma State University, University of South Carolina

**PI/PDs:** Kevin Kam Fung So

University of South Carolina: Hyunsu Kim, Bryan Mihalik, David Cardenas, Simon Hudson

**How does Airbnb experience transfer to memorability and platform loyalty? Findings from a sequential mixed method approach**

While the sharing economy has been boosted by platform and has received increasing attention from academics and industry practitioners, the role of Airbnb experience in transforming memorability and platform loyalty remains unexplored. As such, a sequential mixed method approach is adopted to achieve fill the research gaps. Building on the memory-dominant logic, Study 1 proposes a conceptual framework to investigate how the three dimensions of Airbnb experience form memorability and subsequently build platform loyalty. Study 2 adopts in-depth interviews to further explain and contextualize the findings of Study 1. The findings of this study make significant theoretical and practical contributions to the current understanding of Airbnb experiences.

**Sponsors:** Oklahoma State University, Texas Tech University, University of South Carolina

**PI/PDs:** Kevin Kam Fung So

Texas Tech University: Jing Li

University of South Carolina: Simon Hudson

**Touch vs. Tech service in the hospitality**

Due to COVID-19, both scholars and industry professional suggest applying innovation technology such as self-service kiosk and service robots in the tourism and hospitality industry. Previous studies have suggested that consumers wanted to have service robots in the areas such as front desk, concierge, and room service within a hotel. However, the interaction comfort and perceived service quality with service robot at these three settings remain sparse. Thus, this study investigates the effects of service encounter types and service settings through a number of scenario-based experiments on customer behavioral intentions together with context-dependent factors informed by prior consumer research.

**Sponsors:** Oklahoma State University, Texas Tech University

**PI/PDs:** Kevin Kam Fung So

Texas Tech University: Jing Li

**Platform branding vs. pipeline business branding**

Despite increasing attention has been paid to platform business models (e.g., Van Alstyne et al., 2016; Wirtz et al., 2019), studies focused on branding in platform business remain sparse. Pipeline business models are significantly different from platform business models, as aforementioned. The triatic business model has made the branding process different from the pipeline business models (Van Alstyne, Parker, & Choudary, 2016; Wirtz et al., 2019). Thus, it is critical to investigate branding related issues with both pipeline business and platform businesses to understand the factors that keep customers with the platform (Wirtz et al., 2019). Taken together, this study aims to explore if platform branding differs from pipeline business branding, as well as the role of customer engagement in building customer loyalty.

**Sponsors:** Oklahoma State University, Texas Tech University, University of South Carolina

**PI/PDs:** Kevin Kam Fung So

Texas Tech University: Jing Li

University of South Carolina: Simon Hudson

**Inside the feeling economy: understanding consumer adoption behavior of empathetic artificially intelligent device**

AI has significantly transformed the economy as mechanical tasks have largely been taken over by machines. A number of studies have investigated customers’ adoption motivation of AI, such as utility, capacity, and usefulness of AI devices. However, research on the potential acceptance of empathetic AI applications remain sparse. This study investigates consumers’ adoption of empathetic AI applications in the tourism and hospitality industry. Building on sRAM and extended TAM models, this study includes social-emotional and relational elements to explore the adoption motivation of empathetic AI applications.

**Sponsors:** Oklahoma State University, Texas Tech University

**PI/PDs:** Kevin Kam Fung So

Texas Tech University: Jing Li

**The effects of travel experiences across time: A three-wave longitudinal investigation**

This study examines the effects of travel experiences across time. Using three-wave data collection, this study investigated the lagged effects of travel experiences on customer engagement, subjective well-being, and revisit intention. The findings are expected to offer critical insight into the interrelationships among the well-established components of the consumer evaluative process underlying travel experiences. This study is one of first to provide longitudinal evidence of the potential fading of the impacts of travel experiences on destination specific factors as well as the more general subjective well-being.

**Sponsors:** Oklahoma State University, Texas Tech University

**PI/PDs:** Kevin Kam Fung So, Yueying He

Texas Tech University: Jing Li

**Reciprocal links between destination brand experience and social media stickiness: a three-wave longitudinal study**

This study aims to investigate how tourists’ remembered experience interplays with social media usage and their consequences on tourists’ intention to revisit. The model was tested using 3-wave longitudinal data collected across three time points. The finding suggests that positive remembered destination brand experience could lead to increased social media stickiness among tourists, and then the increased social media stickiness enhanced the destination brand experience recalling, which could evoke tourists’ intention to revisit.

**Sponsors:** Oklahoma State University, Texas Tech University

**PI/PDs:** Kevin Kam Fung So, Yueying He

Texas Tech University: Jing Li

**The reciprocal relationships between remembered destination brand experience, emotions, and brand attachment: A cross-lagged panel model**

Creating a memorable destination brand experience has been recognized as the ultimate competitive advantage of tourism destination management organizations. Prior research has largely concentrated on the use of cross-sectional data to draw statistical inferences. The study aims to evaluate the reciprocal associations between remembered destination brand experience, emotions, and brand attachment using a cross-lagged model using 3-wave longitudinal data collected across three months after a recent trip. The findings of the research will offer an longitudinal perspective on the casual chain of remembered destination brand experience, emotions, and brand attachment.

**Sponsor:** Oklahoma State University

**PI/PDs:** Kevin Kam Fung So, Yueying He

**A bibliometric investigation of service innovation literature and a research agenda**

To identify the knowledge structure and offer a synthesis of findings on service innovation in hospitality and tourism, this study conducts bibliometric investigation by assessing peer-viewed articles sampled from Web of Science (WOS) database. Through BibExcel, Pajek, Gephi, and VOSviewer, citation analysis, co-citation analysis, co-authorship analysis and co-occurrence analysis, the literature will form a service design-delivery-evaluation theoretical model that combines both the organization perspective and customer perspective.

**Sponsors:** Oklahoma State University, Temple University

**PI/PDs:** Kevin Kam Fung So, Yueying He

Temple University: Xiang (Robert) Li

**Measuring Restaurant Service Sabotage Behaviors: Developing and Validating a Scale**

Despite the prevalence and profound negative impact of restaurant service sabotage behaviors (RSSB) worldwide, it has been a challenge for researchers to properly gauge such a construct and understand its contextualized specifications. The purpose of the study is to develop a reliable and valid scale to measure RSSB. A mixed-methods research design, consisting of scale development, refinement, and initial validation, was applied. A tri-dimensional 10-item RSSB scale was developed. This psychometrically valid and conceptually sound scale can be adapted in future research to further explore the criterion network while providing pragmatic insights to the restaurant industry professionals.

**Sponsors:** Oklahoma State University, Kansas State University

**PI/PDs:** Willie Tao

Kansas State University: Junehee Kwon

**"We learn; we share": Culinary knowledge management practices of the 2019 World Pastry Champion**

Culinary knowledge is hard-earned and passed down frugally from one culinarian to another. This attitude is gradually diminishing as elite culinarians are becoming increasingly altruistic and open-minded in disseminating their knowledge. Based on a four-year qualitative project, the authors explore how an elite culinarian—the 2019 World Pastry Champion—navigates his responsibilities as a culinary knowledge bearer. Analysis yields three themes showing how one embraces the roles of a “fundamentalist,” “culinary ambassador,” and “generative culinarian.” Findings converge into the “generative model of culinary knowledge sharing,” a new conceptualization offering implications to both theory and practice in knowledge management and marketing.

**Sponsor:** Oklahoma State University

**PI/PDs:** Willie Tao, Kai-Sean Lee

**What affects dining services at continuing care retirement communities? Manager’s perspective**

Many older adults prefer to reside in continuing care retirement communities (CCRC). However, only limited research investigated the dining aspects of CCRC, and the perspective of foodservice managers was overlooked. This qualitative study explored the factors that influence CCRC dining service by interviewing 15 CCRC foodservice managers. Nine major subcategories under generic, aging-related, and organizational aspects of dining services emerged and guided the subsequent thematic analysis. Managers’ shared vision of “brining in hospitality to older adults” for the future CCRC dining services was also identified and discussed, providing pragmatic strategies for CCRC operators and managers to strengthen the dining services.

**Sponsors:** Oklahoma State University, Kansas State University

**PI/PDs:** Willie Tao, Kiyan Shafieizadeh, KyongSik Sung

Kansas State University: Junehee Kwon

**What attracts older adults when dining at restaurants? A mix-methods study**

Aging is a complex process; however, previous restaurant studies regarding older adults were conducted from managerial perspectives without considering the effect of aging itself. Drawing on the three pillars of aging and Kano Model, this mixed-methods research aims to identify the most influential factors affecting older adults’ dining behaviors when dining at restaurants. By integrating perspectives from gerontology into restaurant research, this study has broadened our understanding of the wide range of factors influencing older adults’ dining behaviors. Our study also provides and practical implications for the restaurant industry to better accommodate the aging population.

**Sponsors:** Oklahoma State University, Kansas State University, University of North Texas, Macao Institute of Tourism Studies

**PI/PDs:** Willie Tao

Kansas State University: Junehee Kwon

University of North Texas: Han Wen

Macao Institute of Tourism Studies: Xiaoye Li

**Experience is the apple of tourist’ eyes: A vicarious viewpoint of authenticity**

This study applied big data techniques to collect and analyze a sizable data set of travel blog postings, aiming to identify the experiential components of tourists’ authentic experiences. While a sense of authenticity of tourists’ experiences in locals’ daily lives appears to entail a mix of different types of authenticity to a certain degree, several aspects remain insufficiently captured by the existing types of authenticity. Based on the results, this study shows several remarkable findings from a vicarious viewpoint.

**Sponsors:** Oklahoma State University, Hong Kong Polytechnic University

**PI/PDs:** Willie Tao, Li Miao

Hong Kong Polytechnic University: Gemmy Moon

**Evaluating the Impact of Food Safety Messages on Customers' Perceptions and Attitudes Toward the Restaurants**

The purpose of this project is to investigate how customers' perceptions and attitudes toward a restaurant would change based on the type of online food safety messages that are provided to customers by the restaurant marketers. Moreover, the moderating effect of customers' health consciousness level will also be examined. The preliminary analysis indicates that all hypotheses of the direct associations are significant, and the proposed moderating effect of customers' health consciousness is also significant.

**Sponsor:** Oklahoma State University

**PI/PDs:** Willie Tao, Kiyan Shafieizadeh, Salman Alotaibi

**Older Consumers’ Acceptance of Mobile Food Delivery Apps: Moderating Effects of Aging**

Interweaving the theory of consumer acceptance technology with the three pillars of aging, this study aims to investigate the influential app attributes that affect older adults’ acceptance of mobile food delivery apps. The current research consists of two 2x2 experimental studies while assessing the moderating effects due to biological, social, and psychological aspects of aging. This study will be one of the first FDA research focusing on older consumers and the critical FDA attributes for technology adoption, raising the awareness of the aging society and its impact on technology use in the restaurant industry.

**Sponsors:** Oklahoma State University, Auburn University, East Carolina University, University of South Carolina

**PI/PDs:** Willie Tao

Auburn University: Alecia C. Douglas

East Carolina University: Seung Hyun (Jenna) Lee

University of South Carolina: Haemoon Oh

**Navigating Social Media Firestorms in Hospitality: Investigating Brand Hate and Negative Consumer Behaviors**Academic research concerning social media firestorms (SMFs) have only recently gained momentum in the marketing and consumer behavior literature. SMFs imply the sudden occurrence of many, predominantly negative social media expressions against a brand. Given the high velocity of these negative messages, SMFs are an important threat to a firm’s reputation and, ultimately, its performance and brand assets. The current 2x2 experimental study will be set in a simulated social media environment where a luxury hospitality brand is in the midst of a SMF, addressing the call for more research on the diffusion of negative messages on brand management.

**Sponsors:** Oklahoma State University, Auburn University, East Carolina University, University of South Carolina

**PI/PDs:** Willie Tao

Auburn University: Alecia C. Douglas

East Carolina University: Seung Hyun (Jenna) Lee

University of South Carolina: Haemoon Oh

**TOSIC: A Data-Driven Framework for Making Strategic Choices in the Industry Cycle**

An industry cycle captures the recurrent fluctuation of the output of an industry. It consists of a set of phases that present different opportunities and threats to companies. A major challenge for companies is to determine what and when to make strategy choices in the industry cycle for survival and growth. In this study, TOSIC, a data-driven framework, is presented in a rigorous and precise manner using formal notations. TOSIC supports systematic analysis of industry cycles, strategic choices, financial performance and their relationships.

**Sponsors:** Oklahoma State University, Oakland University

**PI/PDs:** Yeasun Chung

Oakland University: Daekyu Kim

**Institutional ownership, innovation, and firm value: Entry, exit, re-entry and investment horizon of institutional investors**

Changes in corporate governance affect a company’s strategy, resource allocation, and financial performance. Amid a significant increase in the share of corporate equity held by institutions in the hospitality and tourism industry, existing studies show inconsistent evidence of the impact of institutional ownership on innovation and performance. This study, which examines the entry, exit, and reentry of institutional investors, aims at clarifying the impact of institutional ownership. The concentration, distribution and investment horizon of institutional investors are also examined.

**Sponsor:** Oklahoma State University

**PI/PD:** Yeasun Chung

**Managing diversity and inclusion: D & I maturity model**

A systematic approach to diversity and inclusion is an important strategic planning process that supports a company's D&I development and boosters innovation and financial outcomes. As part of this effort, this study aims to propose a D&I maturity model. The D&I maturity model is a useful tool for assessing where a company is today and setting strategic goals for the next step. We also identify competencies and constraints related to D&I, and examine innovation and financial performance according to the stage of diversity and inclusion maturity.

**Sponsor:** Oklahoma State University

**PI/PDs:** Yeasun Chung, Jinyoung Im

SPEARS SCHOOL OF BUSINESS

RESEARCH ABSTRACT REPORTS 2021

**Department of Management and Legal Studies**

**Bargaining your way to success: Machiavellian CEOs and their effects on organizational costs and performance**

This study examines the effects of CEO Machiavellianism on firm performance. While Machiavellianism has been usually construed as a purely negative trait, we argue that the pragmatic focus on the outcomes of exchanges and psychological obsession with winning in transactions that Machiavellian CEOs bring to their organizations can have important effects on organizational costs and performance. In line with our arguments, we find that CEO Machiavellianism has negative effects on relevant organizational costs and positive effects on organizational performance. We find support for our ideas with a sample of S&P 500 CEOs, operationalizing CEO Machiavellianism with a videometric approach.

**Sponsors:** Oklahoma State University, Pennsylvania State University

**PI/PDs:** Federico Aime

Pennsylvania State University: Tessa Recendes

**The joys and perils of working in plain view: Entrepreneurial engagement with organizational patrons and the emergence of an external layer of organizational control**

Drawing on interviews and observation from a multi-year field study, this article investigates the impact of enacting a permeable organizational boundary by engaging with patrons (e.g., customers, crowd funders). Findings describe how the organization’s members were involved in an external stakeholder-based system of normative and motivational cues that powerfully and efficiently affected their behaviors and feelings of well-being. This account describes how opening the organizational boundaries to external stakeholders through direct exposure and social media evolved into a new form of control – the Patron Control System (PCS) – aligned employee activities by introducing both strong coercive and enabling pressures for employees.

**Sponsors:** Oklahoma State University, Pennsylvania State University

**PI/PDs:** Federico Aime

Pennsylvania State University: Stephen Humphrey

**Control Theory and Employee Affective Adaptation to COVID-19**

We use control theory to outline the theoretical mechanisms of how people respond to an ongoing crisis using different aspects of the way that it unfolds over time and how this impacts anxiety, attitudes, and behaviors (i.e., task performance, engagement, and burnout). We show the power of different referents either diminishes or strengthens over time as people habituate to some changes but are overwhelmed by others. We test these predictions in a shingled ESM study covering a 12-week period that spans the introduction and exponential rise of the virus.

**Sponsor**: Oklahoma State University

**PI/PDs**: Lindsey Greco, Nikos Dimotakis, Sherry Fu, Anna Lennard

**Examining the Interplay Between Counterproductive Work Behavior and Negative Affect**

We aim to explain how people are affected by their own negative behaviors. Negative feelings bring about such behaviors, but they do not affect subsequent moods for the average person. We show individual’s empathy determines how people feel after engaging in negative tasks, with low empathy people feeling better, and high empathy people feeling worse.

**Sponsors:** Oklahoma State University, Ohio State University, Central Connecticut State University, Texas A&M, University North Carolina, Shippensburg University of Pennsylvania, University of Georgia, Athens

**PI/PDs:** Nikos Dimotakis

Ohio State: Bennett J. Tepper, Robert Lount

Central Connecticut State University: James Conway

Texas A&M: Joel Koopman, Young Lee

University North Carolina: Steven G. Rogelberg

Shippensburg University of Pennsylvania: Virginia E. Pitts

University of Georgia, Athens: Fadel Matta

**Why Some Leaders Develop Trust More Rapidly and Whether It Matters**

Existing research has provided important insights regarding the positive impact that the level of trust in a leader has on organizational outcomes. Less attention, however, has been given to fact that trust changes over time. We investigate whether changes in trust, above and beyond the level of trust, impacts leader and unit effectiveness. The highest levels of effectiveness were associated with leaders who exhibited an increase in their followers’ trust as the relationship developed.

**Sponsors:** Oklahoma State University, Washington University, Saint Louis, Wake Forest University, West Point

**PI/PDs:** Nikos Dimotakis

Washington University, Saint Louis: Kurt Dirks

Wake Forest University: Pat Sweeney

West Point: Todd Woodruff

**Is (in)consistency Key? Understanding How Patterns of Abusive Supervision Influence Employee Anxiety and Engagement**

Abusive supervision has harmful, far-reaching effects on a broad range of employee outcomes. These effects can be particularly strong when an employee’s experience of abuse is unanticipated or persists outside of their realm of control. We posit that an examination of abusive supervision over time will capture cumulative or combinatory effects previously overlooked. Over four studies, we investigate how consistent and inconsistent levels of abuse relate to feelings of anxiety.

**Sponsors:** Oklahoma State University, Texas A&M, University of Arkansas, Mercer University, Townson University

**PI/PDs:** Nikos Dimotakis

Texas A&M: Joel Koopman, Young Lee

University of Arkansas: Lauren Simon

Mercer University: Juanita Forrester

Townson University: Tanja Darden

**Gains and Losses: Week-to-Week Changes in Leader-Follower Relationships.**

Leader-Member Exchange (LMX) theory and research suggest that leader-follower relationships develop during the early stages of the dyad, mature relatively rapidly and then stabilize. We predict that leader-follower relationships, like other types of relationships, can improve or deteriorate over time and that these shifts influence follower affect and behavior on the job. Results showed that when LMX improved from one week to the next (gains), employees experienced positive affect and were more likely to engage in positive discretionary behavior (OCBs). When LMX deteriorated over the prior week (loss), they experienced negative affect and engaged in more negative discretionary behavior (CWBs).

**Sponsors:** Oklahoma State University, University of Ottawa, Southern Methodist University, Ohio State University, Georgia State University

**PI/PDs:** Dimotakis, N., Lambert, L. S., Fu, S.

University of Ottawa: Corner, A. J.

Southern Methodist University: Boulamatsi, A.

Ohio State University: Tepper, B. J.

Georgia State University: Maurer, T.

**“I didn’t see that coming!”: Effects of As-Expected and Un-Expected Workload Levels on Well-Being Through Anxiety**

Workload is a ubiquitous feature of the workplace, and one that has been a focus of investigations for decades. In contrast to other workplace aversive experiences, workload cannot be eliminated; thus, research has focused on identifying factors that could alleviate its negative consequences instead, with much of this focusing on the buffering effects of organizational resources. We propose that an unexamined characteristic of workload has the potential to inform much of this literature and thus help to clarify future work. We propose and find that the degree (and type) of workload unexpectedness is associated with well-being via anxiety.

**Sponsors:** Oklahoma State University, Texas A&M, Ohio State University

**PI/PDs:** Nikos Dimotakis, Sherry Fu

Texas A&M: Joel Koopman

Ohio State University: Ben Tepper

**Does The Use of Alternative Predictor Methods Reduce Subgroup Differences? It Depends On the Construct**

Many selection assessments yield race/ethnic-based subgroup differences (e.g., the ACT) and a popular way to address this is to change the method of measurement (the method-change approach). We conducted a meta-analysis of subgroup differences by construct and method to show that changing the method does help eliminate subgroup differences, but it depends on the underlying construct assessed.

**Sponsors:** Oklahoma State University, Texas A&M University

**PI/PDs:** Bryan D. Edwards

Texas A&M University: Winfred Arthur, Jr., Nathanael L. Keiser, Olabisi A. Atoba, Inchul Cho

**Oh the Anxiety! How the Disruption of Leader Bottom Line Mentality Motivates Unethical Employee Behavior.**

Leader bottom line mentality (BLM) is often considered to be a static, unchanging tendency among supervisors/leaders. We challenge this view and show that changing leader demands can shift their attention to and away from the bottom line on a daily basis. We also demonstrate that this varying leader BLM behavior will lead to employees undermining each other to satisfy the leader’s changing behaviors. A leader’s shift in focus to the bottom line can be disruptive to employees because they will need to abandon their usual routines and change efforts toward the bottom line.

**Sponsors:** Oklahoma State University, University of Georgia, University of New Mexico, Rutgers University, Drexel University

**PI/PDs:** Bryan D. Edwards

University of Georgia: Marie S. Mitchell

University of New Mexico: Andrea Hetrick

Rutgers University: Rebecca Greenbaum

Drexel University: Mary Mawritz

**Inform, Offer, Connect: Using Portal Messaging and Embedded Asynchronous Care to Remotely Increase Physician-Assisted Smoking Cessation Quit Attempts**

We randomly assigned 100 smokers to receive a message from their physician encouraging them to quit and the other 100 smokers received a system-generated message (digital outreach). We also randomly assigned smokers to receive asynchronous care from their physician or not. We demonstrated that the quit rate was 4% with digital outreach alone versus 9.5% when digital outreach was combined with asynchronous care. Thus, our intervention was successful in connecting smokers with their physician and ultimately improving quit attempt rates.

**Sponsor:** Oklahoma State University

**PI/PDs:** Bryan D. Edwards, Marjorie Erdmann, Tomi Adewumi

**Recruiting (dis)advantage: Men and Women Differ in Their Evaluations of Gender-Based Targeted Recruitment**

Organizations use targeted recruitment to attract applicants with specific characteristics or to diversify the workforce. Research reports mixed findings regarding the extent to which beneficiaries and non-beneficiaries are attracted to organizations. We explore this inconsistency by investigating how men and women respond to recruitment materials targeted toward members of the traditionally underrepresented gender. We show that a gender asymmetry exists such that men and women respond differently when targeted for occupations in which they are typically the minority gender.

**Sponsors:** Oklahoma State University, Ball State University, Pennsylvania State University, Northeastern University

**PI/PDs:** Alexis Nicole Smith, Bryan Edwards

Ball State University: Brian Webster

Pennsylvania State University, Eerie: Joongseo Kim

Northeastern University: Marla B. Watkins

**Employee Entitlement, Engagement, and Performance: The Moderating Effect of Ethical Leadership.**

Because of their skewed sense of deservingness, employees high in entitlement are less likely to experience workplace engagement. Furthermore, the negative relationship between employee entitlement and workplace engagement is stronger with supervisors low in ethical leadership, but mitigated when ethical leadership is high. We also showed that under conditions of low ethical leadership, low levels of engagement explain why employee entitlement results in poorer job performance. But, this effect does not hold when ethical leadership is high.

**Sponsors:** Oklahoma State University, Rutgers University, Clemson University,

**PI/PDs:** Toby Joplin, Bryan D Edwards

Rutgers University, Rebecca Greenbaum

Clemson University, J. Craig Wallace

**Houston Sport Organizations’ Disaster Relief Efforts Following Hurricane Harvey**

Sport organizations have often been active in community recovery following natural or man-made disasters. Following the September 11, 2001 terrorist attacks, members of the Yankees baseball team visited several sites throughout New York City. In New Orleans, members of the Saints National Football League franchise actively served in volunteer roles and fundraising following the devastation of Hurricane Katrina in 2005. The research questions focused on identifying the types of responses to the disaster and exploring the sport organizations leader’s perspectives on the relief process.

**Sponsor**: Oklahoma State University

**PI/PD**: Bryan Finch

**Investigating Collegiate Athletics' Post-disaster Community Support**

This study sought to examine historical examples of community recovery efforts undertaken by American collegiate athletic programs and to specifically review the responses of Oklahoma State University (OSU) athletics following a tragic community event in Stillwater, Oklahoma. Results found community relief efforts by college athletic programs in 21 of 32 major disasters in the United States since 2000. This study provided insight into the role of a college athletic program following a local disaster and discussed ideas for future research into the topic.

**Sponsor**: Oklahoma State University

**PI/PD**: Bryan Finch

**Virtual Teams Meta-Analysis**

Organizations are increasingly structuring work around teams; increases in technology use, means that most of these teams can be categorized as “virtual teams” that are comprised of geographically and/or organizationally dispersed coworkers that are assembled using a combination of telecommunications and information technologies. This modern reality of teamwork creates a real need to understand the fundamental ways in which technology impacts team functioning in terms of: 1) what are the team inputs that relate to effective virtual team communication and performance, and 2) how does the degree of virtuality relate to team performance.

**Sponsors:** Oklahoma State University, Drake University, Georgia Southern University Brigham Young University

**PI/PDs:** Truit Gray, Lindsey Greco

Drake University: Ina Purvanova

Georgia Southern University: Steve Charlier

Brigham Young University: Cody Reeves

**Moral Emotions Meta-Analysis**

Organizations are rife with situations likely to cause emotional responses in employees including personal relationships, work stressors, and environmental considerations. The importance of moral emotions has led to a range of studies exploring the implications of emotions in organizational phenomena, yet despite the increase in scholarly attention, our understanding of emotional experiences and expression in organizations is limited. We provide a meta-analytic review of this diverse literature.

**Sponsors:** Oklahoma State University, Rutgers University, Indiana University

**PI/PDs:** Truit Gray, Yingli Deng, Lindsey Greco

Rutgers University: Rebecca Greenbaum

Indiana University: Ernest O’Boyle

**Dynamic Identification**

Theories of group identification explicitly consider identification with multiple targets, specifically outlining process related to transitions between identities or conditions under which one identity may be more salient than another. However, the overwhelming majority of research into multiple identification focuses on measures of identification collected at a single point in time. This study focuses on the dynamic nature of identification, specifically how conflict with team and non-team members can affect identification with either team or organizational targets that varies over time.

**Sponsor**: Oklahoma State University

**PI/PDs**: Lindsey Greco, Nikos Dimotakis, Sherry Fu, Anna Lennard

**Stress and Coping in the Fire Service**

Firefighters are frequently exposed to severe operational stressors, such as rendering aid to seriously injured victims, rescuing victims from dangerous situations, and death. Firefighters are also exposed to management-related stressors, such as work overload, staff shortages, and lack of support. In addition, the COVID-19 pandemic has added new layers of both operational (e.g., exposure to COVID-19) and managerial (e.g., constant changes in Incident Action Plan) stress. This study measures the various stressors experienced by firefighters as well as the contextual and managerial issues that mitigate or exacerbate the effect of these stressors on negative mental and physical health outcomes.

**Sponsors:** Oklahoma State University, University of Albany, SUNY

**PI/PDs:** Lindsey Greco, Dale Li

University of Albany, SUNY: David Huntsman

**Norm-Based Counterproductive Work Behavior**

Current conceptualizations of counterproductive work behavior position it largely as norm-violating behavior. That is, the assumption is that such behavior is always judged negatively by others in the organization. However, judging whether CWB is norm-violating or norm-conforming depends on the referent group. This study identifies two referent groups for establishing normative standards: society (prescriptive norms of what one should or should not do) and the workgroup (descriptive norms based on what one typically observes) and explores the relationship between each in predicting CWB.

**Sponsors:** Oklahoma State University, Rutgers University, Indiana University

**PI/PDs:** Lindsey Greco, Seth Smart

Rutgers University: Rebecca Greenbaum

Indiana University: Ernest O’Boyle

**Work-Effort & Guilt**

Employees may feel guilty after withholding effort on their jobs, yet explanations of *when* employees feel guilty and *how* this guilt motivates positive behaviors such as impression management and organizational citizenship behavior is lacking. Drawing on theories of social identity and feedback intervention, we propose and test a model wherein employees feel guilty when they withhold work effort, especially when employees have high work role identity salience. This guilt, in turn, motivates impression management and organizational citizenship behavior.

**Sponsor:** Oklahoma State University

**PI/PDs:** Yingli Deng, Lindsey Greco, Sherry Fu

**Instrumental CWB**

The dominant theoretical rationales used to explain counterproductive work behavior (CWB) position the behavior as a reaction to negative work events. Within these widely used frameworks CWB is preceded by aversive emotional states, with the primary goal of the behavior being harm to an intended target. However, these approaches fail to recognize alternative, goal- directed motives for CWB. This type of CWB, motivated by achievement of planned objectives, is better conceptualized as instrumental CWB. Using a grounded theory approach, we define four alternative motives for CWB: affiliation, conformity, status gain, and tangible goods.

**Sponsors:** Oklahoma State University, Indiana University

**PI/PDs:** Seth Smart, Lindsey Greco

Indiana University: Sheri Walter

**Taxing Sports**

Sports are no longer mere games. In today’s money-driven culture, they have cultivated into a lucrative business enterprise where everyone – whether professional or amateur; owner or player; coach or spectator – stands to make significant money. Modern sports have also morphed into a landscape encompassing both traditional athletic events, and the more novel esports and daily fantasy sports (DFS) arenas. This article is a holistic and modern analysis of the impact of U.S. tax law across the contemporary business of sports, including franchises, business ventures, universities, athletes, individuals, and federal and state taxing jurisdictions.

**Sponsors:** Oklahoma State University, Clemson University

**PI/PDs:** John Holden

Clemson University: Kathryn Kisska-Schulze

**Taboo Transactions: Selling Athlete Biometric Data**

The collection of biometric data from elite-level athletes has become increasingly complicated, as sports leagues, teams, and other governing organizations have begun to see potential commercial value beyond increased performance in this data. This article is divided into five substantive parts, 1) We provide an overview of the biometric data and its value within the gambling marketplace, 2) Discusses the issues surrounding data ownership in the major professional sports leagues, 3) Examines the growth and importance of commercial data sales, 4) Analyzes the questions surrounding the ownership of data, and 5) Finally, proposes new directions for sports organizations.

**Sponsors:** Oklahoma State University, University of North Texas

**PI/PDs:** John Holden

University of North Texas: Kimberly A. Houser

**Fraud on Any Market**

We first argue that fraud-on-the-market would benefit most types of investable markets like sports gambling as well as supporting the doctrine in the securities context. Despite criticisms of the doctrine, our analysis shows that fraud creates the presumption of distorted prices. Second, the money wagered via sports betting and daily fantasy sports (“DFS”) would generate such damages such that leagues would better maintain a competitive environment, boosting sports integrity akin to how securities regulations provide market protections. Since the leagues benefit directly from gambling, and lucratively so, they should owe their fans a truly competitive landscape.

**Sponsors:** Oklahoma State University, University of Georgia, University of Texas

**PI/PDs:** John Holden

University of Georgia: Gregory Day

University of Texas: Brian M. Mills

**Monopolizing Sports Data**

U.S. professional sports leagues’ recent attempts to collectivize the sale of sports game data and prevent non-league affiliated entities from competing in the markets to collect, aggregate, and resell game data gives rise to both legal and policy concerns under federal antitrust laws. This Article analyzes whether the league-wide sale of sports game data should be viewed as a form of collusion among individual sports teams that may potentially violate Section 1 of the Sherman Act, and whether league-wide efforts to secure exclusive rights to sell sports game data should constitute a potential form of exclusionary conduct under Section 2 of the Sherman Act.

**Sponsors:** Oklahoma State University, Baruch College

**PI/PDs:** John Holden

Baruch College: Marc Edelman

**Reshaping College Athlete Sports Betting Education**

The time has come for the NCAA, collegiate athletic conferences, and colleges and universities to take the steps necessary to coexist with widespread legal betting markets. This Article provides the necessary framework for collegiate sports organizations to move forward with modernizing sports wagering education and awareness for collegiate athletes, and affiliated individuals through adopting best practices, establishing reporting processes, and creating a necessary system of education that provides additional measures of protection and awareness of the threats brought on by nefarious individuals.

**Sponsors:** Oklahoma State University, University of Nevada Las Vegas

**PI/PDs:** John Holden

University of Nevada Las Vegas: Becky Harris

**Breaking The Glass Monitor: Examining the Underrepresentation of Women in Esports Environments**

While the growth of esports is undeniable, access, inclusivity, and diversity within this space is reminiscent of U.S. pre-Title IX traditional sport environments. As such, recent calls for the inclusion of esports within the traditional sport management literature have been persuasive. The esports industry is largely male dominated, as women and girls represent a lower proportion of participants, fans, and employees. While the proportions are staggering, the underrepresentation of women and girls in the esports industry has not been fully explored. This serves as the first qualitative study in sport management that examines the career experiences of elite-level women gamers and executives.

**Sponsors:** Oklahoma State University, University of Georgia, University of South Florida, State University of New York – Cortland

**PI/PDs:** John Holden

University of Georgia: Thomas A. Baker III

University of South Florida: Janelle E. Wells

State University of New York – Cortland: Lindsey Darvin

**U.S. Fantasy Sports Law: Fifteen Years after UIGEA**

This Article explains how the U.S. regulates fantasy sports today—fifteen years after the passing of the Unlawful Internet Gambling Enforcement Act. This discusses the change in regulatory governance of fantasy sports in the U.S. that has overlapped with the massive growth of the daily fantasy sports industry in the aftermath of Congress’s passing of UIGEA. We then investigate the growing cybersecurity concerns that emanate from the rise of daily fantasy sports as big business in the United States, including concerns related to both customer identification, and consumer privacy.

**Sponsors:** Oklahoma State University, Baruch College, John Jay College

**PI/PDs:** John Holden

Baruch College: Marc Edelman

John Jay College: Adam S. Wandt

**Regulating Vice: From Marijuana to Sports Gambling**

In spite of the growing state-level legality of both marijuana and sports gambling, the exuberance for sports gambling by entities like banks and institutional investors has surpassed the marijuana industry despite the marijuana industry having a significant head start. This Article explores why sports gambling has been widely accepted and led banks and financial institutions to take risks that they have not been willing to take for the marijuana industry. It also explores best practices adopted by the sports gambling industry that the marijuana industry may be able to emulate to garner broader legal acceptance.

**Sponsors:** Oklahoma State University, Baruch College, John Jay College

**PI/PDs:** John Holden

Baruch College: Marc Edelman

John Jay College: Adam S. Wandt

**Exploring College Sports in the Time of COVID-19: A Legal, Medical, and Ethical Analysis**

This Article explores the implications of resuming intercollegiate sports in the midst of a pandemic from a legal, medical and ethical perspective. Adopting a true interdisciplinary approach to the question of how and when to return to sport, the authors collectively express their concerns regarding how NCAA member colleges are approaching the legal and ethical issues surrounding the offering of intercollegiate sports during a pandemic and propose ten best practices for colleges to determine when and how to resume offering intercollegiate sports.

**Sponsors:** Oklahoma State University, Baruch College, University of Georgia, University of Michigan

**PI/PDs:** John Holden

Baruch College: Marc Edelman

University of Georgia: Thomas A. Baker III

University of Michigan: Andrew G. Shuman

**Global Sports Leagues and China’s Free Speech Problem**

This article looks at the legal and ethical challenges posed for U.S. professional sports leagues that seek to do business with China based on fundamental differences in free speech norms between the United States and China. In particular, this article explores the pressure both the Chinese government and its business leaders have placed on U.S. sports leagues to censure employees and fans who speak publicly on issues that are critical of the Chinese government, as well as the potential ramifications on U.S. sports leagues that adhere to Chinese pressure.

**Sponsors:** Oklahoma State University, Baruch College, University of Georgia

**PI/PDs:** John Holden

Baruch College: Marc Edelman

University of Georgia: Thomas A. Baker III

**The Agency of Female Small Business Owners & Their Responses to Pandemic Issues**

This past year has been fraught with major challenges to the survival of small businesses in the USA. We posit that current agency measures will reflect differences in responses to these challenges, and thus the subsequent success in mitigating the effects due to the pandemic.

**Sponsor:** Oklahoma State University

**PI/PDs:** Chalmer Labig, Juliet Abdel

**The Tulsa Police Department’s Response to its Diminished Reputation due to the Black Lives Matter Movement**

A change in leadership of a police department may have major effects on public perception of the department. We are investigating one mid-sized department’s various efforts to raise their reputation. Of the many strategies employed which have seemed to have made the most positive impact on the general public as well as on its officers.

**Sponsor:** Oklahoma State University

**PI/PDs:** Chalmer Labig

**An Overlooked Aspect of Measurement: Does the Content of Verbal Anchors Matter?**

Discussions of content validity have focused on item generation, and have seemingly overlooked the response formats (e.g. strongly disagree, strongly agree) that accompany the items. We reason that there may be constructs measured with inappropriate response formats, and that an inappropriate response format may generate biased data. Our results show that changing the response format results in differences in the data, suggesting that the choice of response format matters.

**Sponsor:** Oklahoma State University

**PI/PDs:** Lambert, L.S., Gray, T., Davis, A., Erdman, M., and McDermott, R.

**Heuristics and Comparison Standards: Developing Hypotheses Via Thought Experiments**

The task of hypothesis development is widely acknowledged to require imaginative and disciplined thinking, unfortunately, the practice defies efforts to distill it into a replicable process or even into a set of best practices. We develop strategies to spur the development of well thought out and precise hypotheses by combining theories of comparison with thought experiments and three heuristics.

**Sponsor:** Oklahoma State University

**PI/PDs:** Lambert, L.S., and Gray, T.

**Construct Development and Validation in Three Practical Steps: Recommendations for Authors, Reviewers and Editors**

We review contemporary best practice for developing and validating measures of constructs. The three basic steps in scale development are: 1) construct definition, 2) choosing operationalizations that match the construct definition, and 3) obtaining empirical evidence to confirm construct validity. While summarizing this 3-step process, we address how to establish construct validity and provide a checklist for journal reviewers and authors when evaluating the validity of measures. We pay special attention to construct conceptualization, acknowledging existing constructs, improving existing measures, multidimensional constructs, macro-level constructs, and the need for independent samples to confirm construct validity and measurement equivalence across subpopulations.

**Sponsors:** Oklahoma State University, University of Illinois

**PI/PDs:** Lambert, L. S.

University of Illinois: Newman, D.A.

**Development of a New Measure of Corporate Reputation**

Understanding and measuring the reputations of corporations is key to answering important questions. We employ up-to-date scale development practices to the construct of corporate reputation.

**Sponsors:** Oklahoma State University, University of Texas Arlington, University of Texas A & M, Texas Christian University

**PI/PD’s:** Lambert, L.S.

University of Texas Arlington: Parker, O.

University of Texas A & M: Devers, C.

Texas Christian University: Krause, R.

**Supervisors’ Trust in their Subordinates: A Quantitative and Qualitative Exploration of Trust and Trustworthiness**

Subordinates assess the trustworthiness of their supervisors based on their ability, benevolence and integrity. Supervisors’ assessments of trustworthiness have been presumed to rely on these same dimensions, but the inherently asymmetrical relationship between subordinate and the supervisor suggests that the development of trust for the supervisor and the subordinate may differ. Using quantitative and qualitative data, the authors provide evidence that supervisors and subordinates focus on different aspects of trustworthiness in assessing whether to trust someone. Within the context of the supervisor-subordinate relationship, this study lays the groundwork for a new dimension of trustworthiness, subordinates’ development over time.

**Sponsors:** Oklahoma State University, Caucasus University, Towson State University, Xavier University, Abraham Baldwin College

**PI/PDs:** Lambert, L. S.

Caucasus University: Brekashvili, P.

Abraham Baldwin College: Currie, R.

Xavier University: Hardt, G.

Towson State University: Darden, T.

**Too Much of a Good Thing: Prosocial Fit Predicting Job Satisfaction and Pride**

We examined the implicit assumption that increasing prosocial values and impact will have increasing benefits for organizations and employees by considering that employees likely vary in the strength of their prosocial values and that their jobs offer varying amounts of opportunity to experience prosocial impact. Our results indicate that employee attitudes vary substantively depending on whether prosocial supplies meet, are deficient of, or in excess of, prosocial values. Both deficiency and excess were associated with lower satisfaction and pride, but the relationship was asymmetrical such that the effects of deficiency were more severe.

**Sponsor:** Oklahoma State University

**PI/PDs:** L. S. Lambert, Anna Zabinski, Abbey Davis, Cassidy Creech, Nick Hayden

**Emotion Regulation and Work family conflict**

We expand emotional labor beyond the work domain to demonstrate how experiences at home can help employees recover from the emotional requirements of their job. By creating a much-needed connection between theorizing on emotional labor and appraisal theory, we explain those processes by focusing on surface acting at home and subsequent responses. We demonstrate that emotional labor is not merely an intrapersonal process; it is an interpersonal process where its implications are as much determined by the response from the recipient of the surface acting as they are by engaging in the act itself.

**Sponsors:** Oklahoma State University, Michigan State, University of Nebraska

**PI/PDs:** Anna Lennard

Michigan State: Brent Scott

University of Nebraska: Amy Bartels

**Abusive Supervision and Performance Cycles**

Abusive supervision harms individuals and costs companies billions of dollars annually (e.g., legal fees; Tepper et al., 2006, 2017). Consequently, an understanding of abusive supervision’s antecedents is critical. Herein, we demonstrated that different patterns of performance predict the abusive supervision that employees sustain, and that abusive supervision predicts lower levels of subsequent employee performance. Moreover, we determined that employee prevention focus influences the stability of their performance, with higher levels of prevention focus associated with more variable performance. We hope that the results of this investigation provide researchers with a clearer understanding of the employee performance-abusive supervision relationship over time.

**Sponsors:** Oklahoma State University, Michigan State, University of Georgia

**PI/PDs:** Anna Lennard, Nikos Dimotakis

University of Georgia: James Matusik

Michigan State: Brent Scott, Lance Ferris

**Escalation of Commitment**

Escalation drivers affect projects at different stages, but time and different organizational levels of influence are often not considered in the escalation of commitment literature, and there is little theory to organize and delineate these various drivers and contexts. We believe that these limitations in theorizing are reducing the usefulness of escalation of commitment research and aim to build new theory on escalation of commitment by using the organizational commitment literature as a lens to understand how commitment can increase over the lifetime of a project and what situational and personal drivers of commitment can be impactful.

**Sponsors:** Oklahoma State University, Michigan State

**PI/PDs:** Anna Lennard

Michigan State**:** Donald Conlon, Gerry McNamara

**A Return to Reasonableness: State Regulation of Noncompetition Agreements**

States regulate restrictions on employee mobility because noncompetition agreements affect the job market and business environment. In recent years, many states targeted noncompetition agreements for further regulation. The rapid adoption of noncompetition regulation has presented employers with a challenge. I examine a representative sample of new laws passed by states intending to reduce or eliminate the use of noncompetition agreements. I then review the traditional reasonableness analysis and explain its strengths. I conclude by arguing for reduced regulation and expansion of a court’s power to construe reasonableness.

**Sponsor:** Oklahoma State University

**PI/PD:** Griffin Pivateau

**Making Arbitration Work: A Better Means of Dispute Resolution**

During the last decade, the Supreme Court has made it clear that it favors arbitration as a means of dispute resolution. Arbitration clauses have become standard in employment agreements. Nevertheless, opponents of mandatory arbitration allege that such agreements are intended to rob employees of important rights. Here, I describe the arbitration process and review the numerous benefits that it provides to employees. I discuss the problems that a typical employee will incur in the litigation process.

**Sponsor:** Oklahoma State University

**PI/PD:** Griffin Pivateau

**Shields and Swords: Structural Reforms to End Workplace Harassment**

The explosion of sexual harassment claims spurred by the #MeToo movement exposed the widespread nature of workplace harassment and abuse. The movement further revealed the decades-long ethical and legal failure by organizations to stop harassment. Responding to the movement, many state legislatures passed laws intending to make litigation of claims easier. I examine these new regulatory schemes to determine whether the new laws combat workplace harassment or simply increase lawsuits. I conclude that relying on costly and inefficient litigation will not be enough. Organizations should instead adopt structural reforms to end workplace harassment.

**Sponsor:** Oklahoma State University

**PI/PD:** Griffin Pivateau

**An Integrative Model of the Role of Structural, Behavioral, and Cognitive Coordination in Intergroup Effectiveness: How Middle Managers Play a Role**

A major challenge for organizations is coordinating interdependent teams’ effective performance of joint tasks, but an integrative theoretical understanding of how to coordinate such intergroup effectiveness is missing. Consolidating three separate literatures, we develop an integrative multidisciplinary framework of the role of structural, behavioral, and cognitive coordination in intergroup effectiveness, and how these coordination mechanisms interrelate. Multisource data on 188 intergroup dyads support our predictions. Our integrative framework deepens understanding of how these coordination mechanisms combine in driving intergroup effectiveness and suggests that middle managers boundary spanning has a critical role in modern team-based organizations.

**Sponsors**: Oklahoma State University, Drexel University

**PI/PDs**: Jeanine Porck,

Drexel University: Daan van Knippenberg

**Preventing Silo’s from Going Solo: the Role of Conflict Management Style and Team Learning Behavior in Inter-team Coordination & Knowledge Exchange.**

A challenge many organizations face pursuing strategies that require cross-team coordination and knowledge exchange is eradicating silo thinking. This study explores the role of conflict management style and team learning with longitudinal data collected from 27 interdependent teams in a large government organization in Western Europe. Preliminary results show that interdependent teams that recognize their interdependence link are better at exchanging knowledge and inter-team coordination. Interdependent teams that engage more in team learning and coordinative conflict management are also better at exchanging knowledge and inter-team coordination. Relational identification and organizational identification seem to impact the strength of these relationships.

**Sponsors**: Oklahoma State University, Drexel University

**PI/PDs**: Jeanine Porck

Drexel University: Daan van Knippenberg

**Strategic Decision Making in Multi-team Systems.**

Judgment and decision-making research has a long tradition in management. Despite numerous reviews of this topic in the organizational behavior, and psychology, there is little investigation of decision making in multi-team systems. This is surprising, given the extreme decision-making context faced by multi-team systems—such as high uncertainty, time pressure, emotionally charged, and consequential extremes. I will study the role of strategic decision making and contextual factors in multi-team systems, composed of three five-person, functionally specialized component teams, which will be engaged in an exercise that is simultaneously “laboratory-like” and “field-like.”

**Sponsor**: Oklahoma State University

**PI/PD**: Jeanine Porck

**Middle Managers, Coopetition and** **Intraorganizational Knowledge Transfer**

Intraorganizational knowledge transfer is difficult yet critical for numerous organizational outcomes. The knowledge-sharing behavior of middle managers, those often tasked with managing this knowledge transfer, should, however, not be taken for granted. This paper aims to develop an understanding of the underlying motives middle managers have when coordinating knowledge transfer between teams that are in coopetition, i.e. engage simultaneously in cooperative and competitive behaviors. Specifically, I argue that coopetition may prompt middle managers to adopt more myopic motives that make these managers less inclined to coordinate knowledge exchange between teams in their organization.

**Sponsor**: Oklahoma State University

**PI/PDs**: Jeanine Porck, Juan Du

**An Identity Perspective on Middle Managers’ Role Conflict and their Strategic Role Performance**

What drives middle managers to champion new strategic initiatives to top management and simultaneously encourage their followers to implement the organization’s current strategy? These divergent and integrative strategic roles of middle managers are crucial to the strategy process. We argue that the complexity of middle managers’ identity will influence their perceived role conflict and will consequently determine their strategic role performance. Moreover, we hypothesize that managers’ organizational identification affects whether they perform better at the divergent or integrative part of their strategic role. We plan to collect data from middle managers and their supervisors to test these hypotheses.

**Sponsor**: Oklahoma State University

**PI/PDs**: Jeanine Porck, Juan Du

**When Middle Manager’s Performance Appraisals Are Clouded: the Role of Leadership (Mis)Fit and Depletion**

Middle managers’ appraisals of employee performance are critical. Two contingencies may influence performance appraisals: the (mis)fit between how much employees need and receive task focused leadership behavior (initiating structure) from their manager, and the extent to which the middle manager is depleted. We hypothesize that deficient amounts of initiating structure are associated with lower performance appraisal, while a fit between needed and received is associated with higher performance appraisal. Yet, when middle manager depletion is high, misfit will ‘cloud’ their performance ratings negatively. Resulting in lower performance ratings for employees that receive deficient or excess amounts of initiating structure.

**Sponsor**: Oklahoma State University

**PI/PDs**: Lisa Lambert, Jeanine Porck, Juan Du

**Endorsement Ambiguity: When Do Employees Re-voice?**

Voice, or speaking up with work related ideas and concerns, is important. By speaking up, employees offer unique and relevant insights, ultimately influencing work group and organizational functioning. Although much work has focused on affirmative responses to voice, more recent work has begun to consider how employees respond following non-endorsement. Indeed, it is important that employees do not simply give up after a non-endorsement episode, but rather continue to engage with their improvement-oriented ideas for the organization. This study is aimed at understanding how employees learn to become more effective voicers (i.e., get endorsed).

**Sponsors**: Oklahoma State University, Iowa State University

**PI/PDs**: Jeanine Porck

Iowa State University: Melissa Chamberlin, Maartje Schouten

**Minority Perspective-Taking: When Authenticity Climate Promotes Minority Involvement in White-Dominated Spaces**

Underrepresented minorities often have negative workplace experiences that influence their intentions to stay within their white-dominated organizations. We posit that perspective-taking—imagining the world from another’s perspective—is a strategic tool that minorities use to effectively manage their workplace experiences. We argue that perspective-taking allows minorities to have greater certainty about how to best navigate their organizational worlds.

**Sponsors:** Oklahoma State University, Northwestern University, London School of Economics, Slippery Rock University, Columbia University

**PI/PDs**: Alexis Smith Washington, Bryan Edwards

Northwestern University: Cynthia Wang

London School of Economics: Gillian Ku

Slippery Rock University: Edward Scott

Columbia University: Adam Galinsky

**The Implication of Power Dynamics in Dual-Earner Couples: A Study of Household Labor**

Our research studies the household labor of dual-earner couples—married or cohabiting couples where both partners are employed. Integrating power theories and gender-role perspectives, we examine how power dynamics within dual-earner couples influence each spouse's household labor. Polynomial analyses of 204 respondents in dual-earner couples revealed that relative power between spouses affects men and women differently. Our research contributes to the literature of power, gender, and dual-earner couples by examining all possible patterns of the power structure within couples and providing a precise explanation of how relative power and joint power between spouses affect husbands' and wives' household labor.

**Sponsor:** Oklahoma State University

**PI/PDs:** Alexis Smith Washington, Elise Yu, Nikos Dimotakis

**Making Sense of Perceived Sameness and Difference: An intersectional Perspective of Executives Interpersonal Interactions at Work**

As organizations strive to promote gender and racial equality at work, more research and theorizing is needed that acknowledges a minority point of view. Drawing from interviews with 53 Black female executives holding senior leadership roles in U.S. firms, we sought to understand how their intersectionality influences perceptions of inter-race and inter-gender interactions and relationships at work. We looked specifically at how Black women executives make sense of interpersonal interactions based on perceived asymmetries with others at work in light of their own intersectionality.

**Sponsors:** Oklahoma State University, Northeastern University

**PI/PDs:** Alexis Smith Washington

Northeastern University: Jamie Ladge, Keimei Sugiyama, Marla B. Watkins

SPEARS SCHOOL OF BUSINESS

RESEARCH ABSTRACT REPORTS 2020

**School of Marketing and International Business**

**Are Lonely Consumers Loyal Consumers? Two-dimensional Lonely Consumer’s Brand Relationships**

Although loneliness has been shown to influence consumer behaviors, prior research conceptualized loneliness unidimensionally as a feeling of inadequate relationships. However, relationships can be inadequate in terms of quality and quantity, creating a two-dimensional view of loneliness. We show that these dimensions have distinct effects on how consumers relate to brands. Emotional loneliness, due to insufficient relationship closeness, increases brand loyalty, whereas social loneliness, due to insufficient number of relationships, increases preference for greater brand assortment, creating the appearance of weaker loyalty to any one brand. Three studies indicate that loneliness fluctuates brand loyalty, depending on the dimension of loneliness.

**Sponsor:** Oklahoma State University

**PI/PDs:** Zachary Arens, Eunyoung Jang**,**

**Disentangling Product Comparisons with the Attribute-Hedonic Model**

Marketing policies assume that consumers comparing products will show a hedonic contrast effect, when a product seems more appealing being compared with an unappealing competitor. However, hedonic judgments are confounded with underlying attribute judgments and it is important to delineate their effects. This paper presents six studies to disentangle them and consistently finds two distinct effects in opposite directions: while attribute judgments contrast with a competitor, hedonic judgments assimilate. The results show a hedonic contrast effect on the surface, but deeper investigation finds no evidence of the effect. This research shows hidden complexity underlying product comparisons and the consequences for marketing tactics that rely on them.

**Sponsor:** Oklahoma State University

**PI/PD:** Zachary Arens

**Entrepreneurial Orientation (EO) and Firm Innovation Performance**

Using a dynamic capabilities perspective as our theoretical foundation, this study contributes by highlighting the underlying mechanism through which EO affects firm performance based on the subsequent theoretical linkages: 1)strategic resources, 2)strategic actions (organizational responsiveness), 3)competitive advantage, and 4)performance. Our theoretical rationale is that EO as an important strategic resource contributes to firm performance through a sequential link of EO: 1) dynamic capabilities, 2)competitive advantages, and 3) firm performance. More specifically, among various views of firm capabilities, the importance of dynamic capabilities is especially emphasized in the current business environments characterized by fast and unpredictable change.

**Sponsors:** Oklahoma State University, Chinese Culture University, Taiwan

**PI/PDs:** Todd Arnold

Chinese Culture University, Taiwan: Peter Chen

**Alliance Orientation, Competitive Advantage in NPD, and New Product Success**

Strategic orientation is a key determinant of new product development (NPD) performance, yet, little is known about the real value of alliance orientation (AO) in the context of NPD, as well as how it contributes to new product success. This study advances knowledge by investigating the role of important mediating and moderating mechanisms underlying the AO－new product success relationship. Applying a dynamic capabilities perspective, the research demonstrates that competitive advantage in NPD program and process play a significant and varied role (depending upon environmental conditions) in affecting new product success.

**Sponsor:** Oklahoma State University, Chinese Culture University, Taiwan

**PI/PDs:** Todd Arnold

Chinese Culture University, Taiwan: Peter Chen

**Enhancing Perceived Product Value through Peripheral Product Attributes**

We examine how firms could design their products’ packaging both to help customers socialize more successfully, as well as profit. We investigate how a *peripheral product anecdote*, or a brief, interesting story that is loosely connected to the product, but not connected to its history or usage, can serve this purpose. For example, Combat Wombat beer is an Australian beer with an anecdote about a wombat, an Australian animal, on its label. Does such a story facilitate social interaction among those who consume the product? This study addresses such a question.

**Sponsors:** Oklahoma State University, SUNY Albany

**PI/PDs:** Todd Arnold, Josh Wiener

SUNY Albany: Hillary Wiener

**The Costs (and Opportunities) of Highly Involved Organizational Buyers**

The authors examine the impact of organizational buyers’ product involvement on customers’ and suppliers’ financial outcomes, driven by buyers’ increased willingness to pay and their perceived credibility in negotiations with the supplier. The effects of these competing mechanisms are moderated by characteristics of the customer firm and the customer-supplier relationship. The authors examine effects of buyer product involvement using a survey of organizational buyers matched with secondary profit data from their supplier. Customer firms should encourage their buyers to be highly involved but limit their influence within the firm. Highly involved buyers can be potentially costly to suppliers.

**Sponsors:** Oklahoma State University, University of Missouri

**PI/PDs:** Todd Arnold, Justin Lawrence, Colleen McClure

University of Missouri: Lisa Scheer

**End User Engagement with Supplier Firm Brands: Meaningfulness of Work and Differential Impact of Other-Focused versus Self-Focused Marketing Initiatives**

Findings suggest a key management concept, meaningfulness of work, can be applied to brand attachment in a work context. More specifically, results illustrate how end users find meaning on their job and develop strong feelings for supplier firm brands. The interaction between meaningfulness of work and supplier firm brand performance demonstrates that end users who find work more meaningful are more likely to both develop strong attachment for a supplier firm brand and more likely to advocate for that brand to superiors and peers.

**Sponsors:** Oklahoma State University, Georgia Gwinnett College

**PI/PDs:** Todd Arnold

Georgia Gwinnett College: Amy Fehl

**Optimizing Frontline Shift Composition for Increased Customer Satisfaction and Firm Performance**

Both academics and marketing managers agree that frontline employees (FLEs) are paramount for the provision of excellent service to customers. What is less well understood in extant research is the impact other employees may have upon a given individual frontline worker. We term this influence the shift climate, defined as the FLE’s perception of the tendencies of other members on the shift toward service behaviors that focus on customer need satisfaction. This study investigates the influence of shift climate on FLE performance.

**Sponsors:** Oklahoma State University, Georgia Gwinnett College, Grand Valley State University

**PI/PDs:** Todd Arnold

Georgia Gwinnett College: Amy Fehl

Grand Valley State University: Valerie Good

**The Positive Influence of Watching Others Receive Preferential Treatment: The Role of Envy**

The purpose of this research is to examine how and when companies can motivate non prioritized consumers to respond positively to customer prioritization and mitigate their negative reactions. We conducted two studies to test whether non-prioritized customers can respond positively to preferential treatment received by others. We used a video experiment to increase the realism of the manipulation and to establish internal validity and we employed a field survey to demonstrate external validity. We also suggest that the aspect of upward comparison that people pay attention to can influence whether they respond positively or negatively to an upward comparison episode.

**Sponsors:** Oklahoma State University, Texas A&M University-Corpus Christi

**PI/PDs:** Tom Brown

Texas A&M University-Corpus Christi: Yu-shan Huang

**The Drivers of Salespersons’ Customer Insight-Generating Behavior and Its Impact on Sales Performance Outcomes in a Relationship Selling Context**

Salespeople have long been told to uncover information about their prospective customers and their needs. This project examines the degree to which (and process through which) uncovering customer insights influences sales performance.

**Sponsors:** Oklahoma State University, Weber State University, University of Tennessee-Knoxville

**PI/PDs:** Tom Brown**,** Karen E. Flaherty

Weber State University: Nicole A. Flink

University of Tennessee-Knoxville: Alex R. Zablah

**Bleisure Motivation of Meeting, Incentive, Convention, and Exhibition Travelers**

The objectives of this study are to 1) examine the bleisure motivations of MICE travelers, 2) investigate the trip characteristics of bleisure travelers, and 3) induce a grounded theory from data collection and analysis. This study adopted a pragmatic mixed method of emic and etic approaches. Triangulation (participant observations, interviews, and surveys of MICE travelers) was conducted with several datasets collected over time from 2011 to 2021.  
**Sponsor:** Oklahoma State University

**PI/PDs:** Goutam Chakraborty, Bongkosh Rittichainuwat

**CO2 Storage Site Screening Platform Development and CO2 Storage Resource Analysis in SECARB Offshore Reservoirs Using SAS® Viya**

In this study, the SAS® Viya platform was utilized to manage the geological datasets and analyze the geological characteristics of the shelf and deep-water areas through the use of correlation plots and distribution maps. In addition, a CO2 storage site screening platform was developed in SAS® Viya. This screening platform is flexible and allows for quick access to the results, which enables users to easily tune the screening criteria and understand the how various screening criterion affect the output.

**Sponsors:** Oklahoma State University, (external funding from SECARB)

**PI/PDs:** Goutam Chakraborty, Xitong Hu, Prem Bikkina, Jack C. Pashin

**Developing and Creating a User-Friendly** **Dynamic Dashboard of Catalogue using Tableau for Love’s Travel Stop and Stores**

In this funded research project, we developed and created a user-friendly dashboard catalogue for Love’s Travel Stop and Stores using Tableau. The project involved first understanding which elements the mangers want to see in the dashboard. This was accomplished through many in-depth interviews with the managers. The next phase was to create mock ups of dashboards using static data and present to the managers for further refinement. Once buy-in was obtained from the managers through many iterations, then the final phase included replacing the static data with dynamically pulled data from their warehouse and helping them put this into production.

**Sponsors:** Oklahoma State University (External funding from Love’s Travel Stores and Stops)

**PI/PDs:** Goutam Chakraborty, Melissa Reed

**Developing and Fine-Tuning a Machine Learning Model to Track a Custom Object which is Initialized only once in a Video**

In this research project, we developed and tuned a machine-learning model using Python to track an object that appears only once in a video, and to be able to handle occlusion. First, a thorough review of all existing algorithm packages that handle such tasks. These include open CV trackers, deep sort algorithm, Kalman filters and CSRT/MOSSE trackers. While each one of these has advantages, none could handle both of our objectives. Therefore, we developed a custom Python code that created an ensemble of best features from each of the reviewed packages. The Python code was tested with real data and was reasonably accurate.

**Sponsors:** Oklahoma State University, (External funding from Concat Systems)

**PI/PDs:** Goutam Chakraborty, Nikhil Gunti

**Developing and Validating a Customer Lifetime Value Model for Love’s Travel Stop and Stores**

In this funded research project, we developed and validated a customer Lifetime Value (CLV) model for Love’s Travel Stop and Stores using Tableau. Done through building and validating two specific models for the drivers. Forecasting the number of transactions for each driver on a weekly basis. We evaluated multiple time-series models and selected the auto-ARIMA which performed the best on the validation data. Then combined forecasting with operational and financial metrics to create a Customer Lifetime Value (CLV) for each driver. These numbers were used to create segments of drivers who receive customized promotional offers to move them to a higher value segment.

**Sponsors:** Oklahoma State University, (External funding from Love’s Travel Stores and Stops)

**PI/PDs:** Goutam Chakraborty, Harshit Agarwal

**Developing and Creating a User-Friendly** **Dynamic Dashboard of Campaign Analytics using Snowflake and Tableau for Heartland Payment Systems**

In this funded research project, we developed and created a user-friendly dashboard for Heartland Payment Systems using Snowflakes and Tableau. The project involved first understanding which elements of campaign analytics the mangers want to see in the dashboard. This was accomplished through many in-depth interviews with the managers. The next phase was to create mock ups of dashboards using static data and present to the managers for further refinement. Once buy-in was obtained from the managers through many iterations, then the final phase included replacing the static data with dynamically pulled data using Snowflake to optimize time needed to populate the dashboard.

**Sponsors:** Oklahoma State University, (External funding from Heartland Payment Systems)

**PI/PDs:** Goutam Chakraborty, Katelyn Byrne

**The Influence of Donation Resource Abundance on Choice of The Abstract Donation Target**

This paper aims to investigate how to improve the donation choice toward abstract targets by matching donation resource abundance (abundant vs. limited) and message construal level (high vs. low) within donation appeals. Four studies were conducted to examine the influence of donation resource abundance on donation choice toward abstract target. We find that people with abundant resource are more likely to choose an abstract target versus a concrete target. Notably, perceived response efficacy mediates the effect of resource abundance on abstract target choice. In addition, the message construal level plays the moderate role.

**Sponsors:** Oklahoma State University, Sun Yat Sen University

**PI/PDs:** Xiang Fang, Pramit Banerjee

Sun Yat Sen University: Yimin Zhu, Jifei Wu, etc.

**The Effect of Power Distance Beliefs on Vertical vs. Horizontal Display**

This research is to investigate how individuals’’ power distance beliefs influence their evaluations of the products displayed vertically or horizontally. We expect individuals’ with high power distance beliefs are more likely to prefer the products presented vertically than horizontally. This effect is stronger for material products than experiential products. Process fluency mediates the effect of PDB on the evaluations.

**Sponsor:** Oklahoma State University

**PI/PDs:** Xiang Fang, Pramit Banerjee

**Vicarious Authenticity in Tourism: Experientialism Approach and Focus Group Interviews**

Authenticity is a core theme in the hospitality and tourism industry as it brings “a sense of the genuine, the real or the unique” to visitors at a destination via traditional culture and origins of a locality (Sharpley, 1994, p. 130). Three types of authenticity have been identified: objective, constructed, and existential authenticity (Bruner, 1994; MacCannell, 1976; Wang, 1999). The purpose of this research is to theorize a new type of authenticity, ‘vicarious authenticity’, using experientialism as a philosophical base. The objectives of this research are to define vicarious authenticity and explore how it transpires in tourists’ experiences through participation in locals’ everyday lives.

**Sponsors:** Oklahoma State University, Hong Kong Polytechnic University

**PI/PDs:** Xiang Fang, Li Miao

Hong Kong Polytechnic University: Gemmy Moon

**Touch or Click? The effect of direct and indirect human-computer interaction on consumer responses**

Human-computer interaction is the way consumers access product, service and information, which affects consumers’ attitude, evaluation and purchase behavior. This paper examines how human-computer interaction affect consumer attitude and purchase intention. Four studies demonstrate that consumer with direct human-computer interaction will generate more favorable consumers’ attitudes and greater purchase intentions than those with indirect human-computer interaction. This effect is mediated by sense of immersion and this effect is moderated by the product haptic importance. These findings enrich the literature on human-computer interaction and provide some marketing implications for firms to improve product evaluation and purchase behavior by the means of human-computer interaction.

**Sponsors:** Oklahoma State University, Sun Yat Sen University

**PI/PDs:** Xiang Fang

Sun Yat Sen University: Jifei Wu, Hongyan Yu

**Examining the Effect of a Firm’s Product Recall on Financial Values of Its Competitors**

Scholars examine the effect of product recall on the recall firms from two different perspectives. One is from a consumer’s perspective, and the other is from a financial perspective. We chose the second perspective and tested how different product recall strategies (proactive vs. passive) influence competitors’ financial values. We collected 14 years (January 1996 to December 2009) of CPSC product recalls, and found that competitors experience positive abnormal returns when the recall firm employs proactive recall strategies. This confirms that investors interpret proactive recall differently from consumers. Proactive recall not only hurts the recall firm’s stock prices but benefits competitors’ financial values.

**Sponsors:** Oklahoma State University, Towson University, Shanghai Univ. of Finance and Economics

**PI/PDs:** Xiang Fang

Towson University: Yingying Shao

Shanghai Univ. of Finance and Economics: Xiaoyu Wang

**A Cross-Cultural Exploration of How Employees’ Intervention Discourages the Subsequent Misbehavior of Other Customers**

The spreading of Dysfunctional Customer Behavior (DCB) is particularly problematic and costly for organizations. Drawing on social learning theory (Bandura, 1978), we expect that responding to DCB with certain interventions helps other customers learn that an employee has ability to cope with DCB, implying that such behavior is not accepted and will be reprimanded, which may decrease the DCB of other customers. In addition, we investigate the moderating role of cultures (particularly, power distance beliefs).

**Sponsor:** Oklahoma State University

**PI/PDs:** Xiang Fang, Sandy Huang, Ruping Liu

**Managers as Engineers of Market Knowledge Network:  Typology and a Conceptual Framework**

Adopting a grounded theory approach, we offer a typology of manager’s network engineering that is based on three key variables, including managers’ market orientation, their network approach (proactive or reactive), and their servant leadership approach (self-focused or other-focused). Specifically, we propose that marketing managers engineer the social networks of their frontline employees in four unique ways—they may 1) facilitate connections, 2) alter connections, 3) lend connections, or 4) sever connections between the frontline employees and important others.

**Sponsors:** Oklahoma State University, Baylor University, University of Georgia  
**PI/PDs:** Karen Flaherty  
University of Georgia: Son Lam  
Baylor University: Andrea Dixon  
  
**How are Salesperson Professional Identities Shaped? Elements of Identity Work**

Today’s employees often demonstrate stronger commitment to their chosen professions than to the companies they work for. This raises an important research question: how do salespeople’s views of the sales profession as a whole shape their career goals, motivations, attitudes and behaviors? Using a grounded theory approach, we address this question. Based on 54 in-depth interviews with sales professionals, we offer a complex process model of salesperson professional identity construction. Salespeople’s professional identities are malleable and socially constructed. Salespeople engage in a complex process of assessment and reconciliation to form professional identities. This process influences important salesperson outcomes.

**Sponsor:** Oklahoma State University

**PI/PDs:** Karen Flaherty, Curtis Schroeder

**Making a Positive (or Negative) First Impression with Small Talk**

We examine the effect of small talk and relationship orientation on customer intentions to use a service provider in three experiments and one cross-sectional survey. Customers respond positively to small talk when communally oriented, but negatively when they are more exchange oriented. Mediation analyses reveal this effect occurs because small talk differentially leads to feelings of rapport and impatience for people high (versus low) in relationship orientation. While prior research has shown benefits to small talk, we show significant downsides to using small talk with customers who are exchange oriented and show process evidence of why small talk functions as a “double-edged sword.”

**Sponsors:** Oklahoma State University, University at Albany

**PI/PDs:** Karen Flaherty, Joshua Wiener

University at Albany: Hillary Wiener

**Who will Compromise? The Role of Gender in Joint Ethical Decision-Making**Current understanding of how unethical behavior arises in a business context remains unclear. This may be due in part to the complex nature of business decisions. In this study, we report the results of an experiment designed to shed some light on factors that influence how moral judgments arise in a team situation. Based on a sample of 249 undergraduate student teams, we first consider the role that the individual’s and their partner’s motivation-to-lead and political skill play in determining the extent to which the person adjusts his/her response to an ethical dilemma to reflect greater sensitivity to moral issues.  
**Sponsor:** Oklahoma State University  
**PI/PDs:** Karen Flaherty, Jim Pappas

**Alliance Value Creation and Appropriation: The Role of Customer- and Product-Centric Structures**

Establishing a customer-centric structure is a popular but costly marketing strategy; some firms thus seek alliances with customer-centric partners, with mixed results. In this article, according to event study analyses (Study 1) of strategic alliances by *Fortune* 1000 firms over a 17-year period, product-centric firms create 2.5 times more value on average when they work with customer- versus product-centric partners, but they also capture significantly less share of the joint alliance value when allying with customer- versus product-centric partners. A complementary panel data analysis (Study 2) details the net long-term performance of a product-centric firm’s alliance portfolio.

**Sponsors**: Oklahoma State University, Iowa State University, University of Washington

**PI/PDs**: Justin M. Lawrence

Iowa State University: Ju-Yeon Lee

University of Washington: Robert W. Palmatier

**Mitigating Price Discount Spillover in Online and Offline Markets**

In accordance with today’s multichannel B2B environments, the authors theorize differential effects on the seller’s margin via offline and online discount contagion. The authors test their theoretical framework across two large-scale field studies featuring spatial econometric analyses. If managers fail to consider contagion systematically, the effects of targeted discounts can spill over to untargeted buyers, resulting in approximately three times the margin losses. Granting highly differentiated discounts further fuels this contagion process, precipitating even greater margin decline. However, contagion-conscious deployment, such as targeting buyers that limit e-commerce price transparency, allows sellers to virtually eliminate adverse effects of discount contagion.

**Sponsors**: Oklahoma State University, Iowa State University, University of Washington, Colorado State University

**PI/PDs**: Justin M. Lawrence

Iowa State University: Andrew T. Crecelius

University of Washington: Robert W. Palmatier

Colorado State University: Jonathan Z. Zhang

**Sales Channel Specialization for B2B Resellers: Cost-matching versus Relationship-driven Models**

In an effort to cost-effectively match sales channels to the shifting needs of customers and reap the benefits of sales specialization, business-to-business sellers are challenged with migrating customers between outside (field) salespeople and inside (remote) salespeople. Prevalent approaches include cost-matching—assigning less-developed accounts to low-cost inside salespeople and migrating them to the costlier outside sales channel once the account grows—and the relationship-driven approach—deploying the richer outside sales channel to establish relationships with newer customers, until the account can be migrated to inside sales. The authors’ findings challenge accepted wisdom and inform practical recommendations for sales channel specialization strategies.

**Sponsors**: Oklahoma State University, Iowa State University, University of Washington

**PI/PDs**: Justin M. Lawrence

Iowa State University: Andrew T. Crecelius

University of Washington: Robert W. Palmatier

**The Opportunities and Costs of Highly Involved B2B Buyers**

The authors examine the impact of organizational buyers’ product involvement on customers’ and suppliers’ financial outcomes, driven by buyers’ increased willingness to pay and their perceived credibility in negotiations with the supplier. The effects of these competing mechanisms are moderated by characteristics of the customer and the customer-supplier relationship. The authors examine effects using a survey of organizational buyers matched with secondary profit data from their supplier. This study contributes to the limited literature on product involvement and the role of buyer emotions in a B2B exchange setting.

**Sponsors**: Oklahoma State University, University of Missouri

**PI/PDs**: Justin M. Lawrence, Colleen E. McClure, Todd J. Arnold

University of Missouri: Lisa K. Scheer

**Targeting and Designing Supplier-Initiated Relationship Expansion Proposals**

The authors assess effects of relationship expansion proposals contingent on three account opportunity metrics: sales potential, gross margin position, and historical service provision. Study 1), reveals that higher sales potential and higher service provision make a customer a more favorable target for a relationship expansion proposal; conversely, when a customer relationship is more profitable to the supplier, relationship expansion proposals can backfire, resulting in lost business. Study 2), focuses on the strategic design of relationship expansion proposals and demonstrates how the depth of discounting in a proposal affects purchasing, contingent on the same account opportunity metrics used in Study 1.

**Sponsors**: Oklahoma State University, Iowa State University, Marquette University, Ohio University

**PI/PDs**: Justin M. Lawrence

Iowa State University: Andrew T. Crecelius

Marquette University: Jessica L. Ogilvie

Ohio University: Adam A. Rapp

**When Hybrid Sales Structures Enhance Performance in B2B Markets**

Business-to-business selling firms (sellers) increasingly assign customers an inside salesperson, in addition to a traditional outside salesperson. These multichannel sales structures are believed to decrease expenses by substituting a less-costly sales channel and increase sales by enabling more efficient exchange. However, the authors theorize that substitution toward the leaner inside channel can also constrain the seller’s relationship building efforts and induce sales headwinds. Further, if some customers elect not to substitute but instead use the new channel as a supplement, the seller’s customer-level expenses can increase considerably due to the additional resources required to deploy the inside channel.

**Sponsors**: Oklahoma State University, University of Notre Dame, Iowa State University, University of Washington

**PI/PDs**: Justin M. Lawrence

University of Notre Dame: Vamsi Kanuri

Iowa State University: Andrew T. Crecelius

University of Washington: Robert W. Palmatier

**Managing Moral Misalignment and Donor Defection**

Unlike performance-based defectors who leave firms in response to some form of utility deficit with the offering, identity-based defectors are customers who sever relationships due to a perceived mismatch between their identities and their perceptions of the firm’s identity. Using consumer data from a multinational nonprofit firm and a framework derived from customer-company identification theory, this study examines optimal communication strategies for the reacquisition of identity-based customer defectors and reveals suboptimal reacquisition results related to traditional reacquisition messaging. This article introduces identity-based defectors to extant literature and outlines specific routes by which firms should approach their reacquisition.  
**Sponsors**: Oklahoma State University; Florida State University; University of North Carolina, Greensboro

**PI/PDs**: Justin M. Lawrence

Florida State University: Colleen Harmeling, Michael Brady

The University of North Carolina, Greensboro: Harrison Pugh

**The Upstream Impact of Online Ratings on B2B Relationships**

Online reviews reflect relationships and interactions between a firm and end users. Dimensions of marketing strategy execution, such as service quality and affordable prices, drive positive reviews. These reviews therefore capture information that has implications not only for the firm, but for its upstream channel partners, a spillover effect not examined in extant research. Drawing on value capture theory, the authors investigate the differential effects of a firm’s Google reviews on its supplier’s performance, mediated by the buyer firm’s value creation–value capture tradeoff with its end users.

**Sponsors**: Oklahoma State University; Iowa State University

**PI/PDs**: Justin M. Lawrence, Colleen E. McClure, Hans Nguyen

Iowa State University: Andrew T. Crecelius

**Motivating Customers to Respond Positively to Involuntary Intermediation: Minimizing Defection and Maximizing Purchasing**

Tightening margins and emerging competitors are motivating manufacturers to streamline distribution systems by assigning customers to channels where they can be profitably served. One frequently chosen strategy is involuntary intermediation: a manufacturer unilaterally terminating a customer’s direct relationship and encouraging the customer to migrate to a designated intermediary. Drawing on event system theory, this research examines the decisions at hand for customers following an involuntary intermediation, specifically: 1) whether to migrate to the manufacturer’s designated intermediary or defect to a competitor, and 2) how much to purchase of the manufacturer’s products and other products sold by the intermediary after intermediation.

**Sponsors**: Oklahoma State University; Iowa State University; University of Missouri

**PI/PDs**: Justin M. Lawrence

Iowa State University: Andrew T. Crecelius

University of Missouri: Lisa K. Scheer, Divya Anand

**Stable Prices in B2B Relationships: How Resellers React to Longer-term Pricing Policies**

The authors examine when longer-term pricing policies in B2B markets can generate higher profits for suppliers. Drawing on cost of price adjustment (COPA) theory, the authors suggest that price-adjustment carries costs and benefits for customers, and that not all customers find a longer-term policy equally attractive. The authors identify customer characteristics that signal when longer-term pricing policies are more attractive to customers and more profitable for suppliers. This study utilizes a quasi-experiment from involving 8,987 business customers of a global U.S.-based industrial distributor.

**Sponsors**: Oklahoma State University; Southern Illinois University

**PI/PDs**: Justin M. Lawrence

Southern Illinois University: Omid Kamran Disfani, Ashok Bhattarai

**The Negative Impact of Seasonal/Limited Edition Packaging on Product Recognition and Shopping Experience**

Brands often vary their traditional packaging for different times of year (i.e., Coca-Cola’s winter cans), when introducing limited edition products, and when co-branding and crossing promoting products. We find that limited edition/seasonal packaging has a negative impact on consumers’ ability to find the target product. This in turn has a negative impact on their experience, reporting more annoyance with the simulated shopping process. Finally, we show that this is due to the fact that seasonal packaging often eschews familiar brand elements (e.g., color) which are heavily relied on in the search process. Implications for package design and promotion are discussed.

**Sponsor:** Oklahoma State University

**PI/PD:** Steven Shepherd

**Cultural Diversity in Advertising and Representing Different Visions of America**

Cultural diversity in advertising has the potential to reflect American society and embody a view of America that is either consistent or inconsistent with a consumer’s beliefs and values. Our research explores how consumers with differing visions of America and its values evaluate cultural diversity in advertising. Consumers who support America’s dominant ideology more negatively evaluate ads with cultural diversity, particularly for brands that are American as opposed to foreign. We find this is due to the presence of ethnic minorities in ads increases perceptions of threat to American values and culture.

**Sponsor:** Oklahoma State University

**PI/PD:** Steven Shepherd

**Identifying and Explaining the Gender-Gap in Consumer Responses to Product Failures: Gender Stereotypes Create Victims out of Women**

Every year, thousands of consumer complaints are made to regulatory agencies, including the Consumer Product Safety Commission, Federal Trade Commission, among others. The current research asks if the victim matters is how such incidents are interpreted and reported; specifically, the victim’s membership in a group that is seen as vulnerable (e.g., women, children, elderly). We propose based on various model of person perception and stereotyping that when members of these group are victims of a product failure, consumers will: 1) see increased harm done, 2) blame the company more, and 3) show increased tendency to complain about the product failure.

**Sponsor:** Oklahoma State University

**PI/PD:** Steven Shepherd

**Military Veterans are Morally Typecast as Heroic but Unfeeling**

What kind of “mind” do people assume those in the military have? Leveraging previous theorizing on mind perception, dehumanization, and career typology, the current research shows that veterans are seen as having a higher capacity for agency but less capacity for experience. As a result, veterans are seen as relatively ill suited for careers that require a high capacity for experience. Results are found across laypeople and those employed in management and human resources. Implications for veteran well-being are discussed.

**Sponsor:** Oklahoma State University

**PI/PD:** Steven Shepherd

**Brand Dependence, Domain Complexity, and Motivated Brand Trust**

We find that highly victim sensitive individuals want to trust others, but are also very concerned with being taken advantage of. Counterintuitively, we find that these people report increased trust in a brand or service provide when the particular domain at hand is seen as complex (vs. simple), which in turn increases perceived dependence on a particular brand or service. In other words, the concern of being taken advantage of appears to lead one to bolster trust in a brand that one is dependent on.

**Sponsor:** Oklahoma State University

**PI/PD:** Steven Shepherd

**The Challenges of Military Veterans in the Workplace: Applications, Integrations, and Opportunities**

Understanding disadvantage and how processes of stereotyping, stigma, and social circumstance affect individuals and society has long been an active area of research within psychology. However, how these processes affect military veterans and their transition to civilian life have largely been ignored. We discuss contemporary social psychology theories and relevant recent research that are relevant to challenges veterans encounter when they transition from military. We hope that this synthesis inspires other researchers to conduct research in the context of veterans, and for clinicians to draw on these theories to inform

programs and interventions.

**Sponsors:** Oklahoma State University, Duke University

**PI/PDs:** Steven Shepherd

Duke University: Aaron Kay

**The Effect of Brand Personality and Acceptance of LGBT Representation in Ads Among Liberals and Conservatives**

In this research we explore how liberals and conservatives respond to LGBT representation in advertising. Critically, we also test the moderating role of brand personality. While conservatives generally respond more negatively to LGBT representation in ads, this is particularly the case for sincere brand (e.g., brands that are seen as down-to-earth, wholesome, family-oriented), whereas this negative reaction is attenuated for exciting brands.

**Sponsors:** Oklahoma State University, Duke University

**PI/PDs:** Steven Shepherd

Duke University: Aaron Kay

**Differing Terms for the Peer-to-Peer Economy and Their Associations with Race, Morality, and Legitimacy**

Numerous terms that lack clear definitions are often interchangeably used to refer to the peer- to-peer economy and activities within it. Moreover, the popular press has noted racial disparities in how different peer-to-peer activities are perceived and treated. We find that different terms for the peer-to-peer economy are not equivalent when it comes to perceptions of: 1) who participates in these activities, and 2) their morality. Specifically, despite their overlap in application and usage, the sharing economy is more associated with White actors and increased morality, whereas side hustles are more associated with Black actors and decreased morality.

**Sponsors:** Oklahoma State University, Duke University

**PI/PDs:** Steven Shepherd

Duke University: Aaron Kay

**Passion Exploitation: Legitimization of Taking Advantage of Other People’s Passion for Work**Although passion may indeed be beneficial in many ways, we suggest that the modern cultural emphasis may also serve to facilitate the legitimization of demeaning and unfair management practices – a phenomenon we term the legitimization of passion exploitation. We show that people deem poor worker treatment as more legitimate when workers are presumed to be “passionate” about their work. We demonstrate two mediating mechanisms by which this process of legitimization occurs: 1) assumptions that passionate workers would have volunteered for this work if given the chance, and 2) beliefs that, for passionate workers, work itself is its own reward.

**Sponsors:** Oklahoma State University, Duke University

**PI/PDs:** Steven Shepherd

Duke University: Jae Yun Kim, Aaron Kay

**The Cheating Culture: Consequences of Neurotic Competitiveness**

Karen Horney (1937) discussed the concept of neurotic competitiveness. Neurotically competitive persons are more focused on defeating their opponents than on winning per se. Existing research shows that a significant segment of the American public may have a neurotic win-at-any-cost attitude. The current research will examine the link between neurotically competitive attitudes and cheating behavior in business and everyday life.

**Sponsors:** Oklahoma State University, California State University at Chico

**PI/PDs:** Ajay Sukhdial

California State University at Chico: Kirk Damon Aiken

**The Joyless Economy: The Marketing Implications of Consumer Strategies for Beating Everyday Boredom**

Throughout history, philosophers have argued, “Boredom is the root of all evil.” Current academic research confirms that ongoing feelings of boredom, a modern existential condition, are associated with numerous ills in society. Scholars have also argued that consuming all kinds of products and experiences is how consumers try to deal with feelings of boredom. This research will examine the commonly used strategies by individuals for beating everyday boredom and the marketing and public policy implications of such strategies.

**Sponsors:** Oklahoma State University, California State University at Chico

**PI/PDs:** Ajay Sukhdial

California State University at Chico: Kirk Damon Aiken

**A Review and Meta-Analysis of Experimental Effects in Brand Alliance Research**

A meta-analysis is a study of effect sizes across studies. We analyze reported results from a large number of papers. The findings indicate that the brand alliance effect is real and of a small to medium effect size. How research design elements affect the results are analyzed.

**Sponsors:** Oklahoma State University, States of Virginia, Texas, and Ohio

**PI/PDs:** Kevin E. Voss,

University of Virginia: Mayoor Mohan

University of Texas: Jinho Jung

University of Ohio: Fernando Jimenez

**Sound Symbolism and Consumer Forgiveness**

We explore how the sounds of the words used in an apology affect the customer’s likelihood of forgiveness. Such apologies are used in response to a brand transgression. We posit that certain words convey warmth while other sounds convey competence. The warmth or competence of the sounds leads to customer forgiveness intentions.

**Sponsor:** Oklahoma State University

**PI/PDs:** Kevin E. Voss,Minjoo Kim

**Perceived Shared Experience: The Moderating Effect of Experience Type in Building Emotional Attachment**

We explore how different types of experience, for example ordinary versus extreme, experiences affect how people form attachment to their brands.

**Sponsor:** Oklahoma State University

**PI/PDs:** Kevin E. Voss,Ying Ying Li

**How Competing Ad Cues Overwhelm a Brand Alliance Cue**

We demonstrate that distraction impairs brand alliance cues in advertising because brand alliance cues are relatively weak. In published research, theorists have demonstrated that a well-known ally brand improves consumer evaluations of a previously unknown focal brand. Mental load, sex appeals, and celebrity endorsers attenuate the effect of the brand alliance on the previously unknown focal brand.

**Sponsor:** Oklahoma State University

**PI/PDs:** Kevin E. Voss,Ying Ying Li, YoungOk “Sunny” Song

**The Effect of Fear-based stimuli on Emotional Attachment: The Mediating Effect of Emotional Arousal**

The authors demonstrate that fear arousal is an important antecedent of emotional attachment, even when viewers’ emotional arousal is attenuated from the presence of a previously attached brand. When viewers are exposed to a fear-based stimulus, the resultant level of fear arousal drives emotional attachment. Thus, emotional attachment both reduces experienced fear and is strengthened in response to exposure to a fear-based stimulus.

**Sponsor:** Oklahoma State University

**PI/PDs:** Kevin E. Voss,Ying Ying Li

**Measuring Attachment Anxiety and Avoidance: A Semantic Differential Approach**

Marketing researchers are increasingly interested in the effects of attachment styles on important variables in consumer and business-to-business markets. The scales developed herein provide reliable, valid, and generally applicable scales that are shorter than available alternatives. Respondents high in attachment anxiety had significantly lower evaluations of a shoe ad with exciting positioning while those high in attachment avoidance had significantly lower evaluations of a shoe ad with authentic positioning.

**Sponsor:** Oklahoma State University

**PI/PDs:** Kevin E. Voss,Ying Ying Li

**The Effect of Unusual Brand Names on Consumer’s Brand Evaluations**

Research to understand companies’ use of brand names that we classify as unusual. These brand names often use profanity or words that allude to body parts. A website that tracks these names and has a list of 1,617. We lack credible research on why marketers choose such names, how consumers view such names, and what impacts these names have on brand building.

**Sponsor:** Oklahoma State University

**PI/PDs:** Kevin E. Voss,Richie L. Liu

**Building Brand Identification through Cause-Brand Alliances: The Role of Perceived Cause Controversy**Examines the extent to which a cause-brand alliance leads to improved brand identification. In addition, to test whether the attitude toward cause brand alliance is determined, in part, by whether the non-profit organization’s main issue is the subject of controversy. On average, customers’ perception of controversy concerning the nonprofit ally in a CBA influences the average evaluation of the CBA and subsequently the level of identification with the brand ally. Specifically, when there is controversy concerning the non-profit’s issue, customers will have a more favorable attitude toward the CBA and identification with the brand ally only if both partners are credible.   
**Sponsor:** Oklahoma State University   
**PI/PDs:** Kevin E Voss, Yasamin Vahdati   
  
**Conjunctionitis: A Call for Clarity in Construct Definitions.**The authors determine the extent to which the use of coordinating conjunctions enhances or impairs definitional clarity. A sample of 736 construct definitions from Journal of Marketing, the Journal of Marketing Research, and the Journal of Consumer Research over a 30-year period were subjected to judging for ambiguity and vagueness by both academic and lay judges. The authors demonstrate that constructing definitions using both ‘and’ and ‘or’ increases the ambiguity and vagueness of the construct’s meaning. The most frequently used conjunction is ‘and’ which appeared in 42% of the definitions. A significant percentage (26%) contain the conjunction ‘or’.   
**Sponsor:** Oklahoma State University   
**PI/PDs:** Kevin E Voss, Alex R. Zablah, Yu-Shan “Sandy” Huang  
  
**Integrating Reciprocity into a Social Exchange Model of Inter-Firm B2B Relationships**  
Integrates reciprocity and its antecedents into a social exchange model of inter-firm relationships. The social exchange model includes credibility trust, benevolence trust, information exchange, affective commitment, calculative commitment, and long-term orientation. Primary data collection from a sample of firms in the Republic of Korea using a questionnaire. The authors used three-stage least squares to fit the model given the mediational and moderating effects. Adding reciprocity and its antecedents to the social exchange model produce results that differ from previously published findings. Specifically, reciprocity affects information exchanged indirectly through both credibility and benevolence trust.   
**Sponsor:** Oklahoma State University   
**PI/PDs:** Kevin E Voss, Mayoor “Max” Mohan, Emily C. Tanner, Yong-Ki Lee, Hong-Kuen Kim

**Small Talk: A Double-Edged Sword**

There is a pervasive belief in the sales literature that beginning a meeting with small talk will lead to a positive outcome. Drawing on the linguistics and management literature the authors identify conditions where small talk will be counter-productive. In particular, when a customer is exchange A series of experiments support these hypotheses.

**Sponsor:** Oklahoma State University

**PI/PD:** Josh Wiener

**Communicating with a New Customer**

The question is how a sales person should communicate to a customer that is a novice. S/he is unfamiliar with the product or service being sold. The salesperson must choose between beginning in a social or functional manner. A conceptual framework and series of empirical studies support the functional approach.

**Sponsor:** Oklahoma State University

**PI/PDs:** Josh Wiener, Karen Flaherty, Hillary Wiener

**Product Anecdotes**

Extant literature emphasizes how products can be used by a person for one-way communication, i.e., telling others about themselves. A theoretical framework is constructed to explain how a product can be used to facilitate two-way communication (conversation with others). The framework is used to create a marketing strategy (attaching anecdotes to products). A series of empirical studies supports the strategy.

**Sponsor:** Oklahoma State University

**PI/PDs:** Josh Wiener, Todd Arnold, Hillary Wiener

**Support for Regulation**

There ae numerous regulations that restrict the freedom of companies and individuals in order to advance a public health or environmental objective. Drawing on the criminal justice literature a framework for understanding why people might support such restrictions is created. A key finding (empirically supported) is that one’s affect towards the agents whose freedom is restricted is more important than the supposed efficacy of the regulation.

**Sponsor:** Oklahoma State University

**PI/PD:** Josh Wiener

**Why Scientists are Discounted**

Assertions by scientists and other experts are often discounted or rejected by a significant portion of the population. A conceptual framework for understanding why is created. The core point is that if statements about a problem are accompanied by policy proposals then not only are the statements dismissed but future statements by this source are discounted. This extends the common idea that people believe what they want to believe by arguing their belief impacts source credibility.

**Sponsor:** Oklahoma State University

**PI/PD:** Josh Wiener

SPEARS SCHOOL OF BUSINESS

RESEARCH ABSTRACT REPORTS 2021

**Department Management Science and Information Systems**

**A Column Generation Approach for the Product Grouping Problem**

We study the product grouping problem (PGP) which seeks to optimize its production process to minimize total materials and equipment changeover cost in a manufacturing plant.  A simplified version of the problem that ignores materials cost is equivalent to the clique partition problem (CPP).  This paper presents a column generation-based algorithm to solve CPP and PGP.  The algorithm is particularly attractive as it requires less fine-tuning of its parameters, produces lower bounds that can be used to assess the quality of the solutions to the problem, and generates improved solutions for a benchmark dataset.

**Sponsor:** Oklahoma State University  
**PI/PD:** Ali Amiri

**Optimization of Product Category Allocation to Minimize Order Splitting**

We study the problem of allocating product categories to multiple warehouses to reduce online order splitting and ultimately reduce shipping costs. We propose a column generation-based algorithm to solve the problem.

**Sponsor:** Oklahoma State University  
**PI/PD:** Ali Amiri

**Identifying Injury Severity Risk Factors in Automobile Crashes: A Hybrid Explainable AI Approach**

We designed and developed a hybrid methodology involving predictive analytics, explainable AI, and heuristic optimization techniques to investigate the injury severity risk factors in automobile crashes. We proposed an explanation method based on a variable neighborhood search procedure and compared it with the existing methods. By applying an information fusion technique, we identified a ranking list of the most influential injury severity characteristics related to the driver, vehicle, and accident. The findings can be used by practitioners and policymakers to improve traffic safety by mitigating injury-related risk factors.

**Sponsor**: Oklahoma State University

**PI/PDs**: Ali Bagheri, Dursun Delen, Mostafa Amini

**Measuring the Relative Performance of Accountable Care Organizations: The Role of Electronic Health Records**

Accountable Care Organizations (ACOs) were established to address the issues related to the soaring costs of healthcare delivery. We propose an evaluation framework to measure ACO efficiency, based on their ability to use health care resources to maximize patient health outcomes. Drawing on a nationwide sample of ACOs, we find that larger ACOs are more likely to exhibit lower efficiency relative to smaller ACOs. We also find that usage of electronic health records mitigates the negative impact of size on ACO performance.

**Sponsors:** Oklahoma State University, University of Texas

**PI/PDs:** Chenzhang Bao

University of Texas: Indranil Bardhan

**Antecedents and Impact of Health Information Sharing on Hospital Performance: EMR Sourcing Strategies and HIE Participation**

Despite significant investments in health information technologies (IT), there is still a dearth of information sharing among healthcare providers and hospitals, which constrain adopters from reaping the full benefits of health IT. In this study, we examine the impact of electronic medical records (EMR) sourcing strategies of healthcare providers, as well as their participation in health information exchanges (HIE), on the extent of health information sharing. We attempt to identify the underlying mechanisms through which the benefits of health IT on hospital outcomes are realized.

**Sponsors:** Oklahoma State University, University of Texas

**PI/PDs:** Chenzhang Bao

University of Texas: Indranil Bardhan

**IT Spillover Effects in Levels of Healthcare Delivery**

Recent literature has examined positive IT spillover effects in regional healthcare. We extend this idea and argue that patient and information exchange occur mainly between care-delivery levels (e.g. from primary care clinics to tertiary care hospitals and vice versa) rather than within a care level (e.g. from one tertiary care hospital to another). Using the Medicare Cost Report and HIMSS database, we assess how IT adoption by primary care clinics affect the operating cost of tertiary care hospitals.

**Sponsor**: Oklahoma State University

**PI/PDs**: Chenzhang Bao, Ankita Srivastava, Dursun Delen

**Investigating Uneven Distribution of Health IT Vendor Products**

While there is an increasing trend of adopting systems from several dominating vendors, health IT markets remain competitive and fragmented. This study investigates the distribution of different vendor products and how hospitals adopt health ITs compared to other neighboring peers in the local healthcare market. We focus on the longitudinal trajectories of different applications across years.

**Sponsor**: Oklahoma State University

**PI/PD**: Chenzhang Bao

**Evolution of EMRs and the Impact on Performance**

Health IT applications have been criticized for the lack of interoperability across vendor products. We investigate the difference in vendor selection of EMR applications within a hospital referral region. We cluster the longitudinal patterns of this evolution in vendor difference/similarity and examine its impact on hospital performance.

**Sponsors**: Oklahoma State University, Temple University

**PI/PDs**: Chenzhang Bao

Temple University: Sezgin Ayabakan

**Health Information Exchange: Hype or Hope?**

In recent years, healthcare providers increasingly adopt health IT systems primarily from a single supplier in order to maximize their capability to share patient health data. However, little is known about how much variation this merit in health information exchange explains the variations in hospital performance. In this study, we observe that while single-sourcing improves hospital performance, the level of information sharing has negligible explanation on relationship. Compared to information sharing, the benefit of adopting a single-sourced IT system is more likely rooted in its capability to facilitate clinical workflow.

**Sponsor**: Oklahoma State University

**PI/PD**: Chenzhang Bao

**Technostress Among Physicians and Nurses: A Longitudinal Investigation of Health IT-Strategies and User Satisfaction**

In this research, we propose a strategic technostress model to study how EHR strategies impact clinicians’ satisfaction with IT. We perform text mining on data collected from the Glassdoor website to reveal clinicians’ techno-satisfaction and combine it with organizational EHR strategies. Our analysis indicates that EHR adoption is positively associated with techno-satisfaction. We also observe that EHR sourced from multiple vendors is associated with higher satisfaction. However, these relationships are negatively moderated by EHR experience. Our study provides significant theoretical insights about clinicians’ perception of IT and managerial insights for system design.

**Sponsors**: Oklahoma State University, Temple University

**PI/PDs**: Chenzhang Bao, Ankita Srivastava, Surya Ayyalasomayajula, Dursun Delen

Temple University: Sezgin Ayabakan

**Quantum Information Systems: Harnessing Individual and Group Energies**

In this working paper, we propose that an organization is a living organism that generates energy to achieve certain outcomes. We propose that the relationship between the inputs (individual and group use of information systems) and the outputs (strategic alignment and competitive advantage) of a system depends on the basic principles of quantum mechanics. Specifically, we connect the neuroscience research that addresses qualia (individual) and quale (group) to the Management Information Systems (MIS) research. In this paper, we proffer our research objective, discuss our constructs, and present our interview process and survey items that we plan to conduct and administer.

**Sponsors:** Oklahoma State University, Virginia Military Institute, Indiana University of Pennsylvania

**PI/PDs:** Corey Baham

Virginia Military Institute: Jennifer Gerow

Indiana University of Pennsylvania: James Rodgers

**Using Multi-Factor Authentication for Online Account Security: Examining the Influence of Anticipated Regret**

Authentication plays an important role in securing our systems but is threatened by increasingly sophisticated account hacking and account take over. Several security services have been developed, including multifactor authentication designed to cope with online account authentication. It remains unknown how users perceive and evaluate secure authentication for online accounts and consequently use it to avoid online account threats. This study investigates the factors that affect the use of secure authentication to avoid online account threats. This work extends PMT by showing how the emotion of anticipated regret heightens appraisals of threat and coping.

**Sponsors:** Oklahoma State University, University of North Texas

**PI/PDs:** Corey Baham

University of North Texas: Obi Ogbanufe

**Issues, Challenges, and Discussion of a Theoretical Core of Agile Software Development-Research**

Information systems researchers need to balance their pursuit of theoretical contribution by applying the level of nuance needed to make an impact in both research and practice. We argue that the most expedient way to overcome challenges in conducting ASD research and evaluating knowledge claims is first to develop a theoretical core and second, address issues of rigor in ASD research. This paper aims to highlight major issues facing ASD research in IS, discuss how these issues can be overcome, and propose a theoretical core that can be debated, refined, and used in future research.

**Sponsors:** Oklahoma State University, Louisiana State University

**PI/PDs:** Corey Baham

Louisiana State University: Rudy Hirschheim

**Is Technostress Forcing Physicians to Leave Their Careers? An Exploration of EHR-Related Physician Burnout?**

The growing evidence on physician burnout is gaining paramount attention among practitioners, researchers and policy-makers. IS literature has theorized this phenomenon as technostress and there is considerable causal evidence explaining the effect of use of ICT’s on manifestations of strain and reduced productivity. We argue that the existing literature on technostress fails to generalize in healthcare and thus needs to be extended. We propose that an understanding of how EHR’s contribute to physician burnout is needed. A qualitative study using interviews will be deployed at all three levels of care delivery- primary, secondary and tertiary for a holistic exploration.

**Sponsor:** Oklahoma State University

**PI/PDs:** Corey Baham, Ankita Srivastava, Dursun Delen

**Generational Differences in Handling Technology Interruptions: A Qualitative Study**

Digital native and digital immigrant user types characterize the differences between those who grew up in a world of ubiquitous information systems and those who pre-date it. The rise in computer-mediated communication (CMC) technologies is creating more opportunities for interruption. Researchers have explored the impact of growing up in a world of technology, but little research has been conducted to understand potential differences concerning how different user types handle technology interruptions. This paper examines how individuals handle CMC interruptions differently based on the role of technology and its level of pervasiveness in the environment in which they grew up.

**Sponsors:** Oklahoma State University, Auburn University

**PI/PDs:** Corey Baham, Ramesh Sharda

Auburn University: Pankush Kalgotra

**Signals and Mechanisms for Unintended Consequences in AI: A Grounded Theory Approach**

Artificial Intelligence (AI) technologies such as including machine learning, deep learning, computer vision, and natural language processing, are becoming general-purpose technologies that significantly impact the economic and social structure of organizations and society. However, that impact has not been entirely positive. There have already been many cases where undesirable or negative consequences of AI tools have harmed their respective organizations in social, financial, and legal spheres. This research seeks to uncover common signals and mechanisms that lead to unintended consequences in AI. Using a grounded theory approach, we propose a unifying theoretical framework for unintended consequences in AI projects.

**Sponsors:** Oklahoma State University, Churadata Inc.

**PI/PDs:** Corey Baham, David Biros, Madhav Sharma

Churadata Inc.: Jacob Biros

**Entrepreneurial Organizational Culture, IT-business Alignment, and Firm Agility: A Moderated Mediation**

IT-business strategic alignment is one of the most long-standing managerial challenges. Research differs concerning its impact on firm agility. To better understand this relationship, we study the impact of both intellectual and social alignment on firm agility in the context of entrepreneurial organizational culture (EOC) to account for a firm's level of entrepreneurial intensity. In a field study of 100 CIOs, we find that EOC positively impacts firm agility through mediated and moderated effects of both social and intellectual alignment, respectively. This paper provides a theory-driven explanation of the dynamics of social and intellectual alignment's impact on firm agility.

**Sponsors:** Oklahoma State University, University of Tennessee, Virginia Military Institute

**PI/PDs:** Corey Baham, Andy Luse, Ramesh Sharda

University of Tennessee: Randy Bradley

Virginia Military Institute: Jennifer Gerow

**Bridging the Acceptance-Routinization Gap in Agile Software Development Assimilation: An Exploratory Cross Case Analysis**

Agile software development methods represent a departure from the strong document-driven procedures of plan-driven approaches. As organizations continue to adopt agile methods, understanding how to sustain agile methods is a growing concern. In recent years, researchers have focused their attention on the issues of sustained agile use in order to extend our knowledge on agile assimilation. However, little research has been conducted to expose the assimilation gaps that occur as organizations seek to increase the extent and intensity of their agile use. Following prior literature, we investigate the role of organizational factors in the continuance of agile methods.

**Sponsors:** Oklahoma State University, Louisiana State University, Georgia State University

**PI/PDs:** Corey Baham

Louisiana State University: Rudy Hirschheim

Georgia State University: Likeobe Maruping

**The Moderating Effect of Ambiguity on Fake News and Sensemaking**

Fakes news on the Internet has emerged as an issue with far-reaching consequences. Given fake news’ breadth of influence, depth of consequences, and perpetuity, we extend this line of inquiry to a less studied area - uncertainty-reducing behaviors in fake news online. In this study, we examine ambiguity in fake news and its relationship to information seeking and sensemaking. Our results yield strong theoretical and practical implications for public policy and future research.

**Sponsors:** Oklahoma State University, Louisiana State University

**PI/PDs:** Corey Baham

Louisiana State University: Reginald Tucker

**Data is the Disaster: Data Issues in Disaster Management Scenarios**

The 21st Century has been termed “the century of disasters” (Achenbach, 2011) due to several notorious forms of disasters (e.g., geophysical, hydrological, climatological). Among these, the recent biological disaster of the COVID-19 disease epidemic has seen global impacts. The disastrous effects of COVID-19 have exacted a devastating toll on civil and technological infrastructure and society as a whole (e.g., loss of human life, social and economic disturbances, and industry interruptions and shutdowns).

**Sponsor:** Oklahoma State University

**PI/PDs:** Corey Baham, Andy Luse, Ramesh Sharda, Jared Taylor

**A text-mining based cyber-risk assessment and mitigation framework for critical analysis of online hacker forums**

Online hacker communities are meeting spots for aspiring and seasoned cybercriminals where they can engage in technical discussions, and share exploits and relevant hacking tools to be used in launching cyber-attacks on business organizations. Sometimes, the affected organizations can detect these attacks in advance, with the help of cyber-threat intelligence derived from the explicit and implicit features of hacker communication in these forums. In this research, we develop a novel text-mining based cyber-risk assessment and mitigation framework, which performs the cyber-risk assessment using explicit and implicit features applying various machine learning algorithms, sentiment analysis, and topic detection methods.

**Sponsor:** Oklahoma State University

**PI/PD:** Dursun Delen

**A critical analysis of COVID-19 research literature: Text mining approach**

Among the stakeholders of COVID-19 research, clinicians particularly experience difficulty keeping up with the deluge of SARS-CoV-2 literature while performing their much-needed clinical duties. To discover the major topics and trends, this study proposes a text-mining approach to navigating large volumes of COVID-19 literature (i.e., a corpus of 65,262 articles). We utilized natural language processing to curate and generate the term list. We applied topic modeling analyses and multiple correspondence analyses to reveal the trends and major topics, and the associations among topics, journal countries, and publication sources.

**Sponsors:** Oklahoma State University, University of Alabama – Birmingham

**PI/PDs:** Dursun Delen

University of Alabama – Birmingham: Ferhat D Zengul, Ayse G Zengul, Michael Mugavero, Nurettin Oner, Bunyamin Ozaydin, James H Willig, Kierstin C. Kennedy, James Cimino

**Clustering Temporal Disease Networks to Assist Clinical Decision Support Systems in Visual Analytics of Comorbidity Progression**

Detection and characterization of comorbidity, the presence of more than one distinct disorder or illness concurrently occurring among a specific cohort of patients, is an invaluable decision aid and a prominent challenge in healthcare research and practice. The aim of this study is to design a novel visual analytics system that can support efficient pattern detection and intuitive visualization of comorbidity progression modeled via temporal disease networks (TDNs). Through two case studies on Clostridioides Difficile and stroke, we demonstrate that the proposed system is able to provide evidence-based and visual insights regarding comorbidity progression effectively for clinical decision support.

**Sponsors:** Oklahoma State University, Center for Health Systems Innovation

**PI/PDs:** Dursun Delen

Center for Health Systems Innovation: Yajun Lu, Suhao Chen, Zhuqi Miao, Andrew Gin

**An Investigation of the COVID-19 Characteristics Using HER Data from Cerner DW**

Discovery of new novel patterns related to age, race and gender disparities on hospitalization, length-of-stay and mortality in COVID-19 patients through the use of machine learning and data mining techniques and specifically created database on COVID-19 patients within Cerner HealthFacts data warehouse.

**Sponsors:** Oklahoma State University, Center for Health Systems Innovation

**PI/PDs:** Dursun Delen

Center for Health Systems Innovation: Zhuqi Miao

**Predicting and Explaining Pig Iron Production on Charcoal Blast Furnaces: A Machine Learning Approach**

Pig iron, the source for a variety of iron-based products, is traded in commodity markets. Therefore, enhanced productivity has significant economic implications for the producers. In this study, we design, develop, and deploy novel machine learning models on a rich data sample covering more than 20 production variables spanning nine years of an actual operational period, collected at one of the largest pig iron production plants in Brazil. We show that, given the blast furnace parameters, machine learning models are capable of unveiling novel insights by illuminating the black box and successfully predicting production levels at different configurations.

**Sponsors:** Oklahoma State University, Metalsider - Brazil, Sabanci University – Istanbul, Turkey

**PI/PDs:** Dursun Delen

Metalsider - Brazil: Marcio Salles Melo Lima

Sabanci University - Istanbul, Turkey: Enes Eryarsoy

**A Probabilistic Bayesian Inference Model to Investigate Injury Severity in Automobile Crashes**

One area that has great potential to leverage the value of big data and analytics is the critical analysis of traffic accidents, where results can provide an in-depth understanding of the risks and provide measures to enhance the well-being of individuals involved in such accidents. This study proposes a data science methodology in a field where probabilistic modeling makes much sense for faster, better decision-making. The main objective of this data analytics study is to identify the high-risk factors with their apparent significance to influence the probability of injury severity on automobile crashes using a geographically representative car crash dataset.

**Sponsors:** Oklahoma State University, University of Tulsa

**PI/PDs:** Dursun Delen

University of Tulsa: Kazim Topuz

**Crafting Performance-based Cryptocurrency Mining Strategies Using a Hybrid Analytics Approach**

Crafting and executing the best cryptocurrency mining strategy is vital for success. This study aims to identify the best cryptocurrency mining strategy based on service providers' performance for cryptocurrency mining using a hybrid analytics approach, which integrates the Analytic Hierarchy Process (AHP) and Fuzzy-TOPSIS techniques, along with sensitivity analysis. The results show that hosted mining is the overall best cryptocurrency mining strategy, followed by home mining and cloud mining, based on both total cost of operations and cryptocurrency payout criteria.

**Sponsors:** Oklahoma State University, Ibn Haldun University - Turkey

**PI/PDs:** Dursun Delen

Ibn Haldun University - Turkey: Umit Hacioglu, Dounia Chlyeh, Mustafa K Yilmaz, Ekrem Tatoglu

**To Imprison or Not to Imprison: An Analytics Model for Drug Courts**

Analytics can have a significant social impact on decisioning in drug courts. An alternative to traditional criminal courts, drug courts attempt to identify and transform the traditional punitive jurisprudence to a therapeutic one, where the eligible offenders are considered as individuals in need of rehabilitative treatments and are persuaded to undergo a regimen that seeks to return them back to the community, rather than sending them to prison. This initiative, if performed properly, has proven to be effective in lowering the costs and improving the social outcomes. The current study attempts to develop decision support systems for drug courts.

**Sponsors:** Oklahoma State University, University of Dayton, State of Oklahoma

**PI/PDs:** Dursun Delen

University of Dayton: Hamed M. Zolbanin,

State of Oklahoma: Durand Crosby, David Wright

**Derivation and Validation of Essential Predictors and Risk Index for Early Detection of Diabetic Retinopathy Using Electronic Health Records**

Diabetic retinopathy (DR) is a leading cause for blindness among working-aged adults. The growing prevalence of diabetes urges for cost-effective tools to improve the compliance of eye examinations for early detection of DR. The objective of this research is to identify essential predictors and develop predictive technologies for DR using electronic health records. These predictive technologies can provide an early warning sign that motivates patients to comply with eye examinations for early screening and potential treatments.

**Sponsors:** Oklahoma State University, Center for Health Systems Innovation

**PI/PDs:** Dursun Delen

Center for Health Systems Innovation: Ru Wang, Zhuqi Miao, Tieming Liu, Mei Liu, Kristine Grdinovac, Xing Song, Ye Liang, William Paiva

**Discovering New Patters in COVID-19 Literature Using Text Mining and Topic Modeling**

Although the topic is rather fresh, there seem to be very large and rich literatures already accumulating on COVID-19-related research studies. In this text mining and topic modeling study, we accumulated several thousands of published articles and used data mining, Latent Semantic Indexing, and Latent Dirichlet Analysis (LDA) techniques to characterize the research landscape on COVID-19. The outcome of this research is expected to paint a picture on what has been done, what patterns are found to be significantly consistent, and what else needs to be explored (future research directions) relevant to the characterization and management of this epidemic.

**Sponsors:** Oklahoma State University, University of Wisconsin – Whitewater, University of Dayton

**PI/PDs:** Dursun Delen

University of Wisconsin – Whitewater: Behrooz Davazdahemami

University of Dayton: Hamed Majidi Zolbanin

**Identifying Adverse Drug Events with Big Data Analytics**

In pharmacovigilance terminology, Adverse Drug Event (ADE) is a general term that refers to any injury caused by a medication. Although, pharmaceutical companies conduct rather extensive, time-demanding clinical studies to identify such adversities beforehand, it is not possible to do so for unexpected and slow-moving adverse outcomes. This research aims to discover such ADRs, using Big Data and advanced AI (machine learning techniques). The ultimate goal is to use HER, social media/network, medical literature, and biological/chemical databases to develop inelegant systems that detect ADR, thereby saving human lives.

**Sponsors:** Oklahoma State University, University of Wisconsin - Whitewater

**PI/PDs:** Dursun Delen

University of Wisconsin – Whitewater: Behrooz Davazdahemami

**Improving Student Retention with Predictive Analytics**

Accurately predicting and ranking students that are at risk of attrition is the key component of any retention management system. The goal of this research project is to use historical data to develop machine learning based prediction models to accurately identify the freshmen students that are at a greater risk of dropping out after their first year of college. The system not only predicts those students that are at risk but also prioritizes them based on their likelihood of dropping out so that the limited resources for the intervention and retention programs can optimally be utilized.

**Sponsor:** Oklahoma State University

**PI/PD:** Dursun Delen

**Developing a Decision Support Systems for Predicting the Financial Success of Hollywood Movies**

Motion picture business is one of the riskiest endeavors for investors, especially in today’s ever-changing needs and wants, and likes and dislikes of the potential audience. In this study, we aim at developing a Web-based DSS (which we refer to as Movie Forecast Guru, or MFG in short) for investors, movie producers, distributors, and exhibitors to make better decisions in their selection of movie projects. In addition to predicting the box-office success of potential movie projects, this DSS is also capable of assessing the importance and contribution of movie parameters such as genre, super stars, technical effects, release time, etc.

**Sponsor:** Oklahoma State University

**PI/PD:** Dursun Delen

**Balanced Scorecard-based Analysis of Customer Expectations for Cosmetology Services: A Hybrid Decision Modeling Approach**

The goal of this study is to analyze and characterize customer expectations in the cosmetics sector. By employing a multi-criteria decision analysis methodology, the weighted importance of the underlying criteria is identified, and leading cosmetic service providers are ranked. The findings of the study indicate that consumer-focused criteria (i.e., diversification of services, feedback on the product and services, and customer loyalty) have the most significant impact on the success of the cosmetology firms in Ukraine.

**Sponsors:** Oklahoma State University, Kharkiv National University of Economics - Ukraine, Medipol University - Turkey

**PI/PDs:** Dursun Delen

Kharkiv National University of Economics - Ukraine: Oleksandr Dorokhov, Liudmyla Dorokhova,

Medipol University - Turkey: Hasan Dinçer, Serhat Yüksel

**ICT4D and the Capability Approach: Understanding How Conversion Factors Affect Opportunity and Process Freedoms at the Country-Level**

Prior macro-level research on ICT4Ds has measured country-level development using resource- or utilitarian-based approaches. We argue for a people-centered lens using the capability approach, using opportunity and process freedoms. Four conversion factors of ICTs are identified as enablers/restrictors of opportunity or freedoms. Using archival data and a 2SLS model, we test ICT-cost and ICT-infrastructure, and the interaction of e-participation and freedoms on ICTs to predict a country’s human development (HD). Results suggest that cost and infrastructure significantly affect HD, e-participation interacts with freedoms on ICTs such that freedom is only effective when accompanied by high levels of e-participation within a country.

**Sponsor:** Oklahoma State University

**PI/PDs:** Bryan Hammer, Gabriel Bahr, Andy Luse

**International Technology Diffusion, Development, and Trading Partner Spillovers**

The purpose of this paper is to expand ICT4D literature by investigating the associations between international trade of technology merchandise and development across countries. Using a spatial autoregression model and data on 45 upper-middle and high-income countries from 2009 to 2018, we examine the effects of imports and exports of technology driven trade on two measures of development (GDP and Human Development Index). Additionally, we define spatial borders through a trade partner network and discover spillover effects of trade on development through the associated trading partner countries.

**Sponsor:** Oklahoma State University

**PI/PDs:** Bryan Hammer, Gabriel Bahr, Andy Luse

**The Role of Technological Progress in Vertical Specialization and Economic Growth**

Previous research has studied how ICT adoption impacts trade on economic and human growth. Countries contribute to the global supply chain (GSC) with various levels of intermediate to final production. This research investigates to what extent countries with a higher intermediate to final product trade ratio and a higher IT skills/capabilities see faster levels of growth (GDP & HDI) than countries with lower IT skills/capabilities over time. Using 2SLS and data on 82 countries spanning 2005 to 2015, we examine the moderating impact of IT Skills/Capabilities with vertical specialization on economic growth and human development.

**Sponsor:** Oklahoma State University

**PI/PDs:** Bryan Hammer, Gabriel Bahr, Andy Luse

**The Neuro-Correlates of Information Privacy Concerns and Trust: A Longitudinal Study of Approach-Avoidance Behavior Using EEG**

Privacy research has mainly focused on cognitive, conscious conceptualizations for privacy concerns and trust. Not much is known in how privacy operates in the subconscious mind. We posit, in a privacy-salient context, that trust operates as an approach-mechanism for information sharing; privacy concerns operates as an avoidance-mechanism. Using a longitudinal experimental design, we determine the extent to which levels of privacy influence approach/avoidance behavior. Additionally, whether the order of privacy level influences sharing behavior.

**Sponsor:** Oklahoma State University

**PI/PDs:** Bryan Hammer, Andy Luse

**The Role of Psychological Contract Violations in Social Media Platforms**

Online business entities rely on privacy seals and user agreements to facilitate user information sharing. Interactions among users of social media platforms (SMP) do not rely on user agreements. As a form of social exchange, information sharing on SMPs uses a psychological contract (PC; implicit and assumed reciprocal obligations). This study investigates how PC violations (PCVs) affect sharing intentions on SMPs. We find that sharing intention is negatively influenced by interpersonal and institutional PCVs through privacy concern and trust. PCV by another user positively influences the perceived violation by the SMP, suggesting a collateral damage of interpersonal-PCV towards the SMP.

**Sponsors:** Oklahoma State University, Oregon State University

**PI/PDs:** Bryan Hammer

Oregon State University: Forough Nasirpouri Shadbad

**Privacy as a Multidirectional Problem: A Social Relations Model of The Reciprocation of Privacy and Trust Using Network Analysis**

Previous research on privacy (IS, Marketing, Management, Psychology, etc.) models information exchange in privacy salient situations as unidirectional, often from the perspective of a single user. As a social construct, privacy operates in social exchanges in which information moves between and among groups of individuals. Using network analysis, we model privacy and trust within a social relation model. Data come from an organization that uses a social media platform as its primary communication tool. We determine that trust is a reciprocating mechanism within relationships; however, privacy information concerns are not reciprocated, especially between management and subordinate relationships.

**Sponsor:** Oklahoma State University

**PI/PDs:** Bryan Hammer, Andy Luse

**Information Sharing as a Multidimensional Phenomenon: A Multilevel Study of Multiplex Relationships, Privacy, and Trust in Social Media Platforms**

Research on privacy and trust often model relationships (interpersonal, business-consumer, etc.) as unidimensional, lacking depth. Prior research indicates multidimensional relationships enhance trust, resource sharing, and satisfaction. This research proposes that multidimensional (i.e. multiplex) relationships increase trust, decrease privacy concerns, and increase information sharing in social media platforms (SMP). Data was gathered from an organization utilizing Facebook as their primary communication platform. Results suggest that more multiplex relationships lead to information exchange, especially when information sensitivity increases.

**Sponsor:** Oklahoma State University

**PI/PDs:** Bryan Hammer, Andy Luse

**The Fear of Social Exclusion and Our Need to Belong: A Study of Interpersonal Privacy and Trust in Social Media Platforms**

All individuals have an innate desire to belong to society in order to reduce costs of living as well as experience a reciprocation of welfare. Social media platforms (SMP) provide a vehicle that delivers a means to experience this. This research proposes that individuals’ fear of social exclusion and goal-directed enjoyment leads to information sharing in SMP While enjoyment influences all types of information (low, medium, high), social exclusion only influences sharing of low-sensitive information. Interpersonal trust leads to high-sensitive information sharing, but not medium- or low-sensitive; interpersonal privacy concern decreases medium- and low-sensitive information sharing, but not high.

**Sponsor:** Oklahoma State University

**PI/PDs:** Bryan Hammer, Andy Luse

**The Antecedents of Habit on IS Continuance**

This study theorizes the antecedents of the habit construct in hedonic IS usage. Studies of habit in IS investigated habit as a construct in both utilitarian and hedonic contexts, but the link between habit and hedonic IS usage isn't fully understood. Investigating the antecedents of habit should help establish a clearer picture. We investigate social network site and online gaming users through MTurk anonymous surveys to better understand the link between habit and antecedents from the literature.

**Sponsor:** Oklahoma State University

**PI/PDs:** Bryan Hammer, JeromeKirtley, Andy Luse

**Interruptions and Information Recall: Differences Between Virtual and Face-to-Face Learning**

This study investigates the link between sensory interruptions and information recall in computer-mediated learning. There is a dearth of literature concerning sensory interruptions in IS literature and with the rising prevalence of virtual learning in the current environment, investigation of this phenomenon is critical. We will conduct an experiment combined with a survey to assess the effect of visual and audio interruptions on information recall.

**Sponsors:** Oklahoma State University

**PI/PDs:** Bryan Hammer, JeromeKirtley, Andy Luse

**Are You Game? A Meta-Analysis of Gamified Elements and Behavioral Outcomes**

Commercial systems contribute increasing business value by playing a pivotal role in enhancing performance of firms (Melville et al. 2004). Despite the proliferation of technology in our lives, creating systems that maintain user engagement is a struggle for vendors. Previous research has investigated the interplay between gamified elements and user interaction. Using a meta-analysis approach, this research investigates hundreds of published research to investigate the saliency of gamified elements with different types of users and systems.

**Sponsors:** Oklahoma State University, Oregon State University

**PI/PDs:** Bryan Hammer, Andy Luse, Gabriel Bahr, Jerome Kirtley

Oregon State University: Forough Nasirpouri Shadbad

**Hacking the Value Gap: Cybersecurity Investments, Cybersecurity Talent, and** **Vulnerability Relative to Peers**

Cybersecurity investments, when publicly emphasized, create economic rents through gained legitimacy from stakeholders and a reduction in the cost of capital. The results suggest: 1) Publicly Emphasizing Cybersecurity Investments (PECI) are associated with a generally positive value as measured by Tobin’s q, return on assets, and return on sales, 2) PECIs accompanied by security talent generate significantly higher gains, and 3) PECIs are more profitable for under-performing firms as well as over-performing firms. While PECIs without sufficient talent support does not significantly reduce subsequent cyber breaches, it generates market rewards for under- and over-performing firms.

**Sponsors:** Oklahoma State University, City University of Hong Kong, Temple University, Purdue University

**PI/PDs:** Bryan Hammer

City University of Hong Kong: TJ Zhang

Temple University: Taha Havakhor

Purdue University: Mohammad Rahman

**Do I need to be liked to do my job? Perception on Information Security staff and Success of Cooperative Security Operations**

This research examines the effect of employees’ perception on their information security staff on the success of security operations. The extent research has identified various mechanisms, such as sanctions, incentives, and employee training programs, that can improve the performance of information security. We propose that how employees perceive their security team (e.g., controller, projector, enabler, etc.) also plays critical roles, directly and indirectly, in security operations by encouraging or discouraging security-enhancing behaviors. The study will extend the model of security enhancing behaviors and suggest additional methods to improve information security controls.

**Sponsor:** Oklahoma State University

**PI/PD:** JinKyu Lee

**The Role of Individual Differences in Acceptance of Information Security Policies**

Previous studies on corporate information security pointed out that employee incompliance is a major causes of information security incidents. While extant literature suggests that organizations can adopt various incentives and training programs to encourage employees’ compliance with information security policies, most studies considered employees as an invariant group of people regardless their paygrade, job type, industry, etc. In this study, we explore personal factors that can moderate employees’ conformity level in presence of compliance incentives and training programs. This study will identify major personal dispositions that can cause the disparity in policy compliance behaviors and propose a solution.

**Sponsor:** Oklahoma State University

**PI/PD:** JinKyu Lee

**Technical Control or Managerial Control? – A Decision Making Framework for Infosec Control Selection**

Employee training has been widely recognized as one of the most important means to strengthen the information security posture of an organization. However, its complementary and supplementary roles with technical measures in a corporate security architecture has not been clearly understood. This study examines the effectiveness of employee trainings on organizational security posture in relation to technical security countermeasures for various types of information security threats. This study will focus on identifying underlying characteristics that determine the control effectiveness and develop a decision-making framework for managers who need to select an optimal mix of technical and managerial security controls.

**Sponsor:** Oklahoma State University

**PI/PD:** JinKyu Lee

**Strong vs. Weak Theory:  An Evaluative Mechanism for Theoretical Development**

The goal of many theoreticians is to develop sound theory that will be utilized within their field both by researchers and practitioners.  Yet, scholars have not arrived at a consensus concerning what constitutes appropriate theoretical structure. In this paper, we offer an approach to theory design and analysis based on a categorization of strong and weak theory structure.  We first offer a concrete definition of the meaning of strong and weak theory that is based on a variety of literature. Second, we apply this evaluative framework to a prominent stream of theory development and discuss the nature of theory evolution.

**Sponsors:** Oklahoma State University, Iowa State University

**PI/PDs:** Andy Luse, Bryan Edwards

Iowa State University: Anthony Townsend

**Does Technology Thwart Gender Stereotypes: An Impression Formation-based Examination of the Differential Influence of Technology across Gender and Message**

This research examines the relationship between gender, message bias, and technology use on the way that observers form impressions of others. Building on impression formation and gender stereotype research and theory, we develop a two-study research methodology for examining how impressions are formed of technology users. The results of our two studies indicate that technology use is an important component in impression formation, significantly inhibiting the effects of gender stereotyping, such that women and men are not evaluated differently based upon their apparent competency in using technology nor on the content of their messaging.

**Sponsors:** Oklahoma State University, Iowa State University

**PI/PDs:** Andy Luse

Iowa State University: Anthony Townsend

**Company-Sponsored Online Co-Creation and Financial Incentives: The Impact of Intrinsic Motivation on Participation Intention**

In this study, we use LEGO Ideas, a prominent COCB, as an exemplar and employ a between-subjects randomized experimental design to examine the effect of different types of financial incentives on IM’s impact on participation intention in a COCB context, either directly or indirectly through personal innovativeness in the domain of information technology. Our findings suggest that focused financial incentives, representing situations where financial rewards are administered exclusively on the basis of excellent performance, offer the best outcome for predicting PI. Findings provide support for cognitive evaluation theory and insight into the role of financial incentives in a COCB context.

**Sponsors:** Oklahoma State University, Iowa State University

**PI/PDs:** Andy Luse

Iowa State University: Anthony Townsend, Sidharth Baswani

**Using a Virtual Lab Network Testbed to Facilitate Real-world Hands-on Learning in a Networking Course**

The use of an Internet testbed technology named ISEAGE allows students to design and implement fully functional networks using public IP space that is contained in the testbed. To the students, it appears as if they were directly connected to the Internet while still being protected. This paper shows that ‘real world’ projects using virtual lab technology can have a positive effect both on objective networking knowledge, as well as subjective self-assessments of self-efficacy with regard to implementing the technology. It also demonstrates that ‘real world’ final projects encourage student thinking at upper levels of Bloom's taxonomy.

**Sponsors:** Oklahoma State University, Iowa State University

**PI/PDs:** Andy Luse

Iowa State University: Julie Rursch

**Gophish: Implementing a Real-World Phishing Exercise to Teach Social Engineering**

Social engineering is a large problem in our modern technological world, but while conceptually understood, it is harder to teach compared to traditional pen testing techniques. This research details a class project where students implemented a phishing exercise against real-world targets. Through cooperation with an external corporate partner, students learned the legal, technical, behavioral, analysis, and reporting aspects of social engineering. The outcome provided both usable data for a real-world corporation as well as valuable educational experience for the students.

**Sponsor:** Oklahoma State University

**PI/PDs:** Andy Luse, Jim Burkman

**This Isn’t Your Parent’s TV Show…Oh Wait, It Is**

Whether it be old games, books, technology, movies, or TV shows, the prevailing thought is that the younger generation prefers newer things. While this view may be perpetuated online and in popular press, it may also be less than accurate as data actually shows younger generations preferring older content. Utilizing Uses and Gratifications Theory, this research tests this assumption by tracking favorite TV shows of Millennials and Gen Z’ers over a seven-year period. Results show that these individuals actually prefer non-current TV shows and that the level of “non-currentness” of their preference is growing over time.

**Sponsor:** Oklahoma State University

**PI/PDs:** Andy Luse, Jim Burkman

**Wearables in the Workplace: Examination Using a Privacy Boundary Model**

Wearable types can take many forms but this study focuses on RFID wearables due to their low cost, proven durability and reusability (Zhu & Hou, 2020). This research investigates the use of RFID wearables in the context of a corporate environment. Utilizing privacy boundary research, findings show that while being monitored negatively impacts employee satisfaction, this satisfaction further varies based on the voluntary nature of the implementation and the gender of the employee. Findings suggest that greater transparency in implementation may alleviate some of the negative aspects of implanting such technologies in the workplace.

**Sponsor:** Oklahoma State University

**PI/PDs:** Andy Luse, Jim Burkman

**Hot or Not: The Impact of Self-Perceived Facial Attractiveness on Webcam Use During Virtual Meetings**

This research investigates the impact of facial attractiveness in the decision of an individual to display their webcam during a videoconference. Results show that while men are driven by self-views of their own facial attractiveness, women are instead driven by their beliefs about what others think of their facial attractiveness. This provides important information for those who wish to create a richer interaction for the widespread use of videoconferencing tools.

**Sponsor:** Oklahoma State University

**PI/PDs:** Andy Luse, Jim Burkman, Erin Stewart

**Hackalytics: Using Computer Hacking to Engage Students in Analytics**

This teaching brief describes a novel approach to teaching analytics through computer hacking. Students are exposed to the entire data lifecycle by first collecting intrusion detection data through the hacking of other student machines and then utilizing simple analytics procedures to analyze this data. Quantitative and qualitative results show that the students enjoy the activity both in terms of the fun of hacking their fellow classmates as well as analyzing this data in an area less utilized in analytics instruction – security analytics. Three levels of the exercise are provided as well as how-to materials for students to run the exercise.

**Sponsors:** Oklahoma State University, Oregon State University

**PI/PDs:** Andy Luse

Oregon State University: Forough Shadbad

**Best of Both Worlds: The Inclusion of Gamified Elements in Virtual Lab Environments to Increase Educational Value**

This research explores the idea of investigating both contexts within one unified platform. We examine whether using gamified elements within virtual labs is effective in enhancing learners’ educational performance. Particularly, we employ leaderboards as a motivational gamification mechanism for more engagement and participation that can result in higher learning outcomes. Using a sample of students, our results show that utilization of gamification within a virtual lab environment causes students to exhibit higher performance in terms of more task accomplishments (specifically those tasks that are more complex in nature) and higher self-efficacy.

**Sponsors:** Oklahoma State University, Oregon State University

**PI/PDs:** Andy Luse, Gabe Bahr, Bryan Hammer

Oregon State University: Forough Shadbad

**Positive Spillover Effects of Mask Mandate Policy and COVID-19 Spread**

The mean daily case growth dropped 1.5 to 2.9 percent more following mask mandates for cities subject to the policy relative to non-mandate cities. We also examined whether mask mandate effects spilled over to neighboring municipalities without mandates and found evidence that spillover effects do occur. The spillover framework extends work in relational mobility to demonstrate that a relationally mobile society can have not only negative effects with regard to the spread of the virus, but also positive effects with regard to mask wearing spillover. This argues that mask mandates by major metro areas can be beneficial to neighboring communities.

**Sponsor:** Oklahoma State University

**PI/PDs:** Andy Luse, Greg Eaton, Jared Taylor, Ramesh Sharda

**Learned Helplessness Attributional Scale (LHAS): Development and Validation of an Attributional Style Measure**

In answer to the call to increase the use of attribution theory, we look to both the theory of learned helplessness and Weiner’s attribution theory to create a new set of scales to provide a stable, parsimonious instrument for measuring attributions. Twelve sections of four courses across ten semesters were used to develop the scales and test them across groups and time. The final result is a new measurement tool, the Learned Helplessness Attribution Scale (LHAS), that demonstrates solid psychometric properties.

**Sponsor:** Oklahoma State University

**PI/PDs:** Andy Luse, Jim Burkman

**Blocking Effects of Information Sensitivity and Approach-avoidance Disposition on Online Information Disclosure: A Longitudinal Experiment Using EEG**

We theorize that an overarching approach-avoidance mechanism drives information disclosure in which privacy- and trust-related concepts are driven by avoidance tendencies and approach tendencies, respectively. We posit blocking effects and approach-avoidance dispositions explain the inconsistencies. Using a longitudinal experimental design with EEG, we found that while sharing behavior of low sensitive information is not affected by either the approach-avoidance tendencies of the individual or initial information exposure, the sharing of highly sensitive information is significantly affected by both, such that disclosure is negatively impacted by initial exposure to highly sensitive information for those who display avoidance tendencies.

**Sponsor:** Oklahoma State University

**PI/PDs:** Andy Luse, Bryan Hammer

**Information Sharing as a Multidimensional, Dyadic Problem: A Multilevel Study of Multiplex Relationships, Privacy, and Trust**

Using network theory, we theorize that privacy concerns, trust, and information sharing occur at two levels: relational (i.e., dyadic) and individual. Relationships characterized as multiplex, or more multidimensional, are richer and experience greater trust while reducing privacy concerns. Utilizing data collected from an organization using Facebook as their communication and organization platform, we analyze our data using a Bayesian multilevel model approach. Our results indicate that privacy concerns operate mainly through the individual level while trust operates at the relational level. Our findings suggest that privacy mechanisms are more complex than previously modeled and that they depend on interpersonal relationships.

**Sponsor:** Oklahoma State University

**PI/PDs:** Andy Luse, Bryan Hammer

**Are Some Countries Wasting Their Time and Money with ICT4D Initiatives? A Process Freedom Approach to Understanding ICT4D Barriers**

Using publicly available archival data and a 2SLS model with instrumental variables, we test ICT cost, ICT infrastructure, and the interaction effect between e-participation and freedom of expression on ICTs to predict a country’s human development. Results suggest that both ICT cost and infrastructure significantly affect human development and that e-participation interacts with freedom of expression on ICTs in a way that freedom of expression is only effective when accompanied by high levels of e-participation within a country.

**Sponsor:** Oklahoma State University

**PI/PDs:** Andy Luse, Bryan Hammer, Gabe Bahr

**Journal Rankings and Impact Factors: A Comparative Analysis**

Publishing in journals of high quality and reputation has become increasingly important for faculty performance reviews, promotion and tenure. The jury is still out regarding the best way to assess publications and varies widely among universities. Traditionally, international universities have depended more on impact factors while nationally, results of journal ranking studies have taken precedence over impact factors which are based on cite scores. This study investigates journal rankings and impact factors for business related publications looking at the correlation between the two.

**Sponsor:** Oklahoma State University

**PI/PD:** Jeretta Horn Nord

**Critical Components in Organizational Performance**

Organizational performance is one of the most important factors leading to a company’s success. Recognizing the vital role of competencies, knowledge-oriented leadership, and innovation in organizations, there is a need to study how these variables affect organizational performance. This research builds a model with four constructs, i.e., competencies, knowledge-oriented leadership, innovation, and performance within manufacturing companies to find out, through path modeling, 1) the effect of competencies on innovation, 2) the effect of knowledge-oriented leadership on innovation, and 3) the effect of innovation on performance. The survey instrument included four constructs – Competencies, Knowledge-oriented Leadership, Innovation, and Performance.

**Sponsor:** Oklahoma State University

**PI/PDs:** Jeretta Horn Nord, Alex Koohang, Joanna Paliszkiewicz, Marcin Soniewicki

**Data Analytics in Organizations: Leadership, Management, Talent, and Performance**

The success of today’s organizations depends on data analytics—obtaining data, analyzing it, and using the results to make informed decisions. Although the significance of analytics is recognized more than ever by those in businesses, many lack the leadership and talent to optimize the transition from data analytics to data-driven decision making. This research investigates the state of data analytics in organizations through an investigation of leadership, management, talent, and performance.

**Sponsor:** Oklahoma State University

**PI/PD:** Jeretta Horn Nord

**The Internet of Things (IoTs)**

Those in the emerging digital world have recently witnessed the proliferation and impact of IoT-enabled devices. The Internet of Things (IoTs) has provided new opportunities in the technology arena while bringing security, privacy, and trust challenges to an increased level of concern. This research investigates the usage, benefits, and challenges of IoTs in organizations. The research has both practical and theoretical impetus since IoT is still in its infancy, yet is considered by many as the most important technology initiative of today.

**Sponsor:** Oklahoma State University

**PI/PD:** Jeretta Horn Nord

**Using the Gaussian Copula to Generate the Predictive Distribution in Monotonic Nonlinear Models: An Efficient Resampling Approach**

We present a resampling approach for generating the predictive distribution of a dependent variable that has monotonic nonlinear relationships with its predictors. The procedure provides an empirical estimate of the predictive (conditional) distribution in terms of the original variables without requiring analyst intervention to identify appropriate transformations (and back-transformations) of variables. This allows predictions based on the estimated conditional expectation, and prediction intervals based on the estimate of conditional variance. It employs the well-known Gaussian copula, is easily implementable and is computationally efficient.

**Sponsors:** Oklahoma State University, University of Oklahoma

**PI/PDs:** Rathindra Sarathy

University of Oklahoma: Krish Muralidhar

**When will I get out of the hospital? Modeling Length of Stay using Comorbidity Networks**

Using the EMR hosted by CHSI, we build models for predicting hospital length of stay by incorporating historical and probable comorbidities that a patient is likely to face during their hospital stay. The results show significant improvement in predictive performance.

**Sponsors:** Oklahoma State University, Auburn University

**PI/PDs:** Ramesh Sharda

Auburn University: Pankush Kalgotra

**Pandemic Information Support Lifecycle: Evidence from the Evolution of Mobile Apps during COVID-19**

We propose apandemic information support lifecycle (PISL) consisting of five phases: awareness, preventive care, active information, confidence building and evaluation. We validated this PISL using analysis of the mobile apps developed worldwide.

**Sponsors:** Oklahoma State University, Auburn University

**PI/PDs:** Ramesh Sharda

Auburn University: Pankush Kalgotra, Ashish Gupta

**Examining multimorbidity differences across racial groups: a network analysis of electronic medical records**

Using the EMR hosted through CHSI, we study health differences by analyzing multi-morbidities among seven population groups based on race. Our multimorbidity network analysis identifies specific differences in diagnoses among different population groups, and presents questions for biological, behavioral, clinical, social science, and policy research.

**Sponsors:** Oklahoma State University, Auburn University

**PI/PDs:** Ramesh Sharda, Julie Croff

Auburn University: Pankush Kalgotra

**What should I believe? Exploring information validity on social network platforms**

We develop a theoretical framework to explore the accuracy and objectivity of oscial networks content by employing social capital theory. The proposed and validated measures can help assign an accuracy and objectivity score to a conversation taking place in social media.

**Sponsors:** Oklahoma State University, Wright State University

**PI/PDs:** Ramesh Sharda

Wright State University: Daniel Asamoah

**How Can Our Tweets Go Viral? Point-Process Modelling of Brand Content**

We develop and test stochastic models based on Hawke’s process to be able to predict which tweets are likely to go viral.

**Sponsors:** Oklahoma State University, Wright State University

**PI/PDs:** Ramesh Sharda

Wright State University: Amir Hasan Zadeh

**Analytics/Data Science Decision Support for Management of Oklahoma COVID pandemic**

We assist the State of Oklahoma with data accuracy analyses and positivity rate changes to better understand and mitigate the Covid-19 pandemic.

**Sponsors:** Oklahoma State Department of Health

**PI/PDs:** Ramesh Sharda, Andy Luse

**COVID Increase Drives Decrease in Travel Risk Perception**

This is a comparative analysis of perceived international travel risk immediately prior to COVID outbreak and in the months following most airlines returning to near full capacity.

**Sponsor:** Oklahoma State University

**PI/PD:** Mark Weiser

**Task-based Self-efficacy and Perception Changes from Short-term Study Abroad Experiences**

This study evaluates the practical value of short-term faculty-led study abroad experiences to increase an individual's efficacy in tasks specifically related to traveling and interacting abroad, and in comfort and security perceptions about the country of travel and other countries.

**Sponsor:** Oklahoma State University

**PI/PD:** Mark Weiser

**Close to Home: A Survey of Municipal Policies for Short-term Home Rentals**

This study surveys municipal legislation from small cities in which a Division 1 FBS school is located to categorize approaches in developing home-sharing markets.

**Sponsor:** Oklahoma State University

**PI/PD:** Mark Weiser

**Impacts of Smart Technology on Short-term Rentals Operations**

This study analyzes the financial and operational impacts of deploying smart technologies in short-term rentals. Landlords are usually not co-located with lodging units rented through short-term agents, such as Airbnb and VRBO. Application of smart thermostats, plugs, and energy monitors can have a significant impact on costs without a comparable increase in operational burden. Using a case study of five properties, we assess the impact of these devices and explore additional benefits derived from behavioral changes by tenants due to the presence of these devices.

**Sponsor:** Oklahoma State University

**PI/PD:** Mark Weiser