

***Journal of
Contemporary
Business
Issues***

Vol. 24, No. 1, 2019

**Published by:
*Western Illinois University
College of Business & Technology
Macomb, IL U.S.A.***

**Co-Editors:
*James L. Patterson & William J. Polley***

Journal of Contemporary Business Issues

**Western Illinois University
College of Business & Technology
One University Circle
Macomb, IL 61455-1390**

www.wiu.edu/cbt/jcbi

**Established 1988
ISSN: 1553-5347**



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Volume 24, Number 1, 2019

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**FACTORS THAT PREDICT WORKPLACE ABUSE:
AN ORGANIZATIONAL AUDIT**

**Dr. Lisa A. Burke-Smalley
University of Tennessee at Chattanooga**

**Dr. Alexandra I. Zelin
University of Tennessee at Chattanooga**

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FACTORS THAT PREDICT WORKPLACE ABUSE: AN ORGANIZATIONAL AUDIT

Increasingly documented in the media are accounts of workplace bullying, harassment, incivility, and sundry forms of abuse that negatively impact the cultural and economic health of organizations and the psychological and physiological well-being of their workers. In this article, we review the extant literature to document the numerous contextual, relational, and individual antecedents of workplace abuse that managers should be aware of and manage proactively. Using our article, organizations can perform a necessary audit to ensure they are preventing the influences that precipitate toxic workplace behaviors.

INTRODUCTION

Increasingly documented in news media, popular press, and academic literature are accounts of workplace bullying, harassment, incivility, and sundry forms of abuse. These toxic work environments work to negatively impact the cultural and economic health of organizations and the psychological and physiological well-being of their workers (Aquino and Thau, 2009).

For example, a recent *Sports Illustrated* article on former Carolina Panthers' owner Jerry Richardson detailed numerous comments from employees about their abusive context. "You look back and it's wackadoo," said one former Carolina employee. "You felt preyed upon. You felt fear. You felt self-doubt" (Wertheim and Bernstein, 2017). Another example comes from a population especially prone to abuse, i.e., an immigrant worker, Leticia Zuniga, who worked as a nightshift janitor. When describing an alleged assault by her manager, she stated, "I felt trapped in a world where I could not speak" (Taddonio, 2017). What is striking about such examples is the toll on workers' psychological and physical well-being. Indeed, documented outcomes for abused workers include an increase in job stress and health problems, as well as a decrease in emotional well-being (Aquino and Thau, 2009). The established organizational implications of abuse include higher absenteeism, lower organizational performance, and dysfunctional worker retention (Aquino and Thau, 2009; Bowling and Beehr, 2006; Tepper, 2000).

In this article, we review the extant literature to document the numerous contextual, relational, and individual antecedents of workplace abuse that managers should be aware of and can use for targeted intervention. Using our work, organizations can perform a comprehensive audit to be resilient to the development of detrimental worker behaviors that can result in dreaded media exposure and debilitating economic, social, and individual outcomes.

OVERVIEW OF WORKPLACE ABUSE

Abuse in the workplace varies by type, frequency, severity, and visibility to others. For instance, abuse can range from subtle acts of discourteous treatment to unwanted touching, such as sexual assault (Hodgins, MacCurtain, and Mannix-McNamara, 2014). However, all forms of workplace abuse – whether dubbed as bullying, harassment, incivility, or even criminal behavior – represent a form of mistreatment.

Consistent with Crawshaw (2009), we define workplace abuse as any act of aversive mistreatment, occurring over time or as a one-time event, against another person within the organization. While the inherent definition of workplace abuse implies a power imbalance (Salin, 2003), we do not specify a relationship of the abuser to the victim given that the abuse can originate from a superior, coworker, subordinate, client, and/or member of the general public (e.g., customer, guest). Put simply, the sources of abuse are numerous and present critical risk management implications for organizations.

Workplace abuse statistics are staggering, with a study by the Workplace Bullying Institute (2017) finding that 19% of Americans experience bullying at work and 9% indicating they have experienced it within the past year. Using a broader definition of bullying, O'Reilly, Robinson, Banki, and Berdahl (2015) found that 73% of workers have reported being the victim of some form of non-physical aggression within the past calendar year. The numbers are not that much different in Europe; Eurofound (2017) reported that 24% of European employees reported experiencing adverse social behaviors (e.g., verbal abuse, unwanted sexual attention, threats, and humiliating behaviors) in the past month alone. Such statistics exemplify the prevalence of non-physical workplace abuse and the primary type of abuse we emphasize in this paper.

Non-physical abuse in the workplace is typically psychological. Psychological abuse can include both verbal and nonverbal emotional expressions that are unwelcome (e.g., sexual harassment; U.S. EEOC, 1980), violate appropriate conduct standards, and/or cause harm (e.g., smiling while giving negative feedback; Keashly, 1998). Murphy and Cascardi (1999) define psychological abuse as “coercive or aversive acts intended to produce emotional harm or threat of harm.” Relatedly, Mullen and Wenger (2017) estimate that nearly 20% of all employees have experienced psychological abuse within the workplace. In terms of examples, verbal psychological abuse at work could manifest itself in phrases such as, “You are so stupid; can’t you do anything right?” or “That’s Francine, the office ditz.” On the other hand, excluding and ignoring co-workers would be examples of non-verbal psychological abuse (Robinson and Schabram, 2017).

We acknowledge that physical abuse, such as denying breaks to workers (Harrell, 2012) and even sexual assaults (Pina, Gannon, and Saunders, 2009), occurs in the workplace. However, in this article, we focus on the more common verbal and nonverbal psychological forms of workplace abuse (Barling, Dupré, and Kelloway, 2009) and their precipitating influences. Next, we identify factors that set the stage for workplace abuse, as established in the extant literature.

FACTORS THAT PRECIPITATE WORKPLACE ABUSE: AUDIT CHECKPOINTS

In this section, we summarize variables that will likely increase the probability of workplace abuse in a focal organization. Each category of influences at the organizational, relational/group, and individual levels offers a specific “checkpoint” that we encourage top managers to consider when evaluating their organization’s likelihood of devolving into an abusive context.

Organization-level Influences. Prior meta-analyses (Bowling and Beehr, 2006; Hershcovis et al., 2007) reveal that there are numerous organizational attributes increasing the likelihood of abuse in a workplace. Particularly prominent organizational variables that have surfaced include organizational culture, top management/leadership, reward structures, and workplace stressors. All of these components have been documented as contributing to workplace abuse, and each is discussed next.

Organizational culture. The culture of an organization is clearly known to predict the likelihood of abuse (Bowling and Beehr, 2006; The National Academies of Sciences, Engineering, and Medicine, 2018). For instance, Aquino and Lamertz (2004) emphasize that an organization's culture has both a direct and indirect impact on the prevalence of harassment, especially in organizational cultures where incidences are not punished (The National Academies of Sciences, Engineering, and Medicine, 2018; Pearson and Porath, 2005), are ignored, or even rewarded (Brotsky, 1976).

One example, as highlighted in Ulrich's popular press article (2014), includes a company's tolerance of verbal abuse directed toward teammates who are not performing at an expected level. In such instances, the verbal abuse is erroneously presumed to increase loyalty and promote company success although it clearly harms employees (Ulrich, 2014). Therefore, employees are more likely to engage in abusive behavior when it is permissible, even implicitly, within the organization's culture as demonstrated by superiors or influential peers (Brotsky, 1976).

Even victims of workplace abuse claim that mistreatment is dependent upon an organization's culture. For example, Bowling and Beehr (2006) in their meta-analysis note that victims of work abuse often perceive the organization's culture and the ineffectiveness of their human resource staff as actually contributing to their negative experiences. A study of Norwegian employees (Einarsen, Raknes, and Matthiesen, 1994) substantiates this idea; they noted that leadership deficiencies and a generally low ethical and moral company standard contributed to worker abuse. Moreover, Salin (2003) reports that bullying is more common when a workplace culture is stressful and competitive, producing an underlying feeling of harmful conflict among employees. Thus, our first audit checkpoint is:

Checkpoint 1: Does your organizational culture ignore abusive behaviors or fail to punish abusive behaviors? Does the organization ever fail to punish perpetrators of abuse?

Top management/Leadership. Directly related to culture, top managers influence the prevalence of workplace abuse (Hershcovis et al., 2007; McCluney and Cortina, 2017). Because leaders largely shape an organization's culture, their attitudes and behaviors directly impact what is considered as "acceptable conduct" (McCluney and Cortina, 2017, p. 141). Not surprisingly, organizations that have top management members who are respectful of others, actively promote and model respect, and do not engage in abusive behaviors are the least likely to spur forms of aggression within their work environment (McCluney and Cortina, 2017; Pearson and Porath, 2005).

Further, and compatible with previous research on organizational culture, leaders who encourage employees to speak up if they are victims of abuse, thoroughly investigate claims of abuse, and punish perpetrators commensurately are less likely to witness abuse in their organization (Fitzgerald, Drasgow, Hulin, Gelfand, and Magley, 1997; McCluney and Cortina, 2017). Therefore, employees who witness respectful workplace interactions from their supervisors are more likely to engage in those same courteous, civil, and productive behaviors, even if they hold negative feelings toward others (Cortina, 2008). In sum, if a target of workplace abuse perceives members of the organization's top management team as implicitly or explicitly supportive of abusive conduct, more instances of abuse are likely to occur.

Checkpoint 2: Does top management behavior in your organization ever convey a lack of respect or civility?

Reward structures. Typically, receipt of company rewards and perks is positive. However, when any company perk is manipulative, such that the person in charge of those perks also distributes threats toward a lower-level employee, then the perks act as a form of psychological abuse (Ulrich, 2014). Such reward systems are especially dangerous when promotions and direct forms of compensation depend on competitively out-performing one's colleagues (O'Leary-Kelly, Griffin, and Glew, 1996). This is because employees are then more likely to bully colleagues and sabotage others' work to get ahead (Salin, 2003). Put simply, individual-level reward structures can help set the stage for unhealthy workplace behaviors.

Furthermore, employees may use bullying as a shaming tactic to ensure others, such as top managers and peers, know about the poor performers and increase the likelihood that their own successes are recognized (Salin, 2003; Ulrich, 2014). Some workers may even employ harassing behaviors to "force poor performers from a group" when compensation is linked to group performance (Salin, 2003). That is, competitive or manipulative compensation structures can result in abusive co-worker relationships, and managers should be on the look-out for destructive behaviors resulting from such reward designs.

Checkpoint 3: Does your organization's reward system promote unhealthy levels of competition among individual employees?

Workplace stressors. Workplace stressors are regarded as key predictors of workplace abuse. Stressors such as role ambiguity (Salin and Hoel, 2011), role conflict (Skogstad, Einarsen, Torsheim, Aasland, and Hetland, 2007), and role overload (Bowling and Beehr, 2006) are common sources of workplace stress. To concede, these sources are especially challenging to manage given their prevalence in the modern workplace. In addition, a lack of worker control and autonomy (Einarsen et al., 1994), job insecurity (De Cuyper, Baillien, and De Witte, 2009), and interpersonal conflict (Hershcovis et al., 2007) all increase the likelihood of abuse in the workplace. Thus, the abuse literature is clear that stress, as caused by abundant sources, is a common culprit.

In their meta-analysis, for example, Bowling and Beehr (2006) found that role conflict and role ambiguity, again, common workplace stressors, together predicted 21% of the total variance in workplace harassment. This finding is notable for practitioners in that just two sources of stress

were identified as key harassment precipitators. Additionally, Einarsen and colleagues (1994) found that rates of bullying increase when a person's job is routine (i.e., the worker has low personal control in his/her job), the job does not provide cognitive challenges, or work tasks are perceived to have little meaning (Agervold and Mikkelsen, 2004). In summary, the more workplace stressors that exist, the more likely abuse will occur.

Checkpoint 4: Do job and role stressors prevail within your work environment?

RELATIONAL INFLUENCES

As emphasized by researchers (Hershcovis, et al., 2007), relational influences within the workplace also affect the likelihood of abuse. This section focuses on how qualities of social relationships with others can increase the likelihood of workplace abuse. We attempt to highlight the more prevalent relational factors that influence the likelihood of an employee experiencing abuse in an organization.

Bystanders. Latané and Darley (1970) long-ago proposed the concept of bystander behavior through a five-step model.

- (1) Noticing a situation
- (2) Identifying the situation as needing an intervention
- (3) Taking responsibility for providing the intervention
- (4) Deciding how best to intervene
- (5) Taking action to complete their intervention plan

“Active bystanders” notice a situation and take initiative to intervene in the situation, whereas “passive bystanders” notice the situation and choose not to intervene (Banyard, Moynihan, and Plante, 2007; Banyard, Plante, and Moynihan, 2004). Bystander interventions are notably gaining traction and attention in the popular press as managers seek new and effective alternatives to mitigate workplace abuse (Miller, 2017).

Robinson and Schabram (2017) suggest that the inactions of others when witnessing abusive acts “signal to the target that they are not valued or accepted by others” (p. 231), an idea reflected in research by Pearson and Porath (2005) where colleagues heard abuse yet shut their doors to remain uninvolved. Thus, when considering the relational factors that contribute to workplace abuse, it is imperative to investigate how relevant stakeholders tend to react when witnessing various aspects of workplace abuse. Essentially, if targets perceive that no one will come to their aid, they will more likely feel isolated and helpless. Managers should particularly take note that not all workplace abusive acts are visible and evident to others. As such, bystander interventions, while gaining particular notice in the current business reality, cannot be solely relied upon to eliminate workplace abuse.

Checkpoint 5: Are passive bystanders more common in your organization than active bystanders?

Personality profile of a perpetrator. Certain personality traits increase the odds that a person will become a perpetrator of abuse in the workplace. A recent online bullying survey (Wilson and Nagy, 2017) found persons low on agreeableness (i.e., uncooperative, intolerant) and low on emotional stability (i.e., moody, anxious, irritable) tend to be instigators of workplace bullying. Moreover, Wilson and Nagy (2017) also found that perpetrators of workplace bullying are low in conscientiousness (i.e., disorganized, undisciplined) and high in trait anger.

Relatedly, Mathiesen, Einarsen, and Mykletun (2011) discovered that supervisors low in conscientiousness and who are highly neurotic were more likely to engage in bullying, particularly in stressful work contexts, which alone predicts aggression. Perpetrators of workplace abuse have also been reported as high on narcissism (Hershcovis and Reich, 2013), Machiavellianism (Baughman, Dearing, Giammarco, and Vernon, 2012), and possessing a low self-esteem (Hershcovis and Reich, 2013). When taken together, these traits paint a picture of a self-focused, unstable, undisciplined, and volatile worker, who has a difficult time working interdependently with others (Aquino & Thau, 2009). Recruiters and hiring managers can pay attention to these attributes in external and internal candidate sourcing.

Checkpoint 6: Are any of your organization's employees notably low in emotional stability, conscientiousness, and agreeableness, while high on narcissism, Machiavellianism, and trait anger?

Cognitive biases. Not surprisingly, Cortina (2017) asserts that biases held by individuals can influence their engagement in abusive behaviors at work. While current Western culture dictates that engagement in overt discrimination is inappropriate (e.g., displays of overt sexism; Lee, Fiske and Glick, 2010), discriminatory attitudes are still implicitly held in the business reality (Becker, 2010). Many of these biases are unfortunately often held at a subconscious level (Greenwald and Banaji, 1995) making them even more challenging to manage in group behavior.

According to the model of selective incivility, such implicit biases can result in the mistreatment of colleagues who represent certain target groups (e.g., women, people of color; Cortina, Kabat-Farr, Leskinen, Huerta, and Magley, 2013), even without the perpetrators recognizing they are engaging in such harmful behaviors. Without intervention, it is unlikely that perpetrators will be aware of implicit biases or ultimately change their abusive behavior toward others in a target group.

Checkpoint 7: To what degree do your employees' explicit and/or implicit biases negatively impact the treatment of others?

INDIVIDUAL-LEVEL INFLUENCES

In the following section, we discuss individual antecedents of workplace abuse. Specifically, we delineate personal factors that an abusive perpetrator may zone in on.

Personality profile of the target. Personality traits influence which person that perpetrators may choose to abuse (see Cortina, 2017, Perpetrator Predation Model). While the literature reveals some mixed findings in this area, we present the most consistent findings. Workers who are

introverted and emotionally unstable tend to possess fewer social skills and a level of anxiety and negative affect (Aquino and Thau, 2009), which typically preclude them from effectively countering abusive workplace counterparts, thus making them a vulnerable target for abuse.

Coyne, Seigne, and Randall (2000) also found that victims of workplace mistreatment tend to be more introverted and less emotionally stable than non-victims. Similarly, Nielsen and Knardahl (2015) found in their sample of over 3,000 employees that high neuroticism (and low conscientiousness) predicted subsequent victimization at work. Furthermore, victims of workplace bullying have been found to have low social competence, which includes the ability to resolve conflict with others (Hershcovis and Reich, 2013), as well as low agreeableness (Milam, Spitzmueller, and Penney, 2009) and low self-esteem (Matthiesen and Einarsen, 2007).

Checkpoint 8: Are any of your organization's employees notably low in emotional stability, self-esteem, extraversion, and agreeableness? If so, are they typically the targets of workplace abuse?

Degree of Power. While employees in lower job levels report higher levels of abuse in some studies (e.g., Aquino 2000; Hoel, Cooper, and Faragher, 2001), other studies show managers are more likely to be abused than subordinates (e.g., Lamertz and Aquino, 2004). Still other studies demonstrate that organizational hierarchy does not predict victimization (e.g., Aquino and Douglas 2003). As Aquino and Thau (2009) conclude in their review of the literature, there is no crystal-clear delineation of industry, work sector, or job functions that are significantly more associated with workplace abuse. Put simply, power differentials trump job functions.

These findings importantly suggest that it is not necessarily the job that workers are in that predicts whether they will become a victim of abuse. Rather, it is the power differential, real or perceived, that exists between the abuser and the victim (Pearson and Porath, 2005) that will more likely predict who becomes the target of workplace abuse. For example, as Akella (2016) found, bullying is often used as a possible control measure in organizations.

Checkpoint 9: Are there real or perceived power differentials in your organization that are negatively impacting workplace interactions?

Demographics. The research on whether race or gender demographic variables are more likely to make employees targets of abuse is mixed (Aquino & Thau, 2009). Based on the job characteristic of power differentials being a salient predictor of abuse on the job as stated prior (Aquino, 2000; Aquino and Thau, 2009; Einarsen, 1999), numerous researchers indicate that low-status, low power workers (such as women and people of color in lower-level jobs) are more likely to be recipients of workplace abuse (e.g., Buchanan, Settles, and Wood, 2008; Cortina, Kabat-Farr, Leskinen, Huerta, and Magley, 2013). While men can be targets of abuse (Pearson and Porath, 2005), some studies even report greater instances of men being victims than women (e.g., Jennifer, Cowie, and Ananiadou, 2003). Other studies report no gender differences in targets (e.g., Hansen, Hogh, Persson, Karlson, Garde, and Ørbæk, 2006). Because the findings involving race and gender are inconsistent and appear subordinate to power differentials, we do not state a checkpoint but certainly encourage further research in this area.

IMPLICATIONS AND CONCLUSION

This article presents the primary triggers responsible for an abusive workplace context. The checkpoints outlined in our work can be used by top managers, front-line supervisors, and other staff members to perform an organizational audit and direct interventions accordingly. For example, organizations can examine their reward systems to minimize incentives that spawn hyper-competitive work relationships among workers and scrutinize their workplace culture for unnecessary stressors (e.g., role ambiguity) and unsustainable workloads.

More proactively, organizations can screen on individual differences in their talent acquisition and management systems to minimize detrimental personality traits, such as narcissism, Machiavellianism, and psychopathy (see “Dark Triad” in Furnham, Richards, and Paulhus, 2013). Furthermore, those individuals in organizations with power over both positive and negative forms of punishment should be ethical and positive role models, managers, and team leaders should predominate a firm’s management ranks.

Many organizations have also begun to proactively adopt specific anti-aggression policies (Leiter, Peck, and Baccardax, 2017) with multiple reporting channels and offer bystander training or civility training interventions to cultivate a more positive workplace climate. Because little evaluation has been done of such workgroup or training programs, outside of a few field-tested programs (see Leiter, 2012), organizations need to gather and track program metrics. Supportive organizational response systems should certainly be in place; that is, organizations can provide resources to workers who are experiencing forms of abuse by providing stress management curricula, confidential employee assistance programs, and anonymous ethics reporting hotlines.

In terms of options for a target of abuse, Aquino and Thau (2009) suggest various alternatives including leaving the organization, perpetrator avoidance, or possibly internally transferring. One caution we offer with internal transfer is that the target may have a higher probability of re-experiencing abuse in the new position (Ullman and Brecklin, 2002). Also, the perpetrator may reoffend with a new target, particularly if the perpetrator maintains negative biases toward a certain group (Cortina, 2017). In many situations, it will be necessary to remove the abuser from the organization even if they are a high performer or, at a minimum, require formal training and active follow-up to lessen harmful biases (Shields, Zawadzki, and Johnson, 2011).

In conclusion, given increasingly hostile work contexts that contemporary workers confront, it is certain that organizational leaders are looking to researchers for assessment tools and evidence-based mitigation and prevention strategies. This article provides a useful assessment device that organizations can utilize to ascertain points of weakness that need to be addressed in order to increase the cultural and economic health of the firm and the psychological and physiological health of its workers.

REFERENCES

- Agervold, M. and E. G. Mikkelsen (2004), "Relationships between bullying, psychosocial work environment and individual stress reactions," *Work & Stress*, Vol. 18, No. 4, pp. 336-351.
- Akella, D. (2016). "Workplace bullying: Not a manager's right?," *Journal of Workplace Rights*, Vol. 6, No. 1, pp. 1-10.
- Aquino, K. (2000), "Structural and individual determinants of workplace victimization: The effects of hierarchical status and conflict management style," *Journal of Management*, Vol. 26, No. 2, pp. 171-193.
- Aquino, K. and S. Douglas (2003), "Identity threat and antisocial behavior in organizations: The moderating effects of individual differences, aggressive modeling, and hierarchical status." *Organizational Behavior and Human Decision Processes*, Vol. 90, pp. 195-208.
- Aquino, K. and K. Lamertz (2004), "A relational model of workplace victimization: social roles and patterns of victimization in dyadic relationships," *Journal of Applied Psychology*, Vol. 89, No. 6, pp. 1023.
- Aquino, K. and S. Thau (2009), "Workplace victimization: Aggression from the target's perspective," *Annual Review of Psychology*, Vol. 60, pp. 717-741.
- Banyard, V. L., M. M. Moynihan, and E. G. Plante (2007), "Sexual violence prevention through bystander education: An experimental evaluation," *Journal of Community Psychology*, Vol. 35, No. 4, pp. 463-481.
- Banyard, V. L., E. G. Plante, and M. M. Moynihan (2004), "Bystander education: Bringing a broader community perspective to sexual violence prevention," *Journal of Community Psychology*, 32(1), pp. 61-79.
- Barling, J., K. E. Dupré, and E. K. Kelloway (2009), "Predicting workplace aggression and violence," *Annual Review of Psychology*, Vol. 60, pp. 671-692.
- Baughman, H., S. Dearing, E. Giammarco, and P. Vernon (2012), "Relationships between bullying behaviours and the Dark Triad: A study with adults," *Personality and Individual Differences*, Vol. 52, No. 5, pp. 571-575.
- Becker, J. C. (2010), "Why do women endorse hostile and benevolent sexism? The role of salient female subtypes and internalization of sexist contents," *Sex Roles*, 62(7-8), pp. 453-467.
- Bowling, N. A. and T. A. Beehr (2006), "Workplace harassment from the victim's perspective: A theoretical model and meta-analysis," *Journal of Applied Psychology*, Vol. 91, pp. 998-1012.

- Brodsky, C. M. (1976), *The Harassed Worker*. Toronto: Lexington Books, DC Heath and Company.
- Buchanan, N. T., I. H. Settles, and K. C. Woods (2008), "Comparing sexual harassment subtypes among black and white women by military rank: Double jeopardy, the jezebel, and the cult of true womanhood," *Psychology of Women Quarterly*, Vol. 32, pp. 347-361.
- Cortina, L. M. (2008), "Unseen injustice: Incivility as modern discrimination in organizations," *Academy of Management Review*, Vol. 33, No. 1, pp. 55-75.
- Cortina, L. M. (2017), "From victim precipitation to perpetrator predation: Toward a new paradigm for understanding workplace aggression," N. Bowling and M. S. Hershcovis (Eds.), *Research and Theory on Workplace Aggression*. New York: Cambridge University Press, pp. 121-135.
- Cortina, L. M., D. Kabat-Farr, E. A. Leskinen, M. Huerta, and V. Magley (2013), "Selective incivility as modern discrimination in organizations evidence and impact," *Journal of Management*, Vol. 39, pp. 1579-1605.
- Coyne, I., E. Seigne, and P. Randall (2000), "Predicting workplace victim status from personality," *European Journal of Work and Organizational Psychology*, Vol. 9, No. 3, pp. 335-349.
- Crawshaw, L. (2009), "Workplace bullying? Mobbing? Harassment? Distraction by a thousand definitions," *Consulting Psychology Journal: Practice and Research*, Vol. 61, No. 3, pp. 263-267.
- De Cuyper, N., E. Baillien, and H. De Witte (2009), "Job insecurity, perceived employability and targets' and perpetrators' experiences of workplace bullying," *Work & Stress*, Vol. 23, No. 3, pp. 206-224.
- Einarsen, S. (1999). "The nature and causes of bullying at work," *International Journal of Manpower*, Vol. 20, pp. 16-27.
- Einarsen, S., B. R. I. Raknes, and S. B. Matthiesen (1994), "Bullying and harassment at work and their relationships to work environment quality: An exploratory study," *European Journal of Work and Organizational Psychology*, Vol. 4, No. 4, pp. 381-401.
- Eurofound (2017), **Sixth European Working Conditions Survey – Overview Report (2017 update)**. Luxembourg: Publications Office of the European Union, Retrieved from <https://www.eurofound.europa.eu/publications/report/2016/working-conditions/sixth-european-working-conditions-survey-overview-report>.
- Fitzgerald, L. F., F. Drasgow, C. L. Hulin, M. J. Gelfand, and V. J. Magley (1997), "Antecedents and consequences of sexual harassment in organizations: A test of an integrated model," *Journal of Applied Psychology*, Vol. 82, No. 4, pp. 578.

- Furnham, A., S. C. Richards, and D. L. Paulhus (2013), "The Dark Triad of personality: A 10 year review," *Social and Personality Psychology Compass*, Vol. 7, No. 3, pp. 199-216.
- Greenwald, A. G. and M. R. Banaji (1995), "Implicit social cognition: Attitudes, self-esteem, and stereotypes," *Journal of Personality and Social Psychology*, Vol. 102, pp. 4-27.
- Hansen, Å. M., A. Høgh, R. Persson, B. Karlson, A. H. Garde, and P. Ørbaek (2006), "Bullying at work, health outcomes, and physiological stress response," *Journal of Psychosomatic Research*, Vol. 60, No. 1, pp. 63-72.
- Harrell, E. (2012), "Workplace violence, 1993-2009," Bureau of Justice Statistics Special Report," Washington, DC: US Department of Justice, Office of Justice Programs. BiblioGov.
- Hershcovis, M. S. and T. C. Reich (2013), "Integrating workplace aggression research: Relational, contextual, and method considerations," *Journal of Organizational Behavior*, Vol. 34, pp. S26-S42.
- Hershcovis, M. S., N. Turner, J. Barling, K. A. Arnold, K. E., M. Dupré, M. LeBlanc, and N. Sivanathan, (2007), "Predicting workplace aggression: A meta-analysis," *Journal of Applied Psychology*, Vol. 92, No. 1, pp. 228-238.
- Hodgins, M., S. MacCurtain, and P. Mannix-McNamara (2014), "Workplace bullying and incivility: A systematic review of interventions," *International Journal of Workplace Health Management*, Vol. 7, pp. 54-72.
- Hoel, H., C. L. Cooper, and B. Faragher (2001), "The experience of bullying in Great Britain: The impact of organizational status," *European Journal of Work and Organizational Psychology*, Vol. 10, No. 4, pp. 443-465.
- Jennifer, D., H. Cowie, and K. Ananiadou (2003), "Perceptions and experience of workplace bullying in five different working populations," *Aggressive Behavior*, Vol. 29, No. 6, pp. 489-496.
- Keashly, L. (1998), "Emotional abuse in the workplace: Conceptual and empirical issues," *Journal of Emotional Abuse*, Vol. 1, pp. 85-117.
- Lamertz, K. and K. Aquino (2004), "Social power, social status and perceptual similarity of workplace victimization: A social network analysis of stratification," *Human Relations*, Vol. 57, No. 7, pp. 795-822.
- Latané, B. and J. M. Darley (1970), *The Unresponsive Bystander: Why Doesn't He Help?*, New York: Appleton-Century-Crofts.

- Lee, T. L., S. T. Fiske, and P. Glick (2010), "Next gen ambivalent sexism: Converging correlates, causality in context, and converse causality, an introduction to the special issue," *Sex Roles*, Vol. 62, No. 7-8, pp. 395-404.
- Leiter, M. P. (2012), *Analyzing and Theorizing the Dynamics of the Workplace Incivility Crisis*, Amsterdam: Springer.
- Leiter, M. P., E. Peck, and A. Baccardax (2017), "Combating workplace aggression via organizational interventions," N. Bowling and S. Hershcovis (Eds.), *Research and Theory on Workplace Aggression*, London: Cambridge University Press, pp. 322-350.
- Mathisen, G. E., S. Einarsen, and R. Mykletun (2011), "The relationship between supervisor personality, supervisors' perceived stress and workplace bullying," *Journal of Business Ethics*, Vol. 99, No. 4, pp. 637-651.
- Matthiesen, S. B. and S. Einarsen (2007), "Perpetrators and targets of bullying at work: Role stress and individual differences," *Violence and Victims*, Vol. 22, No. 6, pp. 735-53.
- McCluney, C. L. and L. M. Cortina (2017), "Identity matters: Contextualizing workplace aggression within a social structural framework," N. A. Bowling and M. S. Hershcovis (Eds.), *Research and Theory on Workplace Aggression*, Cambridge: Cambridge University Press, pp. 136-155.
- Milam, A. C., C. Spitzmueller, and L. M. Penney (2009), "Investigating individual differences targets of workplace incivility," *Journal of Occupational Health Psychology*, Vol. 14, No. 1, pp. 58.
- Miller, C. (2017), "Sexual harassment training doesn't Work, but some things do," *New York Times*. Retrieved from <https://www.nytimes.com/2017/12/11/upshot/sexual-harassment-workplace-prevention-effective.html>
- Mullen, K. J. and J. E. Wenger (2017), "Many Americans face bullying, harassment, and abuse at work, but bosses can help," *The RAND Blog*. Retrieved from <https://www.rand.org/blog/2017/08/many-americans-face-bullying-harrassment-and-abuse.html>.
- Murphy, C. M. and M. Cascardi (1999), "Psychological abuse in marriage and dating relationships," R. L. Hampton (Ed.), *Family Violence Prevention and Treatment*, 2nd ed., Beverly Hills: Sage Publications, Inc., pp. 198-226.
- Nielsen, M. and S. Knardahl (2015), "Is workplace bullying related to the personality traits of victims? A two-year prospective study," *Work & Stress*, Vol. 29, No. 2, pp. 128-149.
- O'Leary-Kelly, A. M., R. W. Griffin, and D. J. Glew (1996), "Organization-motivated aggression: A research framework," *Academy of Management Review*, Vol. 21, No. 1, pp. 225-253.

- O'Reilly, J., S. Robinson, S. Banki, and J. L. Berdahl (2015), "Is negative attention better than no attention? The comparative effects of ostracism and harassment at work," *Organization Science*, Vol. 26, pp. 774-793.
- Pearson, C. M. and C. L. Porath (2005), "On the nature, consequences and remedies of workplace incivility: No time for "nice"? Think again," *The Academy of Management Executive*, Vol. 19, No. 1, pp. 7-18.
- Pina, A., T. A. Gannon, and B. Saunders (2009), "An overview of the literature on sexual harassment: Perpetrator, theory, and treatment issues," *Aggression and Violent Behavior*, Vol. 14, No. 2, pp. 126-138.
- Robinson, S. L. and K. Schabram (2017), "Invisible at work: Workplace ostracism as aggression," N. A. Bowling and M. S. Hershcovis (Eds.), *Research and Theory on Workplace Aggression*, Cambridge: Cambridge University Press, pp. 221-244.
- Salin, D. (2003), "Ways of explaining workplace bullying: A review of enabling, motivating and precipitating structures and processes in the work environment," *Human Relations*, Vol. 56, pp. 1213-32.
- Salin, D. and H. Hoel (2011), "Organisational causes of workplace bullying," S. Einarsen, H. Hoel, D. Zapf, and C. L. Cooper (Eds.), *Bullying and Harassment in the Workplace*, London: Taylor and Francis, pp. 224-227.
- Shields, S. A., M. J. Zawadzki, and R. N. Johnson (2011), "The impact of the workshop activity for gender equity simulation in the academy (WAGES-Academic) in demonstrating cumulative effects of gender bias," *Journal of Diversity in Higher Education*, Vol. 4, pp. 120-129.
- Skogstad, A., S. Einarsen, T. Torsheim, M. S. Aasland, and H. Hetland (2007), "The destructiveness of laissez-faire leadership behavior," *Journal of Occupational Health Psychology*, Vol. 12, No. 1, pp. 80-92.
- Taddonio, P. (2017), "Meet immigrant women who spoke out about sexual abuse at work," *Frontline*. Retrieved from <https://www.pbs.org/wgbh/frontline/article/meet-immigrant-women-who-spoke-out-about-sexual-abuse-at-work/>.
- Tepper, B. J. (2000), "Consequences of abusive supervision," *Academy of Management Journal*, Vol. 43, pp. 178-190.
- The National Academies of Sciences, Engineering, and Medicine (2018), "Sexual harassment of women: Climate, culture, and consequences in academic sciences, engineering, and medicine," Washington, D.C.: The National Academies Press.
- U.S. Equal Opportunity Employment Commission (1980), "Sexual harassment," Retrieved from https://www.eeoc.gov/laws/types/sexual_harassment.cfm.

- Ulrich, J. (2014), "Corporate Stockholm Syndrome," Psychology Today. Retrieved from <https://www.psychologytoday.com/blog/the-modern-time-crunch/201403/corporate-stockholm-syndrome>
- Ullman, S. E. and L. R. Brecklin (2002), "Sexual assault history, PTSD, and mental health service seeking in a national sample of women," Journal of Community Psychology, Vol. 30, pp. 261–279.
- Wertheim, L. J. and V. Bernstein (2017), "Jerry Richardson, Panthers have made multiple confidential payouts for workplace misconduct, including sexual harassment and use of a racial slur," Sports Illustrated, Retrieved from <https://www.si.com/jerry-richardson-carolina-panthers-settlements-workplace-misconduct-sexual-harassment-racial-slur>.
- Wilson, C. J. and M. S. Nagy (2017), "The effects of personality on workplace bullying," The Psychologist-Manager Journal, Vol. 20, No. 3, pp. 123-147.
- Workplace Bullying Institute (2017), "2017 WBI U.S. workplace bullying survey," Retrieved from: <https://www.workplacebullying.org/wbiresearch/wbi-2017-survey>.

APPENDIX

Audit Checklist for Managers – Warning Signs of Workplace Abuse

Checkpoint 1: Does your organizational culture ignore abusive behaviors or fail to punish abusive behaviors? Does the organization ever fail to punish perpetrators of abuse?

Checkpoint 2: Does top management behavior in your organization ever convey a lack of respect or civility?

Checkpoint 3: Does your organization's reward system promote unhealthy levels of competition among individual employees?

Checkpoint 4: Do job and role stressors prevail within your work environment?

Checkpoint 5: Are passive bystanders more common in your organization than active bystanders?

Checkpoint 6: Are any of your organization's employees notably low in emotional stability, conscientiousness and agreeableness, and high on narcissism, Machiavellianism, and trait anger?

Checkpoint 7: To what degree do your employees' explicit and/or implicit biases negatively impact the treatment of others?

Checkpoint 8: Are any of your organization's employees notably low in emotional stability, self-esteem, extraversion, and agreeableness? If so, are they typically the targets of workplace abuse?

Checkpoint 9: Are there real or perceived power differentials in your organization that are negatively impacting workplace interactions?

**ACTION IDENTIFICATION AND STYLE OF PROCESSING
RELATIONSHIP: IMPLICATIONS FOR MANAGEMENT IN A
MANUFACTURING ENVIRONMENT**

**Tim Bode
Wittenberg University**

**Timothy W. Aurand
Northern Illinois University**

***Journal of Contemporary Business Issues*
Western Illinois University
Volume 24, Number 1, 2019**

ACTION IDENTIFICATION AND STYLE OF PROCESSING RELATIONSHIP: IMPLICATIONS FOR MANAGEMENT IN A MANUFACTURING ENVIRONMENT

Effective communication allows individuals and organizations to better carry out their stated missions and such communication is built upon a sender's ability to understand how the intended audience functions perceptually when receiving messages (Hamrefors, 2010). This study explores the relationship between the Action Identification (AIT) and Style of Processing (SOP) theories and individual perception. AI theory involves individuals and how they perceive/plan their own and others' actions, while SOP theory states that individuals exhibit chronic preferences to process information they receive in a verbal or visual format (Vallacher and Wegner, 1987; Childers, Houston, and Heckler, 1985). Understanding how an individual best receives and processes messages will assist the sender in communicating more effectively. Understanding how they perceive/plan their own actions will assist senders in predicting how they will react to information they are receiving. To test for the presence of this relationship, the Behavior Identification Form (BIF) and the Style of Processing Scale (SOP) instruments were utilized. Resulting analysis indicates a weak, but significant, relationship between the AIT and SOP theories.

INTRODUCTION

Cost, in terms of lost productivity due to ineffective communications, is difficult to ascertain. One study, which cited poor communications as one of three factors, claims that 29 percent of working time in the U.S. is wasted. The study goes on to state that lost productivity costs the U.S. economy \$598 billion annually (Klempa, 2006). Another study of *Fortune 200* companies in the U.S. found that these companies spent between \$5 to \$10 million annually on communication training for their employees (Catt, Miller, and Hindi, 2005). With such large dollar amounts at stake, research shedding light on how to better communication within an organization is of noteworthy value in helping companies reduce waste and maximize return on investment.

In order to better study the communication processes, notable theories have been developed to help explain communication intricacies. Unfortunately, little research exists explaining the relationship between two such theories – Action Identification (AIT) and Style of Processing (SOP). Action Identification theory states that some individuals view their actions in concrete, procedural terms, while others take a more abstract or goal-oriented view (Vallacher and Wegner, 1987). Style of Processing (SOP) theory, on the other hand, claims that some people think and better process information in terms of images, while others rely more on words (Childers, Houston, and Heckler, 1985). Existing scholarly literature also does not delve into whether management and non-management personnel at manufacturing organizations differ as to their AI and SOP predilections (Martin, Jones, and Callan, 2006; Angelidis, Massetti, and Magee-Egan, 2008; Muchiri, Cooksey, DiMilia, and Walumbwa, 2011).

Knowledge of this type of relationship is of notable value to leaders of manufacturing organizations in order to help them tailor their instructions to groups of their subordinates (i.e.,

departments and/or cost centers) in appropriate SOP and AI styles. For example, presenting machine set-up information in terms of images should be faster for image-oriented SOP individuals and cost centers to comprehend and execute. This speed of execution is crucial to efficiency in almost any organization, including the manufacturing sector. Different parts of a manufacturing process require different AI styles. Some need detailed, procedural-focused AI while others need more global, big-picture style AI. Knowing the AI styles of different individuals and cost centers will help to put the right person in the right department/cost center to be more effective. Establishing an AIT-SOP relationship, such as detailed-oriented AI individuals are more likely to be image-oriented SOP individuals (and thus best follow instruction via images instead of words), should also speed up the efficiency of the whole process.

Leaders are often described as individuals who set the agenda and goals to be accomplished for an organization, while leaving the development of procedures to accomplish these goals to their subordinates (Drucker, 2001; Romar, 2004). Knowing a relationship between an individual's SOP and AI can also be used to: 1) help identify individuals with the potential for leadership due to their AI tendencies, and 2) help train current and future leaders to better understand their subordinates' need for information tailored more closely to their SOP style.

RESEARCH QUESTIONS

There are existing theories (Cognitive Experiential Self theory (CEST) and System 1 and 2 theory) that imply a relationship between Action Identification and Style of Processing does exist (Epstein, S. (2003); Evans, 2008; Stanovich and West, 2000; Kahneman, 2011). Anecdotally, they relate abstract thinking, a high-level AI, to verbal SOP. These theories go on to state that concrete thinking, a low-level AI, corresponds with visual SOP (Epstein, Pacini, Denes-Raj, and Heier, 1996). However, these implied relationships have yet to be tested to see if they truly exist or how strong they are. How these relationships may be applied to business or manufacturing has never been addressed either. For these reasons, this study was developed. The research question(s) this study seeks to answer are: What is the relationship, if any, between an individual's AI and his/her SOP and do managers and non-managers show different tendencies in this relationship.

LITERATURE REVIEW

History of Style of Processing. The term style of processing is used as a means to describe an individual's chronic propensity to receive and process information they are exposed to in either visual or verbal form. Some of the earliest work performed to examine these chronic tendencies was concerned with determining how individuals would better process advertising information (Childers and Houston, 1984; Richardson, 1977 as cited in Childers, Houston, and Heckler, 1985). It had long been established in the field of cognitive psychology that, on average, pictures were more easily recalled than words (Childers and Houston, 1984). However, some studies in this area had given cause to researchers to believe that visual imagery did not always produce superior effects to verbal imagery in all situations. Such was the case with a study of yellow pages advertising by Lutz and Lutz (1977) as cited in Childers and Houston (1984).

Further work in this area by Childers and Houston (1984) found that priming could have an effect on the superiority of pictures to words in ad recall tests, with words sometimes working as well as pictures. To better measure individual propensities in this area, and to make a clearer delineation between individual processing ability and processing preference, Childers, Houston, and Heckler (1985) developed the Style of Processing (SOP) scale.

Many would argue that part of the management process should be concerned with the training and development of employees on an ongoing basis. Given that most organizations operate in dynamic environments, a set of procedures adopted early in the organization's existence may later become obsolete. This would necessitate a continued focus on the development of new processes and a corresponding need to train employees in their operation. Knowing the most effective methods (verbal or visual) in which to train and develop employees could arguably be a key to continued organizational success. Possessing advance knowledge of how individual employees prefer to receive and process information may aid in this process.

In order to help develop better training procedures, Sadler-Smith (2011) used the SOP to determine a significant relationship between visual processing style and experiential cognitive style. However, conclusions regarding the relationship between verbal processing style and rational cognitive style were somewhat mixed in this study. Rational cognitive style tends to be very analytical and systematic in operation, whereas experiential style has been described as very intuitive and affect driven (Epstein, Pacini, Denes-Raj, and Heier, 1996; Evans, 2008; Stanovich and West, 2000). Other researchers have also used the SOP in a similar manner. Por and Fong (2011) used the SOP to separate language learners into high and low visualization groups. They then applied their findings to the development of better multimedia language pronunciation training systems. Research on the ability of managers to impart tacit knowledge to employees mentions SOP and visualization propensities as possible moderators or mediators of this effect (Gubbins, Corrigan, Garavan, O'Connor, Leahy, Long, and Murphy, 2012). While this particular study identified many of the problems associated with imparting tacit knowledge, it did not offer or test any solutions.

Other uses of SOP in business research have focused more in the area of consumer information processing, as opposed to management/employee information processing. Yan, Sengupta, and Hong (2016) found that people in general relied on visual information processing for near-term events, while engaging in verbal information processing for distant events. In a related study, Townsend and Kahn (2013) found that people on average preferred visual information processing of product assortments. However, when product assortments are unusually large, visual processing results in more expressions of choice overload than does verbal processing.

History of Action Identification Theory. This section will address the development of the action identification construct and the theory of action identification that goes with it. As an individual performs a given action, cooking dinner for instance, they can be of one of two mindsets as to how they view their action (Vallacher and Wegner, 1987). If asked, some individuals would give a detailed, concrete description of their actions, listing all steps taken to prepare the dish. Some would give a more abstract, goal oriented description, such as maintaining my physical

well-being, as their response. Action Identification theory (AIT) was developed to help explain why and when individuals are of either mindset. Some individuals switch back and forth between the two, depending on the situation, and some are more chronic in their adoption of a given mindset for all their activities. Detailed, concrete descriptions of one's activities are considered to be low-level identifications (also known as construals). Abstract depictions of one's actions are considered to be high-level identifications. Familiarity was thought to play a part in this process. More familiar activities tend to be thought of in more abstract (high level) terms than less familiar activities (Vallacher and Wegner, 1987). In a company setting, managers might be expected to be more familiar with existing processes and therefore more prone to skew their AI toward a high-level/big picture view.

An aspect of AIT, demonstrated by Vallacher, Wegner, and Frederick (1987) through a series of experiments, is that high-level/big picture identifications were more easily changed based on individual expectations of what evaluators of one's work were looking for. These studies showed that chronically high-level/big picture identifiers were more flexible in their future identifications of repeated activities than low-level/procedural focused identifiers. This may provide clues as to what should be expected by managers from employees as they perform routinized processes. With regard to employee self-esteem, it was determined that low-level/procedural focused identifiers tended to be affected more by external events and feedback in their self-concept than do high-level/big-picture identifiers (Vallacher, Somoza, and Wegner, 1989). The implications for management may include a need to provide a more structured work environment with regular, constructive feedback for low-level AI employees than for high-level ones.

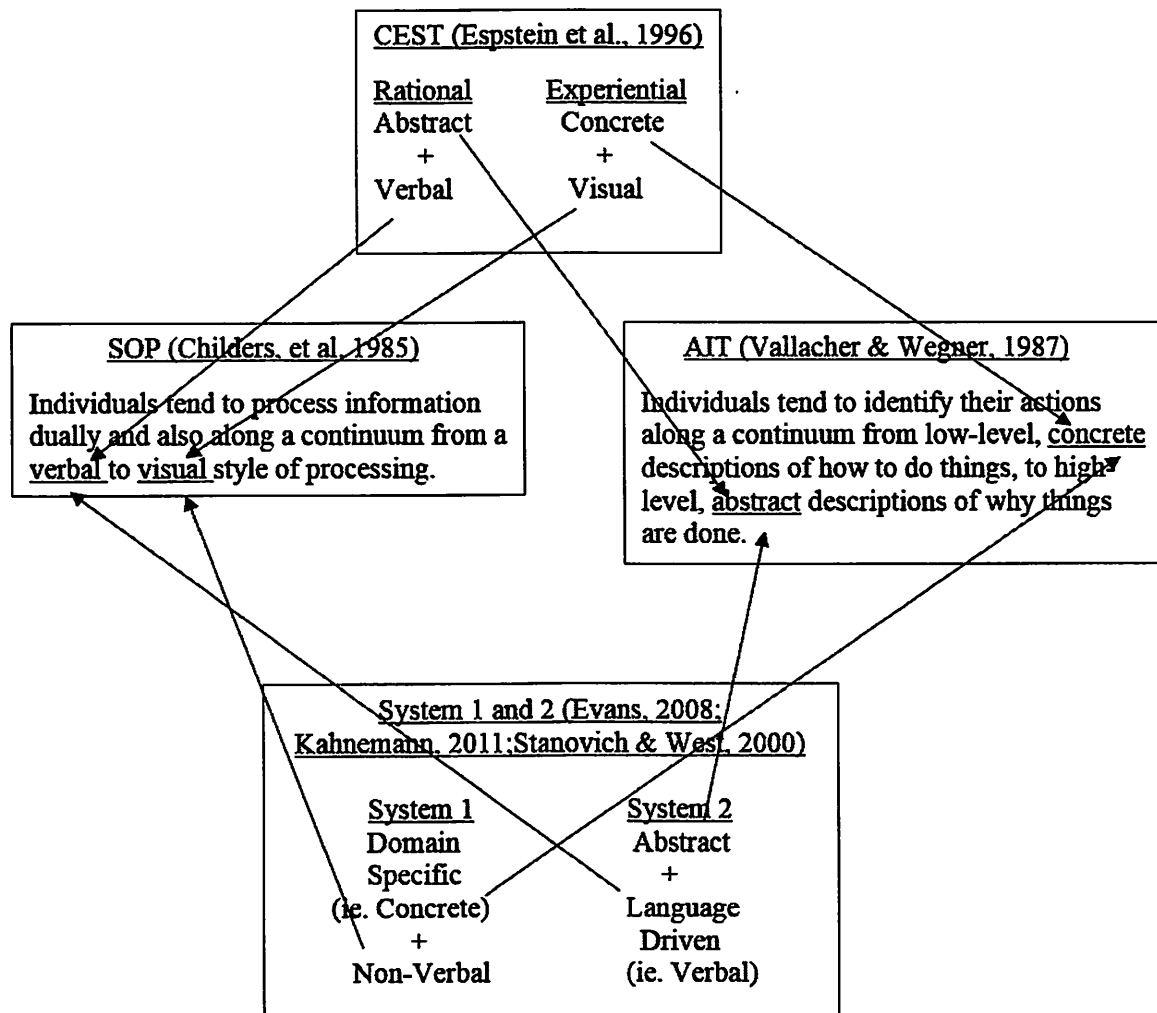
Trope and Liberman (2003) have applied AIT to other areas of social science, such as how events are construed based on time until occurrence. They have labelled their version of AIT as Construal Level theory (CLT). CLT states that events expected to occur in the distant future are thought of in more abstract/high-level terms than events expected to occur in the near future. This means that abstract/high-level construals tend to think more of the effect (the why) of a distant future event and the details (or how) of a near future event. CLT uses the same survey instrument (discussed later in the methodology section) to measure these construal tendencies as AIT does to measure high versus low action identities.

When assessing risk involved in decision outcomes, it was found that a low-level/ procedural focused AI led to higher estimates of risk for a new idea/process. Conversely high-level/abstract AI led to lower risk estimates (Lerner, Streicher, Sachs, Raue, and Frey, 2015). Similar findings were discovered with regard to task difficulty: low-level AI individuals tended to assess tasks as being more difficult to complete, while the opposite held for high-level AI individuals (Thomas and Tsai, 2012). Such findings have led to this study which seeks to explore the relationship between the Action Identification (AIT) and Style of Processing (SOP) theories and individual perception.

Theoretical Relationship between AI and SOP. Theoretical relationships have been implied between an individual's abilities to process information presented verbally, as opposed to visually, and the type of thinking style he/she employs. Thinking styles have been described as

either rational (System 2) or experiential (System 1) (Epstein, Donovan, and Denes-Raj, 1999; Isen, Daubman, and Nowicki, 1987; Schwarz and Bless, 1991; Novak and Hoffman, 2008; Evans, 2008; Stanovich and West, 2000; Kahneman, 2011). Experiential thinking style is said to be, among other things, characterized by thinking in concrete, visual images. On the other hand, rational thinking style has been described as dealing in abstract words and concepts (Epstein, Pacini, Denes-Raj, and Heier, 1996; Novak and Hoffman, 2008; Evans, 2008; Stanovich and West, 2000; Kahneman, 2011). Aspects of these two thinking styles relate to concepts contained in the theories of AIT and SOP. The implication is that high-level action identifiers tend to think in verbal terms and are thus considered more rational thinkers, while low-level identifiers use more visual information processing and thus are more experiential thinkers. Conceptually, this relationship resembles the following:

Figure 1



METHODOLOGY

This research is of a quantitative and exploratory design nature. The population of interest is adult employees in the United States working in the manufacturing industry. The method of collecting data to test for a relationship between AI and SOP was through the use of two survey instruments, the Behavioral Identification Form (BIF) and the Style of Processing (SOP) scale (Vallacher and Wegner, 1987; Childers, et al., 1985). In addition to the survey data, some basic demographic information was also collected to facilitate a comparison of the results between managers and non-managers within the U.S. manufacturing industry.

The Style of Processing (SOP) scale was developed by Childers, Houston, and Heckler (1985). They developed this scale to correct defects that they believed existed in three previous scales then in wide use. This scale contains 22 item measures. The item measures are scored in a Likert type format with a score of one on each statement meaning an always true response and a score of four on each statement corresponding to an always false response. When totaled, summated scores of 22 would indicate an individual with a 100% verbal ability and preference for processing information. A score at the opposite extreme of 88 (always false, or response four for each statement multiplied by 22 statements) would indicate an individual's 100% visual ability and preference for processing information. Initial tests of the SOP scale indicated an internal consistency alpha of .88 for the combined score. The originators of the scale stated that they preferred the scale be used as a whole to score individuals along a continuum from verbally oriented information processors to visually oriented processors. However, the scale is constructed such that separate verbal and visual propensity scores can be calculated if so desired. Retests of the scale have ranged from .71 to .89 (Por and Fong, 2011).

In order to test for an individual's AI propensity, Vallacher and Wegner (1987) created the Behavioral Identification Form (BIF). The BIF consists of a series of 25 questions where each question has two answers. The participant is requested to select which of the two statements they believe best answers the question. The answers are arranged such that there is a low-level/procedural focus action identification view (which is scored as a zero) and a high-level/big picture action identification view (which is scored with a one). By summing these 25 responses, the researcher arrives at a total score from a low of zero to a high of 25 for each participant (Vallacher and Wegner, 1987). Participant's scoring 12.5 or below are considered to be chronic, low-level AIT individuals. Those scoring from 12.5 to 25 are deemed to be chronic, high-level AI individuals. Cronbach alphas for the BIF have ranged from .85 to .91.

The literature anecdotally points to positive relationships between high-level/big picture AI and verbal SOP and between low-level/procedural focused AI and visual SOP (Epstein, 2003; Novak and Hoffman, 2008). The purpose of this research is to verify this relationship and explore how it might apply in a business/industrial setting. This research looks to establish a statistically significant relationship, not causality among these variables. Therefore the strict concept of independent and dependent variables does not implicitly apply. It is also hypothesized that there is a difference between management and non-management personnel in their AI and SOP propensities. For this portion of the study level of AI and SOP are the dependent variables, while job level (i.e., managerial or non-managerial) is the independent variable.

RESEARCH HYPOTHESES

In order to better understand the AI and SOP relationship several research questions, and subsequently hypotheses, were established. The research questions include: What is the relationship, if any, between an individual's action identification and his style of processing? And, does it differ between managers and non-managers? The hypotheses were formulated as follows:

- H1: There is a significant correlation between the level with which individuals identify their actions (AI) and their style of processing information (SOP), such that high-level/big picture AI individuals exhibit a more verbal SOP, while low-level/procedural focused AI individuals exhibit a more visual SOP.
- H2: There is a significant difference in the employee's action identification, based on whether they hold a managerial level position (i.e. one responsible for supervising others) or line level employee role. Managers should exhibit a more high-level/big picture AI, while line level employees should exhibit a more low-level/procedural focused AI.
- H3: There is a significant difference in the employees' style of processing, based on whether they hold a managerial level position or line level employee role. Managers should exhibit a more verbal SOP, while line level employees should exhibit a more visual SOP.

As previously discussed, additional theories have been developed which imply a relationship between abstract (concrete) thinking/action identities and verbal (visual) processing styles. This relationship has never been tested, though. Hypothesis 1 will determine if such a significant relationship in essence does exist. The development of Hypotheses 2 and 3 originated from different streams of research.

Those in the management academy have described management's role in an organization as being about long-term thinking, goal setting, strategizing, and rational decision making (Drucker, 2001; Romar, 2004; Isenberg, 1984). According to these management theoreticians, the development of concrete actions and processes to achieve the goals set by management are best left to the line-level employees that are being managed. Long-term thinking, goal setting, and rational decision making are considered to be hallmarks of the rational cognitive style (according to CEST) and are also considered to be high level action identities (according to AIT) (Epstein, Pacini, Denes-Raj, and Heier, 1996; Vallacher and Wegner, 1987). Given this, Hypothesis 2 was conceived to determine if managers actually do identify their actions differently than those of their line level employees.

Hypothesis 1 states that there is a significant correlation between an individual's AI and SOP. The direction of this correlation would be such that high-level AI's should correlate positively with verbal SOP and low-level AI's should correlate with visual SOP. Given this, a manager

that supposedly thinks in terms of high-level action identities should be predisposed to using a more verbal SOP when taking in and processing new/existing information. In like fashion, line-level employees tasked with thinking how, in concrete terms, to get things done should be predisposed to use a more visual SOP. This line of reasoning led to the formulation of Hypothesis 3, stating that there is a significant difference in an employee's style of processing, based on whether they hold a management position or not.

The population chosen to test these hypotheses was U.S. workers employed in the manufacturing industry in either management or non-management positions. This industry is a major revenue generator and employer of individuals in the U.S. and global economies. Studies have shown manufacturing in the U.S. accounting for between 24 and 27 percent of GDP (Fafaliou and Polemis, 2013; Spohrer and Maglio, 2008; O'Leary and Almond, 2009).

DATA COLLECTION AND ANALYSIS

The study was administered via SurveyMonkey, an online access survey panel. Prior studies using these types of services have found no significant differences in quality when compared to traditional survey methods (Goritz, 2004; Bruggen, et al., 2011). An exploratory correlation model was proposed as the initial method for analysis of the data collected by these two survey instruments. Hypothesis 1 was tested using a Pearson correlation coefficient (r) calculation. The Pearson correlation coefficient is a correlation calculation that is useful when the variables are interval in nature (Norusis, 2008). A secondary analysis was conducted along the lines of an explanatory statistical model. This analysis was performed to determine if there are significant differences between the sample mean responses to both surveys based on job level. The test for this model was an independent samples t-test. This type of t-distribution test is used to determine if significant differences occur between the means of two samples selected (Norusis, 2008). In this case, the two samples consist of manager and non-manager job level individuals. Both the Pearson correlation coefficient (r) and t-distribution statistical tests were conducted using the Statistical Package for the Social Sciences (SPSS).

FINDINGS

Three hundred thirty five total responses were received. Of these, twelve were rejected for incomplete responses. Thus, 323 completed surveys were used for data analysis and exceeded that which is required for such research. An unadjusted sample size of 267 was calculated using two online sample size calculators, www.raosoft.com and www.qualtrics.com. This figure was increased by 20 percent to 320 to compensate for possible incomplete responses, which can occur when using online test panels (Bruggen, et al 2011). A confidence level of 90 percent and a significance level of .05 are used based on a population of 20,000. The population size of 20,000 was recommended by www.raosoft.com and www.qualtrics.com for extremely large populations where it is difficult to determine an exact figure (such as the number of individuals employed in the U.S. manufacturing sector).

Demographic information requested from the respondents included gender, age, highest level of education attained, and number of direct reports supervised. Survey respondents were almost

equally split between male and female respondents, 163 and 160 respectively. One hundred twenty seven respondents were in the 49 to 65 year old category; another 127 were in the 34 to 48 year old category; and 68 were in the 18 to 33 year old category. These age categories roughly correspond to the Baby Boomer, Generation X, and Generation Y age cohorts. Educationally, the majority of respondents, 138, were high school graduates or equivalent. The number of individuals supervised at work by the respondents ranged from 0 to 100. The largest group, at 170, consisted of those respondents who supervised from 1-10 subordinates.

Data were analyzed using Statistical Package for the Social Sciences (SPSS). Descriptive statistics, including tests for normality of the distribution of respondents' answers, were conducted. Both sets of respondent answers were found to be normally distributed. Reliability of the survey questionnaires used was tested by calculating the Cronbach's alpha coefficient for each survey. The BIF scored an alpha coefficient of .87 while the SOP came in at .66. Although an alpha calculation of .70 is considered by some to be the minimum necessary to substantiate survey reliability, Niedergassel (2011) states that alphas in the range of .50 to .60 can be considered sufficient for exploratory research purposes.

Pearson's correlation coefficients were calculated to measure the strength of any relationship existing between the BIF and SOP response variables. To explore significant differences between managers' and non-managers' responses to the two surveys, independent samples t-tests were conducted.

As the purpose of this research is exploratory, neither variable, AIT or SOP, was considered to be a cause for the other. The significance level was set at .05. At this level, a significant inverse correlation was discovered. Thus Hypothesis 1, stating a significant relationship exists between an individual's AI and SOP, is supported. However the low value of the Pearson coefficient, -.141, indicated that this is a relatively weak relationship (see Table 1).

Table 1

Test of Relationship between AIT and SOP

<u>Name of Relationship Tested</u>	<u>N</u>	<u>Pearson's R</u>	<u>Significance</u>
AI v. SOP	323	-.141*	.011

* Correlation is significant at the .05 level (2-tailed)

As one moves higher on the BIF scale, one would move lower on the SOP scale, and vice versa. BIF measures action identities. Its measurement range goes from a low of 0 to a high of 25, with 0 indicating a low-level identifier and 25 indicating a high-level identifier. Similarly, the SOP measures verbal to visual styles of processing over a scoring range of 22 to 88. Those possessing 100 percent verbal processing capabilities would score a 22, whereas scores of 88 would pertain to a 100 percent visual processing.

The results indicate that individuals with chronic, high-level AI's will tend to think/process information in more verbal terms, while those with low-level AI's will think/process information

in more visual terms. These results also indicate that the relationship is in the direction predicted by CEST and Theory of System 1 and System 2 thinking.

The second research question was tested via the calculation of independent sample t-tests. The purpose is to determine if managers differ from non-managers as to their action identification propensities, as measured by the BIF. Job level is defined as whether the individual is a manager or non-manager. Managers are considered to be those individuals supervising one or more direct reports. For this portion of the research, job level was considered to be an independent variable, while action identification was considered to be a dependent variable.

In aggregate, 207 respondents identified as managers and 116 identified as non-managers. The tests were conducted with equal variances within the two groups, both assumed and not-assumed. The significance level was set at .05. The p-value with equal variances assumed was calculated as .384. With equal variances not assumed, it increased to .401. Although management personnel did demonstrate a tendency toward higher-level AI's than non-management personnel, which is in keeping with earlier theories, the difference was not significant. Given that both p-values exceeded the significance level of .05, and therefore, Hypothesis 2 is rejected (see Table 2).

Table 2

**T-Test for Equality of Means
Test for differences in SOP styles between Managers and Non-Managers**

	N	Mean	SD	T	df	Significance (2tailed)	
Management	207	16.5266	5.44861	.871	321	.384	
Non-Management	116	15.9483	6.18391	.841	214	.194	.401

Hypothesis 3 considers the difference in SOP based upon the independent variable, respondent's position (managerial or line level employee) and the respondent's SOP tendencies were considered to be the dependent variable. T-tests were again conducted, both with equal variances assumed and not assumed. P-values were calculated to be .086 and .084, with equal variances assumed and not assumed respectively (see Table 3). While not as great in absolute magnitude as the p-values resulting from the t-tests of AI between the two groups, these two values still exceeded the .05 level of significance. The tests did show a propensity for managers to think more verbally than non-managers, which again was what earlier theories had predicted. However, this difference was not significant; therefore, Hypothesis 3, that there is a significant difference in SOP between managers and non-managers, is rejected.

CONCLUSION

Effective communication is not solely dependent upon on how a message is put forth but the perception of the message as it is processed by its intended audience (Hamrefors, 2010). Poor communications are a costly factor in the operations of many a corporation or organization (Klempa, 2006; Catt, Miller, and Hindi, 2005). This study examines the possible relationships between two theories dealing with individual perceptions and their impact on effective communication: Action Identification Theory (AIT) and Style of Processing (SOP) (Vallacher and Wegner, 1987; Childers, et al., 1985). Two additional theories, CEST and System 1 and 2, imply that, among many other connections, a relationship exists between an individual's chronic action identification and style of information processing pre-dispositions (Epstein, et al., 1996; Evans, 2008; Stanovich and West, 2000; Kahneman, 2011).

Table 3

**T-Test for Equality of Means
Test for differences in AI between Managers and Non-Managers**

	N	Mean	SD	T	df	Significance (2tailed)
Management	207	55.1304	5.48674	-1.721	321	.086
Non-Management	116	56.2155	5.34026	-1.735	243	.693

This study finds a relationship between action identification and style of processing, as predicted by CEST and System 1 and 2 ($r = -.141$, $p > .05$). CEST and System 1 and 2 theories predicted that visual-style information processors would be predisposed toward low-level action identifications stressing means oriented concepts, while verbal processors would tend toward describing their actions (and the actions of others) in high-level, abstract, and goal oriented identifications (Epstein, et al., 1996; Evans, 2008; Stanovich and West, 2000; Kahneman, 2011).

The study also examines differences between managers and line level employees in their action identification and style of processing tendencies. It was believed that these types of differences may exist due to the forward-looking, goal-oriented nature (a high-level AI) of most management positions within an organization and the aforementioned relationship between verbal processors and high-level action identifiers (Drucker, 2001; Romar, 2004; Epstein, et al., 1996; Evans, 2008; Stanovich and West, 2000). However, no significant differences of this type were noted between management and non-management personnel on either AI ($t = .871$ and $.841$, $\text{Sig.} = .384$ and $.401$, $p > .05$) or SOP ($t = -1.721$ and -1.735 , $\text{Sig.} = .086$ and $.084$, $p > .05$).

STUDY SIGNIFICANCE AND IMPLICATIONS OF RESULTS

This research finds a direct relationship between AIT and SOP theories. These theories have significant implications regarding how individuals convey and interpret information and conduct activities related to that information (Childers, Houston, and Heckler, 1985; Vallacher and

Wegner, 1987). The results will help contribute to the growing body of knowledge regarding both inter, and intra employee level communications.

Although difficult to quantify, mistakes resulting from ineffective, internal communications can be a significant cost to organizations. This study finds a relationship between action identification and style of processing. Knowing that such a relationship exists allows organizations to better design their internal communication materials to more clearly explain internal processes. Clearer explanations lead to the accomplishment of desired goals in a more expeditious manner. Significant differences between managers and non-managers in this regard were not found. The existence of a difference between these two groups with regard to these variables was something that had been merely implied by previous management studies and management thinkers (Drucker, 2001; Romar, 2004). Further research is needed to learn if an implied difference does indeed exist and why it was not evident in this study.

STUDY LIMITATIONS AND RECOMMENDATIONS FOR FURTHER STUDY

The choice of instruments employed in this study, while tested many times for validity and reliability, may not be ideal for every situation, and this study is also limited to the manufacturing industry in the U.S. This industry in other countries, or other industries within the U.S., may be comprised of different types of individuals and, therefore, yield different results.

Communication differences can also be found within a given manufacturing organization. For example, there may be managers and line-level employees within the production functions, as well as the support functions of the organization. This study looked at managers and line-level employees as two homogenous blocks. The functional area in which the manager or line-level employee operates may have an effect on the existence of any differences. This is a variable that future researchers may want to consider. Span of control, as far as number of direct reports, also varied from one level of management to the next. This range in the number of direct reports is a variable that could be included in future studies to also expand on the results noted here.

As mentioned earlier, some individuals switch between AI styles depending on the situation. This study was designed to measure individual's chronic tendencies in their AI styles. We made no effort to prime individuals in order to force them into an AI style choice as has been done in other studies. Crisis situations arise from time to time in any organization. At these times, individual AI styles may undergo rapid changes that would not be observed during a period of normal business activity. SOP styles may also change during these times. We did not test for these types of scenarios and how communication may be effected. This may be a condition that future researchers will want to design into their studies of the AI-SOP relationship.

Even with these limitations in mind, this research clearly contributes to the literature with regard to both the sending and processing of information among managers and line-level employees in a U.S. manufacturing setting.

REFERENCES

- Angelidis, J. P., B. L. Massetti, and P. Magee-Egan (2008), "Does Corporate Social Responsibility Vary by Position in the Organizational Hierarchy?" *Review of Business*, Vol. 28, No. 3, pp. 23-32.
- Bruggen, E., M. Wetzels, K. de Ruyter, and N. Schillewaert (2011), "Individual Differences in Motivation to Participate in Online Panels: The Effect on Response Rate and Response Quality Perception," *International Journal of Market Research*, Vol. 53, No. 3, pp. 369-390.
- Catt, S. E., D. S. Miller, and N. M. Hindi (2005), "Don't Misconstrue Communication Cues: Understanding Miscues Can Help Reduce Widespread and Expensive Miscommunication," *Strategic Finance*, Vol. 86, No. 12, pp. 51-55.
- Childers, T. L., and M. J. Houston (1984), "Conditions For a Picture-Superiority Effect on Consumer Memory," *Journal of Consumer Research*, Vol. 11, No. 2, pp. 643-654.
- Childers, T. L., M. J. Houston, and S. E. Heckler (1985), "Measurement of Individual Differences in Visual Versus Verbal Information Processing," *Journal of Consumer Research*, Vol. 12, No. 3, pp. 125-134.
- Critcher, C. R., and M. J. Ferguson (2011), "Affect in Abstract: Abstract Mindsets Promote Sensitivity to Affect," *Journal of Experimental Social Psychology*, Vol. 47, No. 6, pp. 1185-1191.
- Drucker, P. F. (2001), *The Essential Drucker*, New York: Harper-Business.
- Epstein, S. (2003), "Cognitive-Experiential Self-Theory" in *Comprehensive Handbook of Psychology*, Vol. 5 - Personality and Social Psychology, New York: Wiley.
- Epstein, S., R. Pacini, V. Denes-Raj, and H. Heier (1996), "Individual Differences in Intuitive-Experiential and Analytical-Rational Thinking Styles," *Journal of Personality and Social Psychology*, Vol. 71, No. 2, pp. 90-405.
- Evans, J. St. B. T. (2008), "Dual-Processing Accounts of Reasoning, Judgment, and Social Cognition," *Annual Review of Psychology*, Vol. 59, No. 2, pp. 225-278.
- Fafaliou, I., and M. L. Polemis (2013), "Competitiveness of the Euro Zone Manufacturing: A Panel Data Analysis," *International Advances in Economic Research*, Vol. 19, No. 1, pp. 45-61.
- Goritz, A. S. (2004), "The Impact of Material Incentives on Response Quantity, Response Quality, Sample Composition, Survey Outcome, and Cost in Online Access Panels," *International Journal of Market Research*, Vol. 46, No. 3, pp. 327-345.
- Gubbins, C., S. Corrigan, T. N. Garavan, C. O'Connor, D. Leahy, D. Long, and E. Murphy (2012), "Evaluating a Tacit Knowledge Sharing Initiative: A Case Study," *European Journal of Training and Development*, 36(8), pp. 827-847.

- Hamrefors, S. (2010), "Communicative Leadership", *Journal of Communication Management*, Vol. 14, No. 2, pp. 141-152.
- Isen, A. M., K. A. Daubman, and G. P. Nowicki (1987), "Positive affect facilitates creative problem solving," *Journal of Personality and Social Psychology*, 52(6), 1122-1131
- Isenberg, D. (1984), "How Senior Managers Think," *Harvard Business Review*, Vol. 62, No. 6, pp. 81-90.
- Kahneman, D., (2011), *Thinking, Fast and Slow*, New York: Farrar, Straus, and Giroux.
- Klempa, M. (2006), "Eliminating Productivity Roadblocks," *Financial Executive*, Vol. 22, No. 8, pp. 32-35.
- Lerner, E., B. Streicher, R. Sachs, M. Raue, and D. Frey (2015), "Thinking Concretely Increases the Perceived Likelihood of Risks: The Effect of Construal Level on Risk Estimation," *Risk Analysis*, Vol. 36, No. 3, pp. 623-637.
- Lutz, K. A. and R. J. Lutz (1977), "Effects of Interactive Imagery on Learning: Application to Advertising," *Journal of Applied Psychology*, Vol. 62, No. 4, pp. 493-498
- Martin, A. J., E. S. Jones, and V. J. Callahan (2006), "Status Differences in Employee Adjustment during Organizational Change," *Journal of Managerial Psychology*, Vol. 21, No. 2, pp. 145-162.
- Muchiri, M. K., R. W. Cooksey, L. V. DiMilia, and F. O. Walumbwa (2010), "Gender and Managerial Level Differences in Perceptions of Effective Leadership," *Leadership and Organization Development Journal*, Vol. 32, No. 5, pp. 462-492.
- Niedergassel, B. (2011), *Knowledge Sharing in Research Collaborations: Understanding the Drivers and Barriers*, Wiesbaden, Germany: Springer Fachmedien GmbH.
- Norusis, M. J. (2008), *SPSS statistics 17.0 – Guide to Data Analysis*, Upper Saddle River, N.J.: Prentice Hall.
- Novak, T. P., and D. L. Hoffman (2008), "The Fit of Thinking Style and Situation: New Measures of Situation-Specific Experiential and Rational Cognition," *Journal of Consumer Research*, Vol. 36, No. 2, pp. 56-72.
- O'Leary, M. B., and B. A. Almond (2009), "The Industry Settings of Leading Organizational Research: The Role of Economic and Non-Economic Factors," *Journal of Organizational Behavior*, Vol. 30, No. 4, pp. 497-524.
- Por, F. P., and S. F. Fong (2011), "Exploring Innovative Multimedia Pronunciation Learning Managements System on Students with Different Psychological Profiles," *International Journal of Business and Social Science*, Vol. 2, No. 24, pp. 244-250.
- Richardson, A. (1977), "Verbalizer-Visualizer: A Cognitive Style Dimension," *Journal of Mental Imagery*, Vol. 1, No. 1, pp. 109-126.

- Romar, E. J. (2004), "Managerial Harmony: The Confucian Ethics of Peter Drucker," *Journal of Business Ethics*, Vol. 51, No. 2, pp. 199-210.
- Sadler-Smith, E. (2011), "The Intuitive Style: Relationships with Local/Global and Verbal/Visual Styles, Gender, and Superstitious Reasoning," *Learning and Individual Differences*, Vol. 21, No. 4, pp. 263-270.
- Schwarz, N., and H. Bless (1991), "Happy and Mindless but Sad and Smart? The Impact of Affective States on Analytical Reasoning," in *Emotion and Social Judgment*, L. L. Martin and G. L. Clore, (eds.), Mahwah, N.J.: Erlbaum, pp. 159-176.
- Spohrer, J. and P. P. Maglio (2008), "Emergence of Service Science: Toward Systematic Service Innovations to Accelerate Co-Creation of Value," *Production and Operations Management*, Vol. 17, No. 3, pp. 238-246.
- Stanovich, K. E., and R. F. West (2000), "Individual Differences in Reasoning: Implications for the Rationality Debate?," *Behavioral and Brain Sciences*, Vol. 23, No. 2, pp. 645-726.
- Townsend, C., and B. E. Kahn (2013), "The 'Visual Preference Heuristic': The Influence of Visual Versus Verbal Depiction on Assortment Processing, Perceived Variety, and Choice Overload," *Journal of Consumer Research*, Vol. 40, No. 1, pp. 993-1015.
- Thomas, M., and C. I. Tsai (2012), "Psychological Distance and Subjective Experience: How Distancing Reduces the Feeling of Difficulty," *Journal of Consumer Research*, Vol. 39, No. 2, pp. 324-340.
- Trope, Y., and N. Liberman (2003), "Temporal Construal," *Psychological Review*, Vol. 110, No. 3, pp. 403-421.
- Vallacher, R. R., and D. M. Wegner (1987), "What do People Think They're Doing? Action Identification and Human Behavior," *Psychological Review*, Vol. 94, No. 1, pp. 3-15.
- Vallacher, R. R., D. M. Wegner, and J. Frederick (1987), The presentation of self through action identification, *Social Cognition*, Vol. 5, No. 4, pp. 301-322.
- Vallacher, R. R., M. P. Somoza, and D. M. Wegner (1989), "That's easy for you to say: Action identification and speech fluency," *Journal of Personality and Social Psychology*, Vol. 56, No. 2, pp. 199-208.
- Yan, D., J. Sengupta, and J. Hong (2016), "Why does Psychological Distance Influence Construal Level? The Role of Processing Mode," *Journal of Consumer Research*, Vol. 43, No. 3, pp. 598-613.

**INCORPORATING FORCE FIELD ANALYSIS INTO
EFFECTIVE NEGOTIATION PLANNING:
A SYSTEMS PERSPECTIVE**

James L. Patterson
Western Illinois University – Quad Cities

Marijana Nedic
Western Illinois University – Quad Cities

Journal of Contemporary Business Issues
Western Illinois University
Volume 24, Number 1, 2019

INCORPORATING FORCE FIELD ANALYSIS INTO EFFECTIVE NEGOTIATION PLANNING: A SYSTEMS PERSPECTIVE

Professional negotiators have historically sought more efficient and effective planning tools and techniques to provide them with a tangible competitive advantage at the negotiating table. Using the long-established technique of force field analysis (FFA) derived from the social sciences, a new application is proposed to assist negotiators in identifying, planning, and implementing more effective negotiation strategies. A brief background of FFA, as well as a brief sampling of its previous uses, is presented followed by a description of how this popular change management technique can be utilized to facilitate the negotiation strategy planning phase resulting in more favorable outcomes.

INTRODUCTION

Negotiation is something that virtually every person, personally or professionally, performs daily in a broad spectrum of applications (Lewicki, et al, 1999). For example, children negotiate with their parents to get a new toy or a treat from the store. Buyers negotiate with suppliers for better pricing, higher quality, or improved delivery times. Governments strive to negotiate favorable trade agreements and cooperative defense pacts with other countries. Organized labor unions negotiate with management over working conditions, fringe benefits, and wages. Even drivers arriving at a four-way stop intersection nonverbally “negotiate” with each other to see who goes through the intersection next without causing an accident.

Although the context of a given negotiation may vary widely depending on the situation specifics and parties involved, the basic phases of a negotiation are generally considered to be universal. In essence, each party to the negotiation has something that the other party needs or wants, and that tension creates and/or sustains conflict. Therefore, professional negotiators have long sought the holy grail of more efficient and effective planning tools and techniques to help provide them with a competitive advantage and increased leverage.

Negotiation has been defined in numerous ways. “Negotiation is a basic means of getting what you want from others. It is back-and-forth communication designed to reach an agreement when you and the other side have some interests that are shared and others that are opposed.” (Fisher, et al, 1991). “[B]argaining is like the competitive haggling over price that happens during a yard sale or flea market, whereas negotiation is a more formal process that occurs when parties are trying to find a mutually acceptable solution to a complex conflict.” (Lewicki, et al, 1999). “Negotiation is an interpersonal decision-making process necessary whenever we cannot achieve our objectives single-handedly.” (Thompson, 2005). “A negotiation is an interactive communication process that may take place whenever we want something from someone else or another person wants something from us.” (Shell, 2006). Negotiation is “a process for formal communication, either face-to-face or by electronic means, where two or more people come together to seek mutual agreement about an issue or issues.” (Monczka, et al, 2016).

As can be seen in these commonly accepted definitions, conflict, or at least the existence of opposing interests, needs, and wants, is at the very heart of any negotiation. Conflict is defined herein as a condition of the relationship between the parties in which one or more of the parties' expectations regarding the performance or outcomes from the relationship are either not currently achieved or are reasonably expected to not be achieved in the foreseeable future (Patterson, 1999). A substantial part of negotiation involves seeking and verifying information regarding the other party's stated positions and their underlying interests or motivation through an iterative, back-and-forth process of asking probing, open-ended questions while often receiving evasive or misleading responses from the other party. For many negotiators, the requisite soft, interpersonal skills necessary to identify and resolve this inherent conflict may be neither readily apparent nor easily recognized. Therefore, this imperfect situation requires a successful negotiator to be involved in significant strategy development, tactical preparation, and fact-finding efforts prior to engaging in the actual negotiation.

Paraphrasing a theme commonly espoused by the real estate industry, it can be said that the three most important things in any negotiation are: 1) preparation, 2) preparation, and 3) preparation. However, what most negotiators experience is that it is often hard to find the time necessary to effectively carry out the negotiation itself, let alone conduct sufficient pre-negotiation planning and preparation. Therefore, negotiators seek tools and techniques that will allow them to efficiently and effectively utilize their limited preparation time and upfront information search efforts necessary to pursue acceptable negotiation outcomes. This paper proposes the use of one such planning technique, force field analysis (FFA), to help accomplish this end.

NEGOTIATION VIEWED AS CHANGE MANAGEMENT

One can readily consider negotiation as a process in change management. Striving to achieve successful outcomes in any negotiation typically requires one or more of the parties to modify or adjust their stated positions and reconsider their underlying interests in order to reach an agreement acceptable to all participants. To effectively manage the behavioral and process changes that inevitably occur in a negotiation, one should consider this process to be a series of proactive change management steps undertaken in pursuit of the negotiator's preferred outcomes. To accomplish these tasks more effectively and efficiently, the negotiator must also consider any key stakeholders that can be, or will be, materially affected by the negotiated final agreement. Force field analysis can be used as an effective tool in considering and evaluating the underlying forces driving and inhibiting possible negotiation outcomes, as well as their likely effects on the parties, and to other stakeholders who may not even participate in the actual negotiation.

Garvin (1993) discusses that organizational learning does not come only from "reflection and self-analysis," but "[s]ometimes the most powerful insights come from looking outside one's immediate environment to gain a new perspective." This paper, therefore, outlines how the appropriate application of force-field analysis, which has been widely used in many other applications, can extend those experiences by equipping and assisting negotiators wanting to improve the effectiveness of their negotiation planning efforts.

Generally accepted change processes include three stages or sets of activities (Evans and Lindsay, 2017). These stages illustrate the basis for using force field analysis as an effective change management technique in a negotiation setting. First, the current state of affairs, or status quo, must be determined, as well as any desired future state, equilibrium, or preferred outcomes. Additionally, the negotiator must define and evaluate those underlying forces driving the desired changes and those restraining any movement from the status quo. This step must be considered and accomplished for *each and every major issue* that can be reasonably expected to be encountered during the negotiation. Note that the vast majority of negotiations often contain multiple issues with disparate preferred outcomes between the parties.

The second set of change management activities involves managing those inherent fluctuations and uncertainties found in moving from extant conditions toward those desired. In a typical negotiation scenario, this activity may involve identifying, anticipating, analyzing, and preparing for the other party's expected positions, interests, strategies, tactics, needs, wants, and BATNAs (best alternative to a negotiated agreement) (Monczka, et al, 2016). Used here, a position is described as the negotiator's stated opening offer or succeeding counteroffer on a particular issue. This typically represents the most optimistic or preferred value for that issue by the negotiator. In other words, it is this expressed demand that the negotiator initially provides to the other party as an opening offer. Conversely, an interest is the unspoken motivation or impetus for the negotiator's publically stated position. In most negotiation scenarios, this implicit interest should not be shared with the other party as it oftentimes belies a perceived transfer of power between the negotiating parties due to damaging or otherwise revealing information being shared.

A negotiation strategy is the superordinate approach used in planning and conducting the negotiation and includes such traditional conflict management approaches as collaboration, compromise, competition, avoidance, or accommodation (Thomas, 1985). Tactics are those specific actions or behaviors that a negotiator may employ in pursuing the overall negotiation strategy, such as take-it-or-leave-it, low-ball, trial balloon, silence, expand the pie, planned concessions, etc. (Lewicki, et al, 1999). Tactics can take on positive, negative, or neutral characteristics, depending on the specific tactic used and its underlying intent to either enlighten or obfuscate.

A negotiator's needs include those outcomes on issues that must be achieved as a result of any negotiated agreement. Conversely, a negotiator's wants are those outcomes that he/she would like to obtain on each issue but could forego in order to successfully conclude the negotiation and reach an otherwise acceptable agreement. A BATNA can best be defined as the negotiator's "bottom line," or reservation point, at which point he/she would rather walk away from the negotiation instead of pursuing a less-than-desirable outcome than that which could be obtained through an alternative agreement with someone else (Fisher, et al, 2001).

Lastly, the achieved outcome must be formalized and perpetuated by getting the other party to obligate to and implement the agreement. However, the courtesy handshake, bow, or public ceremony given at the end of a negotiation does not necessarily mean that the parties will go ahead and do exactly what they said they would do as a result of their agreement. Therefore, the

parties must develop some verifiable, sustainable method by which each of the parties commits to and follows through on the agreement.

People typically resist change for three primary reasons. The first reason is uncertainty of the future. When change stems from a negotiated agreement, it replaces the usual and expected condition with ambiguity and the unfamiliar. Since change often causes known things to become unknown, the other party may react negatively and either directly or indirectly resist the suggested alternative. The second cause of resistance to change is a concern for loss, i.e., the possibility of losing something of value that the negotiator already has in his/her possession or under his/her control. The greater the perceived investment in the current conditions or status quo, the greater the resistance typically exhibited by the other party. The last cause of resistance to change refers to the negotiator believing that the change under consideration is not in the best interest of the negotiator, his/her organization, or the relationship with the other party. Inconsistency with the negotiator's personal or organizational beliefs, norms, resources, or procedures can also lead to resistance to the proposed change.

DESCRIPTION OF THE FORCE FIELD ANALYSIS TECHNIQUE

Force field analysis is a widely recognized and utilized change management tool that has its historical, formative roots in the field of social psychology. The concept of FFA was developed by Kurt Lewin to describe unseen psychological forces that promote or constrain human behavior. As such, this concept has been described as “a distribution of forces in space” (Lewin, 1938; Lewin, 1951). Lewin viewed change as “the outcome of a struggle between driving forces (which are seeking to upset the status quo) and restraining forces (which are attempting to maintain the status quo).” (Pojasek, 2001). FFA can be used systematically to identify, analyze, and understand the various conflicting factors in complex situations, such as those found in a typical negotiation.

Force field analysis can also be utilized to help a negotiator determine his/her own strengths and weaknesses, as well as to more accurately estimate those of any other party. Once these conflicting forces have been identified, analyzed, and understood, an astute negotiator can then use this newfound knowledge and insight to identify, evaluate, and implement appropriate negotiation strategies and tactics to more effectively support his/her preferred outcomes and mitigate or minimize those supporting the other party's preferred outcomes. The negotiator can conduct a more thorough and effective negotiation by being better prepared for contingencies that arise in the process of reaching agreement.

This technique of FFA has been more recently applied in a broad spectrum of disciplines to aid managers and other key decision-makers in identifying and managing the positive and negative forces of change which frame a given set of circumstances. Its primary use to date has been in managing change within an organization. The basic premise of FFA is that, for every actual or perceived change in an organization, there are certain internal and external environmental forces that will exert pressure to support the change while other forces will serve to resist, delay, or prevent the change. FFA is a practical, easily grasped graphical technique for identifying the

pros and cons of a change management situation, like those typically encountered in a negotiation.

In FFA, pressures known as driving forces tend to initiate or press for change or movement away from the status quo and, once the change has begun to emerge, can work to maintain its momentum. However, restraining forces are those internal, environmental, or situational forces that seek to counter or resist the impetus of the change under consideration. In a negotiation scenario, driving forces are those which support or positively influence a negotiator's preferred outcomes, while restraining forces are those that oppose his/her preferred outcomes and/or favor the other party's positions and demands.

For example, force field analysis has been effectively applied in a variety of organizational settings and applications, including: corporate responsibility in procurement (Harwood and Humby, 2008), customer service training for employees (Bailey, 1994), maritime transportation policy (Cavana, 2004), nurses training in health services (Baulcomb, 2003), evaluation of governmental policies on professional mobility in the European Union (Davis and Saunders, 1997), elementary science teacher training (Harwell, 2000), decision-making by couples (Eckstein, 1994), conservation efforts (Watts and Selman, 2004), education development in pathology, (Negi, et al, 2015), primary care health services (Grant and Hine, 2001), intragroup development (France and Wahl, 1997), identification of business unit performance drivers (Grundy, 1997), implementation of change of communication modes (Hogan, 1998), motivated cognition (Kruglanski, et al, 2012), analysis of the status of primary education (Kumar, 2003), distributed supply chain planning (Antonio de Santa-Eulalia, et al, 2008), effect of policies on working women in Singapore (Lan and Lee, 1997), implementation of total quality management in less developed countries (Mersha, 1997), special needs education (Weiss, et al, 2017), community development (Hobbs, 2004), classroom conflict management (Newhouse and Neely, 1993), planning and implementing information systems (Ouellette, 1993), accounting practice management (Aquila, 2004), special education preservice training (Lifter, et al, 2005), and evaluation and implementation of organizational strategies (Thomas, 1985; Ajimal, 1985; Paquin and Kopyay, 2007; Hollingworth, 2008; Malsen and Platts, 2000; and Oliver and Donnelly, 2007). These previous applications are summarized alphabetically by application in Table 1.

Conceptually, force field analysis can be visualized generically as shown in Figure 1. In this example, Point A represents the current equilibrium position or status quo, while Point B represents the future desired state or preferred negotiation outcome. In a given negotiation, Point A might represent an existing price point or delivery schedule that the parties are attempting to negotiate, while Point B might be the desired outcome in terms of a new price or delivery schedule. The driving and restraining forces are represented by the arrows, i.e., driving forces pointing to the right away from the current equilibrium or status quo toward the desired state and restraining forces pointing to the left opposing any movement from the current equilibrium point. The width and length of each individual vector represent the relative strength and duration of the underlying force it represents respectively. The longer the arrow, the longer the force has been in existence or is expected to continue; while the wider the arrow, the more powerful or resilient that force is or can be expected to be.

Table 1

ALPHABETICAL SUMMARY OF FORCE FIELD ANALYSIS APPLICATIONS

Business and Organizations	<ul style="list-style-type: none">• Ajimal, 1985• Aquila, 2004• Grundy, 1997• Hollingworth, 2008• Malson & Platts, 2000• Mersha, 1997• Oliver & Donnelly, 2007• Ouellette, 1993• Paquin & Kopyay, 2007• Thomas, 1985
Education	<ul style="list-style-type: none">• Harwell, 2000• Hogan, 1998• Kumar, 2003• Negi, et al, 2015• Newhouse & Neely, 1993• Weiss, et al, 2017
Governmental Policy	<ul style="list-style-type: none">• Davis & Saunders, 1997• Hobbs, 2004• Lan & Lee, 2007
Science and Healthcare	<ul style="list-style-type: none">• Grant & Hine, 2001• Watts & Selman, 2004
Sociology, Psychology, and Communication	<ul style="list-style-type: none">• Eckstein, 1994• France & Wahl, 1997• Kruglanski, et al, 2012
Supply Chain Management	<ul style="list-style-type: none">• Antonio de Santa-Eulalia, et al, 2008• Cavana, 2004• Harwood & Humby, 2008
Training	<ul style="list-style-type: none">• Bailey, 1994• Baulcomb, 2003• Lifter, et al, 2005

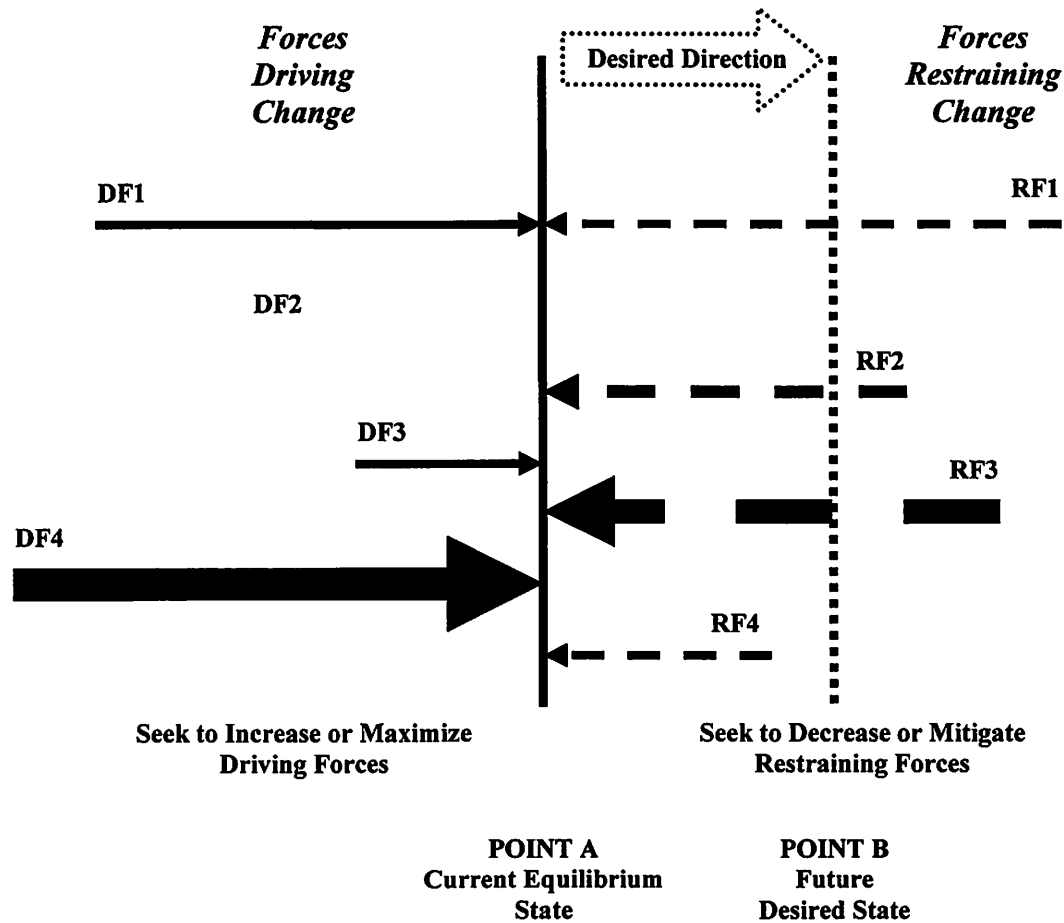
All negotiation situations can be considered as being in temporary equilibrium, which is a delicate balance between these contrasting forces. This equilibrium exists when the sum of driving forces is roughly equivalent to the total of opposing forces. A negotiation attempts to adjust or mitigate the balance between them to move towards an acceptable conclusion. A successful outcome on any given negotiated issue (i.e., change) involves ensuring that the forces favoring the change (or new state of equilibrium) must be stronger than the forces opposing the change (Moody, 1983). In a negotiation, this encounter between opposing forces can be considered in the same manner as negotiating power. Various influence strategies and tactics

can then be developed and employed to either build up or support driving forces while eliminating or mitigating the other party's restraining forces.

Movement from Point A toward Point B is achieved through two methods, either individually or in combination with each other. First of all, a negotiator can strive to increase the level or intensity of those driving forces promoting the change. For example, the negotiator might introduce or cite irrefutable, independent third-party information that supports his/her perspective or position. Alternatively, the negotiator can introduce information that provides a compelling competing perspective or point of view that serves to counteract the other party's stated positions and arguments.

Figure 1

BASIC FORCE FIELD ANALYSIS DIAGRAM



In any given negotiation scenario, the forces for and against movement or change can be either internal or external (Thomas, 1985). Driving and restraining forces in a negotiation setting could include such external or environmental influences such as changing market conditions, available

time to negotiate, relative economic power or size of the negotiating parties, generally known or widely accepted and verifiable third-party information and data, and visibility of the negotiation to key stakeholders not involved in the actual negotiation. Internal forces could be interpersonal or individual influences including the negotiator's personality style, formal position in the organization, physical presence, reputation, age, experience, gender, charisma, or team membership if a negotiating team structure is utilized.

TOOLS AND TECHNIQUES TO IDENTIFY RELEVANT FORCES

In order to successfully utilize force field analysis in negotiation planning, it is necessary to identify those relevant driving and restraining forces that are likely to affect the outcome of the negotiation. A variety of concept-generating tools and techniques exist that can be used to generate potential alternatives and are summarized alphabetically in Table 2.

Table 2

COMMON TOOLS AND TECHNIQUES TO GENERATE IDENTIFICATION OF DRIVING AND OPPOSING FORCES

Brainstorming
Cause-and-Effect Analysis
Devil's Advocacy
Dialectical Inquiry
Nominal Group Technique
Triangle Talk

Brainstorming. Brainstorming is a common technique for generating ideas in a group setting with which many businesspeople may already be familiar. In classical brainstorming, the process allows participants to sequentially develop, one individual at a time, a list of potential ideas to address a problem in a relatively short period of time. However, no analysis or criticism of any idea is allowed during the idea generation phase. A facilitator allows each participant to present and describe his/her idea, posts each idea on some visual medium by which all participants can see and refer, and then moves on to the next participant. Once the last participant is finished in each cycle, the facilitator restarts the process throughout the group until no more ideas are generated. The idea is to stimulate new ideas through the freewheeling synthesis and combination of ideas previously expressed by the group. Quantity is preferred to quality.

Once all of the ideas have been developed, the facilitator has the group undergo a clustering and ranking process to whittle down the number of ideas to a more workable quantity for further analysis. The facilitator first leads the group in combining similar ideas by common theme or category. After this step is completed, a common method of ranking is to allow each participant a fixed number of votes to allocate between all remaining ideas. The top vote getters are then analyzed outside the group for further consideration, approval, and/or implementation.

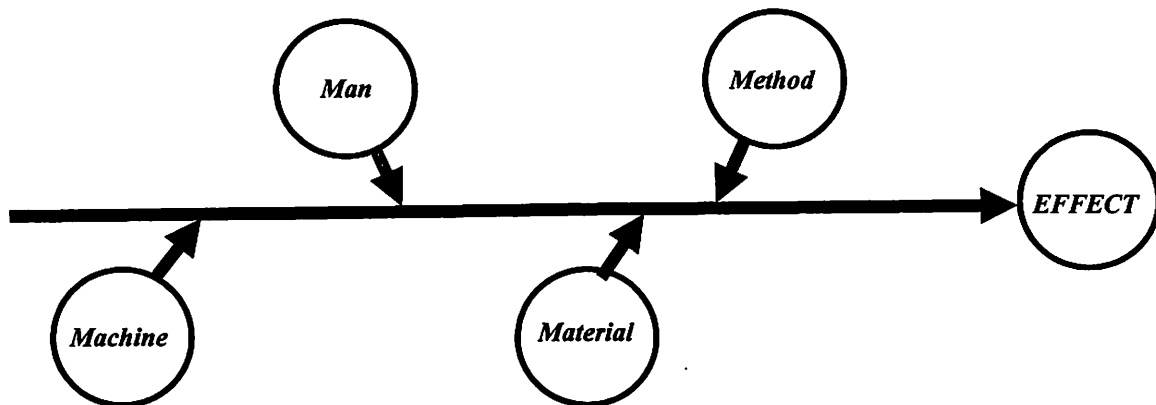
Cause-and-Effect Analysis. A commonly used tool in total quality management, cause-and-effect analysis is also known by several additional names – root cause analysis and Ishikawa (or fishbone) analysis. Cause-and-effect analysis has proven itself to be an effective technique to investigate the relationships between qualitative attributes of a problem, like driving and opposing forces in FFA. Figure 2 outlines the basic construction of an Ishikawa or fishbone diagram in cause-and-effect analysis.

The basic process of constructing an Ishikawa diagram begins with agreement on the problem statement which can also be referred to as the effect (Lunenburg, 2012). One caveat here is to avoid defining the problem in terms of an ultimate solution to minimize potential bias. Second, develop a consensus as to the broad groupings of the causes of the effect. Practitioners of the cause-and-effect diagram typically begin with generic groupings related to Man, Material, Method, and Machine. These can be effectively tailored using other relevant categories to aid in the development of driving and opposing forces in a FFA-driven negotiation planning process.

As the potential causes are developed, they can be shown as subsets or outcroppings of the generic groupings. The group should repeatedly ask the question “Why does this happen?” as they work through the idea generation process. Once a sufficient number of potential forces has been identified, they can each be further evaluated as to their efficacy to the negotiation at hand.

Figure 2

GENERIC ISHIKAWA DIAGRAM



Devil’s Advocacy. Devil’s advocacy is an alternative generating technique that adds the element of conflict into the process and works to reduce groupthink in a group decision making process. Groupthink is the tendency of highly cohesive groups to pressure members into accepting consensus where none exists. The group is generally very familiar with each other and tends to think with a strong group identity as opposed to an assortment of individuals. There are eight symptoms of groupthink that work to reduce the efficacy of a group. These symptoms consist of the following negative characteristics (Lunenburg, 2012).

- *Involulnerability* – the group creates the illusion that it is impervious to any weakness which causes it to engage in unwarranted optimism and excessive risk-taking.
- *Rationalization* – the group discounts warnings that run counter to its assumptions or beliefs.
- *Morality* – the group demonstrates unquestioned loyalty to itself and causes the group to discount any ethical or moral consequences of its actions and decisions.
- *Stereotyping* – group members develop unhealthy and gratuitous labels and attitudes for those who disagree with them.
- *Pressure* – the group forces internal dissenters to either withdraw their objections or be risk being expelled from the group.
- *Self-censorship* – group consensus outweighs any threat or presence of non-conforming or dissenting opinions or behaviors.
- *Unanimity* – the group shares the illusion that all members are onboard with its purpose, decisions, and behavior, even when they are not.
- *Mindguards* – the group appoints gatekeepers to protect it from encountering adverse information that may threaten its closed mindset.

In devil's advocacy, one group member is assigned the role of devil's advocate in which he/she develops and presents as many objections or concerns as possible concerning each alternative the group is considering. To prevent the person fulfilling the devil's advocate role from becoming too confrontational or being perceived as being too negative by the group, it is a good idea to frequently rotate this role between group members. By allowing counter-opinions to be freely expressed and evaluated, the group can delay implementation of potentially harmful decisions and consider other less damaging or risky alternatives.

Dialectical Inquiry. As in the devil's advocacy technique, dialectical inquiry can also be used to control groupthink. Based on ancient Greek philosophy, dialectical inquiry involves the advancement of truth through the exploration of opposite positions – thesis and antithesis. The underlying assumption here is that the process of discussing and evaluating the thesis and antithesis should be able to explain the facts and data facing the negotiation scenario. The result is a useful debate between viewpoints that are in basic opposition to each other (Lunenburg, 2012). It can be a constructive approach to the development of opposing forces in FFA, even though it often tends to encourage conflict within a group.

Using the dialectical inquiry technique, teams of decision-makers are instructed to create, define, and evaluate several alternatives with the end result culminating in a recommendation and presentation of the "best" alternative. Each team should be formed as differently as possible from each other to stimulate the broadest, most diverse range of alternatives. Each group is responsible for creating the pros and cons of its alternatives, including the feasibility of their implementation.

After hearing each of these competing positions, a team of high-level decision-makers meets separately to evaluate and select the most promising elements of each recommendation, synthesizing a comprehensive final alternative. Information gaps are identified in the process of

reaching consensus, and additional research may be conducted as required. In the process of reaching group consensus, it is imperative to avoid an “us” versus “them” mentality.

Nominal Group Technique. The nominal group technique (NGT) is an effective group process for generating professional opinions about a problem, like a negotiation, and then synthesizing group member judgments as to their viability and feasibility in an amorphous scenario (Delp, et al, 1977). The effectiveness of the NGT is contingent on the experiences, skills, and perceptions of group members who are located in the same location. As each member is provided a question, he/she is asked to silently write down as many possible answers as possible without any interaction between the participants. Once this is accomplished, the facilitator will ask each participant in turn to present a single item from his/her list and make it available for all other participants to see.

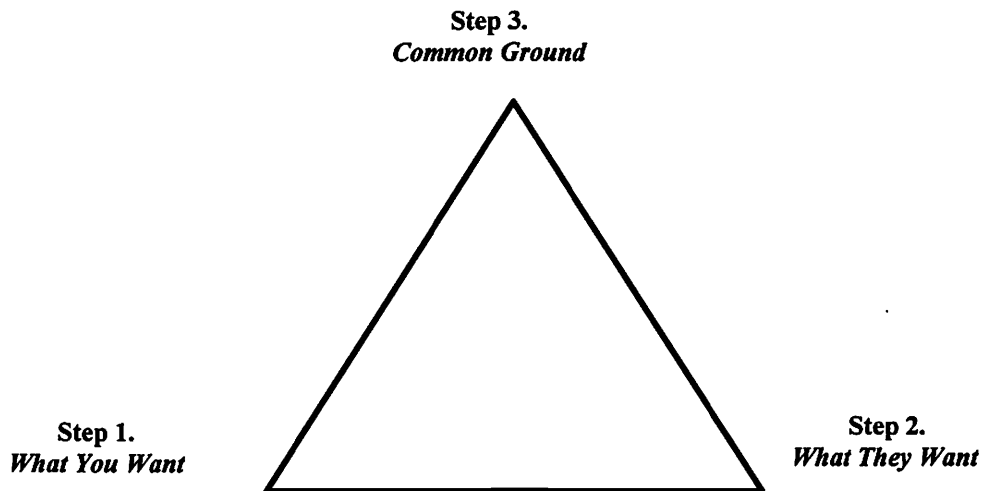
As in brainstorming, no discussion or judgment is permitted until all ideas have been presented in round-robin fashion. Each item is then briefly discussed in the group to provide their preferences by rank ordering the proposed alternatives. This is an iterative process which is repeated with additional discussion and argumentation, although the group must continue to focus on the problem, not the individuals involved. Because of the high level of individual participation, it is usually more difficult for stronger individuals to dominate the process.

Triangle Talk. Triangle talk is a simple three-step process that enables negotiators to clearly understand and share their own needs and wants, determine those of the other party, and develop tactics and strategies to propose action in ways to which the other party can accept and agree (Anderson, 1994). Figure 3 outlines this relatively simple, three-pronged approach to understanding and mitigating conflict like that encountered in a typical negotiation. Understanding what you want and determining what they want are key elements of determining the underlying driving and opposing forces discussed earlier.

“To get from Point A to Point B, you have to know where Point B is.” (Anderson, 1994). First, finding out exactly what the negotiator wants means to determine what and why who negotiator is and what he/she wants or needs from the negotiation. In formulating this, the negotiator must be crystal clear as to the extant conditions and what constitutes an acceptable outcome to the negotiating process. Second, determining what the other party wants requires the negotiator to ask a number of open-ended questions, not simply “yes” or “no” questions. “Don’t guess, and don’t assume. ASK.” (Anderson, 1994). When a negotiator asks more meaningful and thoughtful questions, the other party typically becomes more at ease which encourages him/her to open up and provide meaningful and thoughtful responses. These questions should be accompanied by appropriate body language, proxemics, and active listening behavior. Additionally, the negotiator should strive to focus on the problem, not the individuals involved, taking ego and personality out of the scenario. Lastly, the negotiator should always realize that there is always some area of agreement in a negotiation. As you reiterate what you want and what they want, mutual agreement is easier to find.

Figure 3

BASICS OF TRIANGLE TALK



Each of these tools and techniques described above can be effective in determining the relevant underlying driving and opposing forces in a negotiation FFA. It is important to remember to select an appropriate tool or technique that closely matches the personality of the negotiator and the actual negotiation circumstances.

HOW TO UTILIZE FFA IN PREPARING A NEGOTIATION

Use of the force field analysis technique allows a negotiator to readily categorize and focus on which relevant driving forces support a given issue and which restraining forces fight against it. It is very useful in addressing the subjective issues typically found in a negotiation and determining what appropriate strategies, tactics, and supporting information are likely to work to reach the negotiator's desired negotiated outcome on that issue. However, the negotiator must realize that the other party also has its driving forces pushing for his/her own preferred outcomes, as well as a list of relevant resisting forces, and the savvy negotiator needs to anticipate and prepare for both sets of perspectives and how they are likely to play out during the actual negotiation.

Effectively using FFA involves a series of steps for each negotiation issue. The greater the number of issues to be negotiated, the greater the number of driving and opposing forces there are that must be identified and considered, issue by issue. Note that every individual issue must be considered in light of its own FFA and BATNA, although some forces are likely to overlap between different issues.

First of all, the negotiator must identify and clearly state the current situation, i.e., the status quo or equilibrium point, the baseline case, and desired outcomes (or future states). He/She should be as specific as possible and try to document them. Then, the negotiator needs to identify each

of the specific forces that either drive or resist the preferred outcomes. Thirdly, the negotiator must analyze all perceived forces facing each issue thoroughly, asking the following questions.

- Is the force valid?
- What could be the impetus, or interest, underlying the apparent force?
- How could it be changed, mitigated, or counteracted?
- What additional information do I need to support or counteract this force?

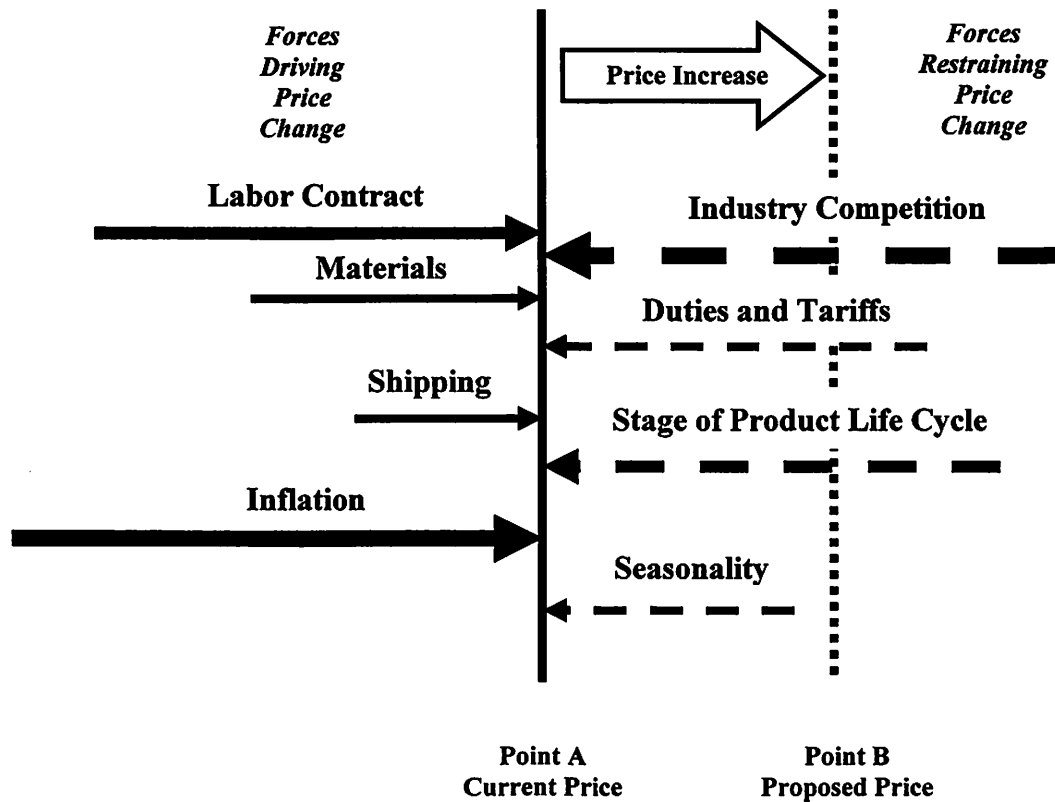
Once this identification process is completed, the negotiator can then estimate the relative strength of each force (driving and opposing) using a Likert-type scale (from 1 to 7) or a low-medium-high scale to determine the relative importance or priority of each force. Here, the FFA's graphical representation of the various countervailing forces is useful in helping the negotiator effectively visualize both the positive and negative influences that may affect each negotiated issue likely to be encountered, as well as their relative strength or influence. Recalling Figure 1, the size, length, and width of the arrows represent the relative strength of each force. Larger, longer, and wider arrows represent stronger, more deeply held, or more persistent forces.

Figure 4 provides an example of typical driving and restraining forces that could be faced in a typical supplier's proposed price increase scenario. The same kind of analysis can be applied in virtually any kind of commercial negotiation, especially from either the buyer's or the supplier's perspective. In this case, one can readily see that the most important and/or critical forces that must be addressed if the desired negotiated outcome is to be achieved and where resistance is likely to be encountered. For example, Point A represents the status quo or current condition from which a supplier's requested price hike has been proposed. Note that, in this case, the buyer must anticipate and consider likely positions that may be presented at the negotiating table, as well as their underlying interests, when analyzing the various forces for and against the proposed price hike.

Once the negotiator has identified and adequately analyzed each of the driving and opposing forces for a given issue, he/she should then develop appropriate strategies and tactics to either bolster or increase driving forces while seeking to reduce, eliminate, or mitigate opposing forces that are likely faced by the other party. One of the major advantages of FFA is that this visual representation of the negotiation scenario allows the negotiator to more easily summarize each of the various influences facing any given issue in the negotiation. It also serves as a physical reminder of the negotiator's predetermined goals and objectives that must be addressed during the actual negotiation. As new information is uncovered during the negotiation process, it is not difficult to modify or update the FFA diagram for each issue as required.

Figure 4

FFA DIAGRAM FOR SUPPLIER'S PROPOSED PRICE INCREASE



However, there are several caveats that the proactive negotiation planner must consider in order to effectively use this FFA technique. For example, the negotiator must ensure that all significant forces and influences (both positive and negative) are identified, included, and analyzed. This may involve some type of cross-functional, team-based brainstorming session as discussed earlier to adequately vet the relevant influences affecting the negotiation. Omitting even one can have deleterious effects on the proposed outcomes. It is often helpful to brainstorm one's negotiation positions, strategies, tactics, needs, and wants on each issue from the other party's perspective.

Likewise, simply bolstering the existing driving forces can either strengthen existing or even develop new restraining forces. Therefore, it is very important to find those appropriate strategies and tactics that are needed to reduce or mitigate the restraining forces rather than simply overpowering them, which potentially engenders further resistance and increases the likelihood of an impasse. Since negotiation is always between people, one must always consider the personal reactions of the other negotiator when developing and evaluating the necessary strategies and tactics to deal with these forces. Logical arguments can be made totally

ineffective if they made without regard to the interpersonal effects that they may arouse in the other party.

IMPLICATION FOR MANAGERS

Developing stronger force field analysis skills can help make a supply chain negotiator better prepared and more confident because of his/her greater depth of understanding surrounding the circumstances of the negotiation and the characteristics of the other party that are developed through a purposeful planning process. Force field analysis, coupled with various idea and alternative generating techniques, serves to quickly prepare the negotiator with more knowledge of his/her own needs and wants, as well as those of the other party beforehand.

REFERENCES

- Ajimal, K. S. (1985), "Force Field Analysis: A Framework for Strategic Thinking," *Long Range Planning*, Vol. 18, No. 5, pp. 55-60.
- Anderson, K. (1993), *Getting What You Want: How to Reach Agreement and Resolve Conflict Every Time*. New York: Plume.
- Antonio de Santa-Eulalia, L., J.-M. Frayret, and S. D'Amours (2008), "Essay on Conceptual Modeling, Analysis and Illustration of Agent-based Simulations for Distributed Supply Chain Planning," *INFOR* Vol. 46, No. 2, pp. 97-116.
- Aquila, A. J. (2004), "Let the Force Be with You," *Accounting Today*, June 7-20, pp. 8-9.
- Bailey, D. (1994), "Forces in Customer Service," *Training & Management Development Methods*, Vol. 8, No. 5, pp. 7.01-7.05.
- Baulcomb, J. S. (2003), "Management of Change through Force Field Analysis," *Journal of Nursing Management*, Vol. 11, No. 4, pp. 275-280.
- Cavana, R. Y. (2004), "A Qualitative Analysis of Reintroducing Cabotage onto New Zealand's Costs," *Maritime Policy & Management*, Vol. 31, No. 3, pp. 179-198.
- Davis, S. M. and M. N. K. Saunders (1997), "Freedom of Movement for Professionals: An Assessment of the Effectiveness of European Union Policy and the Barriers that Remain," *Journal of Applied Management Studies*, Vol. 6, No. 2, pp. 199-218.
- Delp, P., A. Thesen, J. Motiwalla, and N. Seshardi (1977), *Systems Tools for Project Planning*, Bloomington, IN: International Development Institute, pp. 14-18.
- Eckstein, D. (1994), "Force-field Analysis as an Aid in Decision Making by Couples," *Family Journal*, Vol. 2, No. 4, pp. 371-372.
- Evans, J. R. and W. M. Lindsay (2017), *Quality and Performance Excellence: Management, Organization, and Strategy*, 8th edition, Boston: Cengage Learning.
- Fisher, R., W. Ury, and B. Patton (1991), *Getting to Yes: Negotiating Agreement Without Giving In*, 2nd edition, New York: Penguin Books.
- France, M. H. and J. Wahl (1997), "What's Going on Here? Strategies for Group Development," *Guidance & Counseling*, Vol. 12, No. 3, pp. 24-27.
- Garvin, D. A. (1993), "Building a Learning Organization," *Harvard Business Review*, Vol. 71, No. 4, pp. 78-91.

- Grant, C. and C. Hine (2001), "Evaluating Newly Commissioned Services in Primary Care: Lessons from a Force Field Analysis," *Primary Health Care Research and Development*, Vol. 2, pp. 209-214.
- Grundy, T. (1997), "Management Accounting for Strategic Performance," *Management Accounting (British)*, Vol. 75, No. 11, pp. 63-64.
- Harwell, S. H. (2000), "Impediments to Change: An Application of Force-field Analysis to Leader Master Teacher Training in an Elementary Level Science Systemic Reform Initiative," *Journal of Elementary Science Education*, Vol. 12, No. 2, pp. 7-19.
- Harwood, I. and S. Humby (2008), "Embedding Corporate Responsibility into Supply: A Snapshot of Progress," *European Management Journal*, Vol. 26, No. 3, pp. 166-174.
- Hobbs, D. (2004), "How to Benchmark with Easily Available Resources: Ensure that You're Comparing Apples to Apples," *Public Management*, Vol. 86, No. 8, pp. 14-18.
- Hogan, C. (1998), "Reviewed Article: If You Are Going to Stick to 'Talking Heads,' Why Not Post Them a Video?," *Training & Management Development Methods*, Vol. 12, No. 1, pp. 5.01-5.06.
- Hollingworth, M. (2008), "Strategic Assumptions: The Essential (and Missing) Element of Your Strategic Plan," *Ivey Business Journal Online*, Vol. 72, No. 6, p. 1.
- Kruglanski, A. W., J. J. Bélanger, X. Chen, C. Köpetz, A. Pierro, and L. Mannetti (2012), "The Energetics of Motivated Cognition: A Force-Field Analysis," *Psychological Review* Vol. 119, No. 1, pp. 1-20.
- Kumar, S. (1999), "Force Field Analysis: Applications in PLA," *PLA Notes* Vol. 36, pp. 17-23.
- Lan, L. L. and J. Lee (1997), "Force-field Analysis on Policies Affecting Working Women in Singapore," *Journal of Management Development*, Vol. 16, No. 1, pp. 43-52.
- Lewicki, R. J., D. M. Saunders, and J. W. Minton (1999), *Negotiation*, 3rd edition, Boston: Irwin McGraw-Hill.
- Lewin, K. (1938), *The Conceptual Representation and the Measurement of Psychological Forces*, Durham, North Carolina: Duke University Press.
- Lewin, K. (1951), *Field Theory in Social Science: Selected Theoretical Papers*, New York: Harper & Brothers Publishers.
- Lifter, K., L. Kruger, B. Okun, C. Tabol, L. Poklop, and E. Shishmanian (2005), "Transformation to a Web-based Preservice Training Program: A Case Study," *Topics in Early Childhood Special Education*, Vol. 25, No. 1, pp. 15-24.

- Lunenburg, F. C. (2012), "Devil's Advocacy and Dialectical Inquiry: Antidotes to Groupthink," *International Journal of Scholarly Academic Intellectual Diversity*, Vol. 14, No. 1, pp. 1-9.
- Malson, R. and K. W. Platts (2000), "Building Manufacturing Capabilities," *International Journal of Manufacturing Technology & Management*, Vol. 1, No. 4, pp. 349-365.
- Mersha, T. (1997), "TQM Implementation in LDCS: Driving and Restraining Forces," *International Journal of Operations & Production Management*, Vol. 17, No. 2, pp. 164-183.
- Monczka, R. M., R. B. Handfield, L. C. Giunipero, and J. L. Patterson (2016), *Purchasing & Supply Chain Management*, 6th edition, Mason, Ohio: Cengage Learning.
- Moody, P. E. (1983), *Decision-Making: Proven Methods for Better Decisions*, New York: McGraw-Hill Book Company.
- Negi, G., M. Harsh, V. D. Chauhan, V. Kalra, P. Agarwal, and A. Kusum (2015), "Implementation of an Education Development Project in Pathology to Improve Student Competency-lessons Learnt," *International Journal of Applied and Basic Medical Research*, Vol. 5, pp. S7-10.
- Newhouse, R. C. and M. Neely (1993), "Conflict Resolution: An Overview for Classroom Managers," *International Journal of Educational Management*, Vol. 7, No. 3, pp. 4-8.
- Oliver, G. R. and P. J. Donnelly (2007), "Effective Use of a Strategic Issue Management System (SIMS): Combining Tools and Approaches," *Journal of Public Affairs*, Vol. 7, pp. 399-406.
- Oullette, L. P. (1993), "Profit from Audience Profiling," *Chief Information Officer Journal*, Vol. 5, No. 7, pp. 8-9.
- Paquin, J.-P. and T. Kopyay (2007), "Force Field Analysis and Strategic Management: A Dynamic Approach," *Engineering Management Journal*, Vol. 19, No. 1, pp. 28-37.
- Patterson, J. L. (1999), *Conflict Potential in Strategic Buyer-Supplier Relationships*, East Lansing, Michigan: Michigan State University.
- Pojasek, R. B. (2001), "To Change the Culture, You Must First Master the Force," *Environmental Quality Management*, Vol. 10, No. 3, pp. 73-79.
- Shell, G. R. (2006), *Bargaining for Advantage: Negotiation Strategies for Reasonable People*, New York: Penguin Books.
- Thomas, J. (1985), "Force Field Analysis: A New Way to Evaluate Your Strategy," *Long Range Planning*, Vol. 18, No. 6, pp. 54-59.

Thompson, L. (2005), *The Mind and Heart of the Negotiator*, 3rd edition, Upper Saddle River, New Jersey: Pearson Prentice Hall.

Watts, K. and P. Selman (2004), "Forcing the Pace of Biodiversity Action: A Force-Field Analysis of Conservation Effort at the 'Landscape Scale'," *Local Environment*, Vol. 9, No. 1, pp. 5-20.

Weiss, P. L., S. V. G. Cobb, M. Zancanaro, N. Bauminger-Zviely, S. Eden, E. Gal, and S. J. Parsons (2017), "Challenges in Developing New Technologies for Special Needs Education: A Force-Field Analysis," *Journal of Alternative Medicine Research*, Vol. 9, No. 2, pp. 115-119.

**CONSTRUCT VALIDATION OF A NON-SELF REPORT MEASURE
OF WORKPLACE DEVIANCE**

Susan M. Stewart
Western Illinois University – Quad Cities

H. Kristl Davison
Appalachian State University

Journal of Contemporary Business Issues
Western Illinois University
Volume 24, Number 1, 2019

CONSTRUCT VALIDATION OF A NON-SELF REPORT MEASURE OF WORKPLACE DEVIANCE

In 2009, Stewart, Bing, Davison, Woehr, and McIntyre reexamined the commonly used self-report measure of workplace deviance developed by Bennett and Robinson (2000) and adapted it into a non-self report measure based on multiple other-reported assessments. Stewart et al.'s measure has provided organizational researchers with a tool to gather information on deviant workplace behaviors of employees from other (i.e., non-self-report) sources, such as peers and supervisors. The current study extends the Stewart et al. scale development work by examining the convergent and discriminant validity, as well as the criterion-related validity, of this non-self report measure of workplace deviance to further evaluate its psychometric properties. The findings provide additional evidence of the utility of Stewart et al.'s measure by providing a nomological network around the non-self report deviance scales and support their construct validity. The usefulness of this measure and the theoretical implications of measuring deviance from others' perspectives are discussed.

INTRODUCTION

Over the last twenty years, workplace deviance has increasingly become an issue of importance both in the public arena as well as in academic research. The Occupational Safety and Health Administration has indicated that each year nearly two million U.S. employees report being victims of workplace violence (OSHA, 2019). Beyond actual acts of violence, other less extreme forms of workplace deviance are common, with more than half of workers being affected by bullying, which includes verbal abuse and intimidation in the workplace (Comaford, 2016; Namie, 2017). Research has been increasingly focused on this topic; for example, a search of Business Source Elite for the terms “workplace deviance,” “counterproductive workplace behavior,” or “workplace bullying” produced more than 850 scholarly works on this topic since 1999. Clearly, deviant and counterproductive behaviors in the workplace remain an important and relevant issue.

Workplace deviance has been defined as “voluntary behavior that violates significant organizational norms and in so doing threatens the well-being of the organization, its members, or both” (Robinson & Bennett, 1995, p. 556). Robinson and Bennett (1995) developed a typology of workplace deviance based on crossing two dimensions: the target of the deviance (interpersonal vs. organizational) and severity of the deviance (minor vs. serious). This crossing produced a four-cell typology consisting of political deviance (minor interpersonal deviance), personal aggression (serious interpersonal deviance), production deviance (minor organizational deviance), and property deviance (serious organizational deviance). Although there are a number of other approaches for organizing deviant and counterproductive acts (e.g., Spector et al., 2006), as well as some that group them into a single category (e.g., Skarlicki & Folger, 1997), the Robinson and Bennett (1995) approach and their associated measure of workplace deviance (Bennett and Robinson, 2000) have received a good deal of attention and are widely used in research on workplace deviance. Thus, here we focus on their work and recent modifications that have expanded its usefulness.

Based on the four-cell typology of workplace deviance, Bennett and Robinson (2000) developed a corresponding measure. To create this measure, they proceeded through a series of steps to develop, review, and refine items, ultimately resulting in 28 items assessing deviant workplace behaviors. Subsequently, they used both exploratory and confirmatory factor analysis to develop a final, 19-item measure, consisting of twelve Organizational Deviance items and seven Interpersonal Deviance items. However, it should be noted that their workplace deviance measure was developed using self-reports and thus was intended for applications to situations in which self-reported acts of deviance would be obtainable from individuals as the potential perpetrators.

This use of a self-report measure raises two problems for research in the area of workplace deviance. First, same-source systematic method error or bias can occur when the same source provides information on both a predictor and a criterion, which can inflate relations among measured constructs (Campbell and Fiske, 1959; Feldman and Lynch, 1988; Podsakoff and Organ, 1986). This is not a significant concern if a researcher is studying the effects of different situations on deviance, and the situations are either manipulated by the experimenter or measured via non-self report means (e.g., others' observations). However, if participants are responding both to measures of workplace deviance, and, for example, to perceptions of the workplace situation, or even to other individual differences measures such as personality and/or attitudes, then same-source bias as well as common method bias are potential concerns. A second concern is that often it may not be possible or prudent to attempt to collect self-reports of deviance. A number of research streams have suggested that individuals may be reluctant to self-report negative information about themselves (e.g., Bing, LeBreton, Davison, Migetz, and James, 2007; Bing, Stewart, et al., 2007; Lee, 1993). Consequently, self-reports of deviance may not always be accurate.

Given the above concerns about the Bennett and Robinson (2000) self-report measure of workplace deviance, Stewart, Bing, Davison, Woehr, and McIntyre (2009) modified that original self-report measure into a non-self report measure based on multiple other-reported assessments (i.e., observers' assessments). However, given that observers of deviant behaviors likely differ in their opportunities to observe such behaviors, as well as the fact that different observers may have different reporting biases, it was possible that other-reports of deviance might produce a different factor structure (and even with different items) than self-reports. Thus, rather than using Bennett and Robinson's (2000) 19-item measure, Stewart et al. (2009) started with the original 28 items and used an employee sample consisting of coworkers, supervisors, subordinates, etc., who rated target employee participants on those 28 items. An exploratory factor analysis following by a confirmatory factor analysis on those items revealed a three-factor structure with fourteen items, assessing the categories of production deviance, property deviance, and personal aggression. Moreover, the three-factor structure was generally found to be psychometrically equivalent across both coworkers and supervisors.

Stewart et al.'s (2009) fourteen-item non-self report measure has significant advantages for use in the study of workplace deviance, given both practical (e.g., impression management) and ethical (e.g., self-incrimination) concerns in collecting such information in a self-reported manner directly from employees as potential perpetrators of the deviant behaviors. Moreover,

this non-self report measure has potential for use in studying workplace deviance as a multi-level phenomenon (see O'Boyle, Forsyth, and O'Boyle, 2011).

Although Stewart et al. (2009) determined the dimensionality, internal consistency, and measurement equivalence of the resulting three workplace deviance scales, the validity of the three scales (e.g., criterion-related validity) has yet to be investigated extensively. Hence, the goal of the current study is to begin to establish the nomological network around these non-self report deviance scales in order to provide additional and novel support for their construct validity that was not provided by Stewart et al. (2009). Specifically, we investigate the convergent validity of Stewart et al.'s (2009) non-self report workplace deviance scales by examining their relationships with personality constructs to which they theoretically should be related. We also examine their relationships with actuarial job outcomes that they should logically and theoretically predict, to provide evidence of convergent and criterion-related validity. Additionally, we examine relationships between the workplace deviance scales and constructs to which they should theoretically *not* be related in order to provide evidence of discriminant validity.

METHODOLOGY

Participants and Procedure.

The current study utilized the same sample of employee participants and raters as in Study 2 of Stewart et al. (2009). The participants were employees of a large hospital in the southeastern U. S. who worked in a variety of positions, including administrators, physical therapists, nurses, and support and service staff. Standard letters describing the research project were sent to the hospital employees. To increase project support and response rates, a presentation about the study was also made to managers, and follow-up letters were sent to the hospital employees. Participants were informed that the purpose of the study was to examine work experiences and attitudes of healthcare employees. The sample of participants included 195 employees (139 women, 38 men, 19 not reporting).

At hospital staff meetings, a survey containing several personality measures (see *Measures* section) was distributed to employee participants. Personality data were obtained from 184 (41 men, 143 women) of the 195 employee participants. In addition, four sealed survey packets, which contained the deviant behavior checklist (see *Measures* section) were also given to each employee participant at these staff meetings. The employee participants were asked to put their own name on the outside of each packet. They were also requested to select four individuals (e.g., coworkers, subordinates) with whom they worked on a regular basis and to write on the outside of each packet the name of each of these individuals. The employee participants did not see the surveys in these packets but were informed that the individuals (i.e., raters) they identified would rate their behavior at work. One additional packet was also given to each employee participant's immediate supervisor. Raters completed the surveys at a later time and returned them in a pre-addressed, postage-paid envelope. All participants were assured of the confidentiality of their responses and informed that their responses would be used for research purposes only. Actuarial job outcomes were obtained directly from the hospital's human

resource department.

Ratings were received from a total of 726 (584 women, 126 men) raters, and a mean of 3.72 ratings was received per employee participant. Coworkers (60.2%), supervisors (24.4%), subordinates (9.9%), internal suppliers (1.5%), and 'other' (3.2%) raters provided these ratings. Raters also reported on aspects of the relationship with the employee participant. For example, 39.4% noted that they spent quite a bit of time or a great deal of time together, and 29.2% indicated that they worked together for over four years.

Measures.

Workplace Deviance Scales. Stewart et al.'s (2009) 14-item non-self report measure of workplace deviance was used in the current study. The response scale was: (1) *never*, (2) *several times a year*, (3) *monthly*, (4) *weekly*, and (5) *daily*. As described by Stewart et al. (2009), the seven production deviance items were averaged across raters within targets to create a Production Deviance scale score, and the same procedure was used for the three property deviance items and the four personal aggression items to form Property Deviance and Personal Aggression scale scores, respectively.

Because researchers (e.g., George, 1990) have noted that, unless raters nested within the same target (in this case, rating the same employee participant) provide relatively similar ratings, those rater responses should not be aggregated into scale scores. Hence, the agreement among raters nested within the same target was established prior to calculating scale scores. The intraclass correlations, ICC(1,1) and ICC(1,*k*), were calculated to assess interrater agreement in this study (e.g., Bartko, 1976; LeBreton and Senter, 2008; Shrout and Fleiss, 1979). Because the deviance checklists were completed by an average of 3.72 (i.e., approximately $k = 4$) raters per each target in Study 2 of Stewart et al. (2009), the ICC(1,*k*) was computed by applying the Spearman-Brown formula to the ICC(1,1) to determine the reliability of four raters' mean ratings.

For Production Deviance, the ICC(1,1) value was .18 and the ICC(1,4) value was .47. For Property Deviance, the ICC(1,1) value was .37 and the ICC(1,4) value was .70. For Personal Aggression, the ICC(1,1) value was .24 and the ICC(1,4) value was .56. Although there are no strict standards of acceptability for either ICC(1,1) or ICC(1, *k*) values, James (1982) reported a median ICC(1,1) value of .12 in the organizational climate literature, and Glick (1985) recommended an ICC(1,*k*) cutoff of .60. As indicated, the ICC(1,1) values are above the median reported by James (1982), and the ICC(1,*k*) values are close to or above the cutoff recommended by Glick (1985) and thus are not low enough to prohibit aggregation. Additionally, the scale scores showed acceptable internal consistency, with coefficient alpha reliabilities of .92 for the Production Deviance scale, .95 for the Property Deviance scale, and .89 for the Personal Aggression scale. The three deviance scales also correlated with each other moderately. Production Deviance correlated with Property Deviance at .48 ($p < .01$) and with Personal Aggression at .50 ($p < .01$). Property Deviance correlated with Personal Aggression at .51 ($p < .01$). Overall, these results suggest adequate levels of agreement among raters and adequate levels of scale reliability.

Hogan Personality Inventory. The 206-item Hogan Personality Inventory (HPI; Hogan & Hogan, 1995) was administered in this study. The HPI manual provides evidence for the reliability and validity of these scales. Participants responded with *true* or *false* to HPI items, and high scores on all HPI scales indicated higher levels of the measured construct (e.g., high scores on the Prudence scale indicated the presence of more prudence, etc.).

The following HPI scales were used to examine convergent validity due to the theoretically defensible associations (in a negative direction) of these constructs with workplace deviance: Employee Reliability, Prudence, Empathy, No Hostility, Not Spontaneous, and Avoids Trouble. For example, workplace deviants should be lower in employee reliability than their non-deviant peers, lower in sound judgment and thus be less prudent, and have little empathy for others, especially for the victims of their deviant behavior. Furthermore, workplace deviants should be higher in hostility, lack some degree of behavioral impulse control and thus likely have a higher degree of spontaneity, and be less trouble avoidant than their peers.

In addition, the following HPI scales were used to examine discriminant validity due to the dissimilarity of these constructs to workplace deviance: Likes Crowds, Interest in Culture, No Somatic Complaints, Not Autonomous, Perfectionism, and Clerical Potential.

Aggression. The Aggression scale from the Jackson Personality Research Form (PRF; Jackson, 1984) was used to measure whether participants agreed on a *true* or *false* scale with twenty items assessing a non-pathological personality dimension of aggression. High scores on this scale indicated higher levels of aggression. The manual for the PRF provides evidence for the reliability and validity of this scale. In our study coefficient alpha for this scale was .59. We hypothesized that workplace deviants would be higher in aggression than their non-deviant peers, so this scale was used for examining convergent validity.

Primary and Secondary Psychopathy. As conditions of psychopathy often manifest themselves in the form of deviant behaviors (Levenson, 1990, 1992), a 26-item Psychopathy measure (Levenson, Kiehl, and Fitzpatrick, 1995) consisting of two scales measuring Primary and Secondary Psychopathy was also administered for examining convergent validity. Primary Psychopathy is characterized as uncaring, selfish, and manipulative, whereas Secondary Psychopathy is characterized as self-defeating and impulsive (Levenson et al., 1995). Participants responded using a 5-point Likert scale ranging from *strongly disagree* (1) to *strongly agree* (5). High scores indicated greater psychopathy. The coefficient alphas were .79 and .59 for the Primary and Secondary Psychopathy scales, respectively.

Actuarial Job Outcomes. Objective job outcomes were collected directly from the hospital's human resource department to provide evidence of criterion-related validity. These outcomes included the number of disciplinary actions (e.g., warning letters) filed against the employee participants by the organization. These disciplinary actions are often filed when an employee violates a rule or norm of the organization which can threaten the well-being of the organization and its members. To the extent that those higher in workplace deviance should be more likely to violate organizational norms and rules, such recorded infractions (i.e., disciplinary actions) should accrue more often for workplace deviants than for non-deviants (Feldman, 1984). Thus,

we hypothesized that a significant portion of variance in disciplinary actions should be explained by individual differences in workplace deviance measured here. Although disciplinary actions are certainly multiply determined and not every disciplinary action is indicative of deviance, there should nonetheless be a portion of variance in these disciplinary actions explained by workplace deviance as deviant behavior can result in acts that violate organizational rules and result in disciplinary actions. In sum, we predicted a positive relationship between our measures of workplace deviance and the number of disciplinary actions recorded. The number of disciplinary actions per employee participant ranged from 0 to 8, with a mean of .16 ($SD = .75$).

In addition, we collected data on the number of hours of sick leave taken by the employee participants within a twelve-month period. Number of hours sick leave was collected because Robinson and Bennett (2000) indicate that “calling in sick when not” is a form of deviance. Also, Spector and Fox (2005) note that absence behavior (as a form of work withdrawal) is often included in measures of counterproductive workplace behaviors. Similarly, Lau, Au, and Ho (2003) indicate that absenteeism is a typical criterion of counterproductive workplace behaviors. Finally, Lawrence and Robinson (2007) classify absenteeism as an organizationally-directed minor form of production deviance. In sum, although some sick leave taken by an employee certainly can have legitimate causes, we considered that taking *excessive sick leave* might be a form of retaliation against the organization, supervisors, or co-workers, insofar as taking unnecessary and excessive sick leave could leave the organization understaffed and put undue pressure on the remaining organizational members. In sum, as with disciplinary actions, we expected a portion of the variance in sick leave to be explained by workplace deviance. Thus, we predicted a positive correlation between the number of hours of sick leave and workplace deviance. Hours of sick leave ranged from 0 to 596, with a mean of 95.67 ($SD = 109.24$).

RESULTS

The means and standard deviations for the three deviance scales were as follows: Production Deviance ($M = 1.35$, $SD = .45$), Property Deviance ($M = 1.06$, $SD = .26$), and Personal Aggression ($M = 1.40$, $SD = .47$). Thus, the deviant acts were committed by the employee participants, on-the-average, between “never” and “several times a year,” indicating that deviance is a relatively low-base-rate phenomenon. Means and standard deviations for the other scales and criteria are presented in Table 1.

Convergent Validity

The results of the correlational analyses designed to provide convergent validity evidence for the deviant workplace behavior scales can be found in Table 1. The presence of significant correlation coefficients in expected a priori directions between the measures of interest and the measures of similar constructs provide evidence of convergent validity (see Campbell and Fiske, 1959). As the table shows, Production Deviance correlated significantly with Primary Psychopathy (.15), Prudence (-.13), Not Spontaneous (-.15), and Avoids Trouble (-.14). Although these correlations are in the predicted direction, they are not overly strong, but nonetheless provide some degree of convergent validity for Production Deviance. The same can be noted for Property Deviance, which had significant correlations with Aggression (.15),

Empathy (-.13), and Avoids Trouble (-.21). However, stronger correlations were found for Personal Aggression, which had significant correlations with all of the scales used to examine convergent validity. For example, Personal Aggression correlated with Primary Psychopathy (.25), Aggression as measured via the PRF (.26), Employee Reliability (-.27), and Avoids Trouble (-.24). Thus, stronger evidence of convergent validity was obtained for the workplace deviance other-report scale of Personal Aggression, and more moderate support was obtained for Production and Property Deviance. Certainly, it makes sense that of the three deviance scales, Personal Aggression would correlate most strongly with the PRF Aggression scale. Moreover, given that some of the personality traits measured in this study involve interpersonal interactions (e.g., Primary Psychopathy, Empathy, No Hostility), it also is reasonable that Personal Aggression (a serious form of interpersonal deviance) would correlate more strongly than the other deviance scales with these traits.

Discriminant Validity

Table 1 also presents the results of correlational analyses designed to provide evidence of discriminant validity for the deviant workplace behavior scales. A lack of significant correlation coefficients between the measures of interest and measures of dissimilar constructs provide evidence of discriminant validity (see Campbell and Fiske, 1959). For example, there is no compelling theoretical reason why scores on Clerical Potential would be related to scores on the scales of workplace deviance. The results presented in Table 1 provide strong evidence for discriminant validity, as the observed correlation coefficients between each of the workplace deviance scales and measures of dissimilar constructs (i.e., Likes Crowds, Interest in Culture, No Somatic Complaints, Not Autonomous, Perfectionism, and Clerical Potential) were low (i.e., ranging from -.09 to .07) and nonsignificant. Moreover, these correlations of the workplace deviance scales with unrelated constructs were almost always lower than the correlations of the workplace deviance scales with similar constructs, providing further evidence of construct validity.

Criterion-Related Validity

Finally, the results of the criterion-related validity analyses are presented in Table 1. Positive and statistically significant validity coefficients were found between all three measures of workplace deviance and the number of disciplinary actions taken against the employee ($r = .42$ for Production Deviance, $r = .72$ for Property Deviance, $r = .41$ for Personal Aggression). Clearly, those who engage in property deviance are highly likely to receive more disciplinary actions. However, the correlations were also quite strong for both Production Deviance and Personal Aggression, both of which represent acts of deviance that would merit disciplinary action by the organization. Thus, although disciplinary actions are multiply determined, and not every disciplinary action can be attributed to deviant workplace behavior, from these results it certainly would appear that deviant workplace behavior is strongly associated with organizational sanctions, measured here as disciplinary actions, against organizational norm and rule violators.

Additionally, the number of hours of sick leave taken by employees was significantly correlated with Production Deviance ($r = .21$) and Personal Aggression ($r = .17$). Although these

correlations are not as strong as those for disciplinary actions, they do provide evidence of criterion-related validity. It is interesting to note that items such as “Came in late to work without permission,” “Put little effort into their work,” and “Intentionally worked slower than they could have worked,” which are in the Production Deviance scale, are indicative of a lack of work effort (e.g., work withdrawal) and passive forms of workplace deviance. Not showing up to work via claiming sick leave when one is *not* actually sick is similar to these forms of workplace inactivity, insofar as it is a withdrawal behavior that impacts productivity. Thus, there does appear to be a portion of sick leave that is a result of Production Deviance, which other researchers have also anticipated (e.g., Lawrence and Robinson, 2007; Spector and Fox, 2005). However, a good deal of the variance in sick leave was left unexplained, which one would also anticipate because variance in sick leave is also a result of legitimate absences. Taken together, these correlations with objectively measured outcomes provide support for the criterion-related validity of these non-self reported measures of workplace deviance.

DISCUSSION

The Stewart et al. (2009) study utilized Bennett and Robinson’s (2000) measure of workplace deviance to develop and assess the psychometric properties of an instrument based on other-reported, rather than self-reported, organizationally deviant acts. Stewart et al.’s measure has provided organizational researchers with a tool to gather information on deviant workplace behaviors of employees from other sources, such as peers and supervisors. The current study extends Stewart et al.’s scale development work by providing new evidence for the construct validity of this instrument. This new evidence of construct validity was obtained by examining the relationships between the deviance scales and other measures that assess related constructs (i.e., personality traits such as aggression, hostility, and psychopathy) and unrelated constructs (i.e., interest in culture, perfectionism). Support for the criterion-related validity of the deviance scales was also obtained with actuarial work outcomes (i.e., disciplinary actions).

Personal Aggression in particular obtained the strongest convergent validity with the personality traits, which may be due to the interpersonal nature of both Personal Aggression and a number of the assessed traits (e.g., primary psychopathy, aggression, empathy). Indeed, the Personal Aggression scale includes items related to saying hurtful things, acting rudely, and making fun of others, all of which can certainly be considered uncaring, hostile, and unempathetic acts. All three scales, but especially Property Deviance, exhibited strong criterion-related validity with the number of disciplinary actions taken against the target employee. As Property Deviance represents a serious form of organizational deviance, it is not surprising that those who engage in acts of property deviance such as theft or drug use on the job would be subject to disciplinary actions. Finally, of the three scales, Production Deviance was most strongly related to hours of sick leave taken. Although not all sick leave is unjustified, taking excessive, unjustifiable sick leave can be considered a deviant form of withdrawal behavior and could be akin to behaviors such as working slower, taking longer breaks, or coming in late. Thus, the results presented here for convergent and criterion-related validity, along with the findings for discriminant validity, provide further evidence of the construct validity of the Stewart et al. (2009) other-report measure of workplace deviance.

Here, we should also note that the personality measures used in this study to assess employee participants' personality were from several different personality tests (i.e., the HPI, the PRF, Levenson's Psychopathy measure). Thus, convergent validity was found with multiple measures of personality traits, and from different measures with different conceptualizations of related constructs. Also, the use of actuarial data on disciplinary actions and sick leave, obtained from the independent source of HR personnel records, is another strength of the current study as (a) these are important organizational outcomes, and (b) relationships with these outcomes cannot be explained by mono-method nor same-source bias. In sum, other-reports of workplace deviance were correlated with various self-report measures of the target employees' personality traits, and also with actuarial employee records. The diversity of sources used in the current study provides an important test of construct validity, and greatly attenuates concerns with methodological artifacts (e.g., same-source bias, method bias, etc.).

Thus, concerns such as those voiced by O'Boyle et al. (2011, p. 56), that use of other-reports leads to a "loss of information" may very well depend upon the type of deviance under investigation. For example, given that interpersonal aggression is, by definition, experienced by the "other" person, that construct in particular may be quite accurately measured by other-reports, whereas self-reported interpersonal aggression could easily be underreported due to impression management motives and self-deception. In fact, it may be the case that the Personal Aggression scale obtained superior convergent validity results in comparison to the other scales (see Table 1) as it is very appropriately and accurately measured via other-reports, given that interpersonally aggressive acts are relatively easily visible and indeed often experienced by other colleagues. Thus, we should reiterate that, because self-reports of workplace deviance likely include substantial underreporting (especially when the individual is identifiable), it is possible that other-reports may be more accurate in certain cases and for certain forms of deviance (e.g., interpersonal deviance). Future research may investigate how other aspects of the relationship between rater and target affect reporting of deviant behaviors, such as closeness or quality of the relationship.

THEORETICAL IMPLICATIONS

Our findings have implications for the study of workplace deviance from multiple perspectives. As noted above, self-reports of deviance may have underreporting of deviance, for various reasons, whereas use of other-reports may also be deficient in their coverage of deviant acts. To understand the value of these differing perspectives on reporting of workplace deviance, Hogan's (1991) socioanalytic theory may be valuable. Specifically, Hogan proposes that self-ratings provide a way for the individual to present his or her identity, "the core and bedrock of each person's psychological being, and the primary means by which each person guides and interprets his or her life" (Hogan, 2007, p. 9). In contrast, observer ratings measure an individual's reputation, or what a person has done in the past. From this perspective, both self-ratings and other-ratings of workplace deviance can be value-added, insofar as they complement each other by providing different perspectives on deviance. For example, individuals who engage in acts of deviance may not recognize that their acts are deviant, or may not realize that others perceive their acts as deviant. This provides one possible explanation for why the Bennett and Robinson (2000) measure of self-reported workplace deviance included some different items as compared to Stewart et al.'s (2009) measure—the self-report measure is capturing one's identity, and the

non-self-report measure captures one's reputation.

Table 1

RESULTS OF VALIDATION ANALYSES

MEASURES	M	SD	OBSERVED CORRELATIONS		
			PRODUCTION DEVIANCE	PROPERTY DEVIANCE	PERSONAL AGGRESSION
<i>Convergent Validation</i>					
Primary Psychopathy	1.82	.46	.15*	.09	.25**
Secondary Psychopathy	2.19	.46	.10	.04	.19**
PRF Aggression	1.26	.16	.09	.15*	.26**
<i>Dimensions from the HPI</i>					
Employee Reliability	11.68	3.13	-.11	-.08	-.27**
Prudence	20.12	3.89	-.13*	-.03	-.24**
Empathy	2.91	1.40	-.10	-.13*	-.18**
No Hostility	2.05	.95	-.11	-.11	-.21**
Not Spontaneous	2.70	.94	-.15*	-.05	-.17*
Avoids Trouble	3.82	1.10	-.14*	-.21**	-.24**
<i>Discriminant Validation</i>					
<i>Dimensions from the HPI</i>					
Likes Crowds	1.57	1.55	.07	.05	.02
Interest in Culture	1.90	1.32	.07	-.08	-.03
No Somatic Complaints	3.41	3.41	.02	.01	.00
Not Autonomous	2.28	2.28	-.01	.03	-.04
Perfectionism	3.16	1.07	.04	.06	-.09
Clerical Potential	15.53	4.17	.05	-.02	.03
<i>Criterion-Related Validation</i>					
Number of Disciplinary Actions	.16	.75	.42**	.72**	.41**
Number of Hours of Sick Leave	95.67	109.24	.21**	.11	.17*

Note. $N = 176$ after aggregation of the other-reports of workplace deviance across raters within targets.

* $p < .05$ ** $p < .01$. PRF = Personality Research Form. HPI = Hogan Personality Inventory.

It may also be helpful to consider the realistic accuracy model (RAM; Funder, 1995) of reporting of personality traits when investigating the reporting of workplace deviance. Specifically, according to RAM, personality ratings are more accurate when behavioral patterns can be reliably observed. Work by Gosling, Ko, Mannarelli, and Morris (2002) has suggested that such patterns take the form of identity claims and behavioral residue. Identity claims are observable behaviors that are used to present one's identity to other individuals, such as displaying particular bumper stickers or books, etc., that "advertise" one's personality characteristics. In contrast, behavioral residue consists of physical evidence in one's environment that is indicative of one's personality, such as having fliers about parties or other social events might indicate extraversion. Together, identity claims and behavioral residue provide information about an

individual's personality that observers view and interpret to make a subsequent inference about a target's personality.

Given this perspective, the value of using various other-reports of workplace deviance can be framed within the context of identity claims and behavioral residue. Different observers may have different opportunities to observe a target's identity claims and behavioral residue indicative of deviance, and thus using multiple observers can be value-added. For example, consider the item, "Left their work for someone else to finish." Leaving one's work unfinished could provide the kind of behavioral residue that is indicative of deviance, and moreover, would likely be easily observable by multiple others (i.e., co-workers, supervisors, etc.). Similarly, the item "Made fun of someone at work" could represent a kind of identity claim that is also observable by others. Making fun of others could be misconstrued by the individual performing the act as playful banter that he or she believes to be consistent with a reputation of being comical. Thus, this individual has a non-deviant identity of being witty, whereas others might consider such behavior, depending upon the intensity and nature of the joking, as mean-spirited and thus deviant. In sum, Hogan's (1991) socioanalytic theory of personality along with RAM (Funder, 1995) may enhance our understanding of differences between self- and other-reports of workplace deviance, and future research could expand the realm of identity claims and behavioral residue that could be indicative of deviant acts to more fully capture the construct of workplace deviance.

LIMITATIONS

Additional research is also needed to empirically assess the relationship between self- and other-ratings of workplace deviance. Due to organizational constraints in the current study, we were unable to obtain permission from the organization to gather self-reported deviance. However, it is an important aspect that needs to be examined in future research. Research by Fecteau and Craig (2001) suggests that self-raters perceive fewer differences among themselves (i.e., are less discriminating) than peer, supervisor, and subordinate raters. Furthermore, range restriction has been found to attenuate observed correlations between self-ratings and others' ratings (LeBreton, Burgess, Kaiser, Atchley, and James, 2003). These are interesting issues that need to be addressed using a dataset that contains both self-ratings and other-ratings of workplace deviance.

Another limitation is that the employees were allowed to select the raters who evaluated them. Hence, these employees may have distributed the survey packets primarily to individuals who shared their own conceptualization of normative performance. If certain groups of individuals were systematically excluded because of the employee participants' choices, the results reported here may not generalize to studies or situations in which employees have less control over who evaluates them. However, we should note that the employee participants did not have a choice with regard to the participation of their immediate supervisors (see *Methods* section). Also, Stewart et al. (2009) found only minimal differences when examining the workplace deviance factor structure by source (i.e., they obtained "partial metric invariance" across coworker and supervisory reports, p. 212), so we can conclude that the survey distribution process was not likely a vital concern and did not negatively impact the results of the current study. However, future research should examine such issues surrounding data collection efforts that involve non-self reports of workplace

deviance among various organizational members (e.g., coworkers, supervisors, subordinates, etc.).

Furthermore, this study focused on a sample of employees in one organization, a hospital setting, which may also limit the generalizability of the results. However, individuals from a number of different departments and functional areas participated, which together represented a broad variety of positions. Because of this diversity of employees, we were also limited in the possible criteria we could use for the validation. Specifically, we selected disciplinary actions and sick leave as our criteria. Certainly these criteria, like most organizational outcomes, are multiply determined, and other factors beyond individual or organizational deviance could have affected them. However, we did find significant correlations between the workplace deviance measures and these criteria. Nonetheless, we believe that it would be valuable to obtain other criteria, including self-reported deviance as well as organizational criteria such as standard performance appraisals or even low-base rate criteria such as theft. Future research should attempt to replicate this study's findings in other organizations and industries with additional workplace criteria.

Finally, our focus was on the Stewart et al. (2009) measure, which was based on the Bennett and Robinson (2000) scale of workplace deviance because of its wide use and the particular interest it has sparked among organizational researchers and business managers. Future studies might examine or develop other aggression or deviance-related scales for performance evaluations that focus on counterproductivity as opposed to productivity. This is a fruitful area for future research which could also consider different conceptualizations of deviance.

CONCLUSION

In closing, it is hoped that this study stimulates others to consider conducting research on the assessment of deviant workplace behaviors from a non-self report perspective. Interested parties might want to use the modified version of the Bennett and Robinson (2000) instrument provided by Stewart et al. (2009) as a criterion measure to assess deviant workplace behaviors, in addition to focusing on prosocial workplace behaviors that have traditionally been assessed in a non-self report fashion (e.g., organizational citizenship behaviors). This information should be of particular interest to researchers and managers who are attempting to identify, understand, and predict deviant workplace behaviors that waste a substantial amount of human and financial organizational resources.

REFERENCES

- Bartko, J. J. (1976), "On various intraclass correlation reliability coefficients," *Psychological Bulletin*, Vol. 83, pp. 762-765.
- Bennett, R. J. and S. L. Robinson (2000), "Development of a measure of workplace deviance," *Journal of Applied Psychology*, Vol. 85, pp. 349-360.
- Bing, M. N., S. M. Stewart, H. K. Davison, P. D. Green, M. D. McIntyre, and L. R. James (2007), "An integrative typology of personality assessment for aggression: Implications for predicting counterproductive workplace behavior," *Journal of Applied Psychology*, Vol. 92, pp. 722-744.
- Bing, M. N., J. M. LeBreton, H. K. Davison, D. Z. Migetz, and L. R. James (2007), "Integrating implicit and explicit social cognitions for enhanced personality assessment: A general framework for choosing measurement and statistical methods," *Organizational Research Methods*, Vol. 10, pp. 346-389.
- Campbell, D. T. and D. W. Fiske (1959), "Convergent and discriminant validation by the multitrait-multimethod matrix," *Psychological Bulletin*, Vol. 56, pp. 81-105.
- Comaford, C. (2016), "75% of Workers Are Affected by Bullying - Here's What To Do About It." Retrieved on 5/1/2019 at <https://www.forbes.com/sites/christinecomaford/2016/08/27/the-enormous-toll-workplace-bullying-takes-on-your-bottom-line/#549ccf0d5595>.
- Facteau, J. D. and S. B. Craig (2001), "Are performance appraisal ratings from different rating sources comparable?" *Journal of Applied Psychology*, Vol. 86, No. 2, pp. 215-227.
- Feldman, D. C. (1984), "The development and enforcement of group norms," *Academy of Management Review*, Vol. 9, pp. 47-53.
- Feldman, J. M. and J. G. Lynch, Jr. (1988), "Self-generated validity and other effects of measurement on belief, attitude, intention, and behavior," *Journal of Applied Psychology*, Vol. 73, pp. 421-435.
- Funder, D. C. (1995), "On the accuracy of personality judgment: A realistic approach," *Psychological Review*, Vol. 4, pp. 652-670.
- George, J. M. (1990), "Personality, affect, and behavior in groups," *Journal of Applied Psychology*, Vol. 75, pp. 107-116.
- Glick, W. H. (1985), "Conceptualizing and measuring organizational and psychological climate: Pitfalls in multilevel research," *Academy of Management Review*, Vol. 10, pp. 601-616.
- Gosling, S. D., S. J. Ko, T. Mannarelli, and M. E. Morris (2002), "A room with a cue: Judgments

- of personality based on offices and bedrooms,” *Journal of Personality and Social Psychology*, Vol. 82, pp. 379–398.
- Hogan, R. T. (1991), “Personality and personality measurement,” In M. D. Dunnette and L. M. Hough (Eds.), *Handbook of Industrial and Organizational Psychology*, 2nd ed., Vol. 2, pp. 873–919, Palo Alto, CA: Consulting Psychologists Press.
- Hogan, R. (2007), *Personality and the Fate of Organizations*, Hillsdale, N.J.: Erlbaum).
- Hogan, R. and J. Hogan (1995), *Hogan Personality Inventory Manual*, Tulsa, OK: Hogan Assessment Systems.
- Jackson, D. N. (1984), *Personality Research Form Manual*, 3rd ed., Port Huron, MI: Research Psychologists Press.
- James, L. R. (1982), “Aggregation bias in estimates of perceptual agreement,” *Journal of Applied Psychology*, Vol. 67, pp. 219-229.
- Lau, V. C. S., W. T. Au, and J. M. C. Ho (2003), “A qualitative and quantitative review of antecedents of counterproductive behavior in organizations,” *Journal of Business and Psychology*, Vol. 18, pp. 73-99.
- Lawrence, T. B. and S. L. Robinson (2007), “Ain’t Misbehavin: Workplace deviance as organizational Resistance,” *Journal of Management*, Vol. 33, pp. 378-394.
- LeBreton, J. M., J. R. D. Burgess, R. B. Kaiser, E. K. Atchley, and L. R. James (2003), “The restriction of variance hypothesis and interrater reliability and agreement: Are ratings from multiple sources really dissimilar?” *Organizational Research Methods*, Vol. 6, pp. 80-128.
- LeBreton, J. M. and J. L. Senter (2008), “Answers to twenty questions about interrater reliability and interrater agreement,” *Organizational Research Methods*, Vol. 11, pp. 815-852.
- Lee, R. M. (1993), *Doing research on sensitive topics*, London: Sage.
- Levenson, M. R. (1990), “Risk Taking and Personality,” *Journal of Personality and Social Psychology*, Vol. 58, pp. 1073-1080.
- Levenson, M. R. (1992), “Rethinking psychopathy,” *Theory and Psychology*, Vol. 2, pp. 51-71.
- Levenson, M. R., K. A. Kiehl, and C. M. Fitzpatrick (1995), “Assessing psychopathic attributes in a noninstitutionalized population,” *Journal of Personality and Social Psychology*, Vol. 68, pp. 152-158.
- Namie, G. (2017), “*Workplace Bullying Institute U.S. Workplace Bullying Survey*,” Downloaded May 1, 2019 from <https://www.workplacebullying.org/wbiresearch/wbi-2017-survey/>.

- O'Boyle, E. H., D. R. Forsyth, and A. S. O'Boyle (2011), "Bad apples or bad barrels: An examination of group- and organizational-level effects in the study of counterproductive work behavior," *Group & Organization Management*, Vol. 36, pp. 39-69.
- Occupational Safety and Health Administration (2019), "Workplace Violence," Retrieved on 5/1/2019 at <https://www.osha.gov/SLTC/workplaceviolence/>.
- Podsakoff, P. M. and D. W. Organ (1986), "Self-reports in organizational research: Problems and prospects," *Journal of Management*, Vol. 12, pp. 531-544.
- Robinson, S. L. and R. J. Bennett (1995), "A typology of deviant workplace behaviors: A multidimensional scaling study. *Academy of Management Journal*, Vol. 38, pp. 555-572.
- Shrout, P. E. and J. L. Fleiss (1979), "Intraclass correlations: Uses in assessing rater reliability," *Psychological Bulletin*, Vol. 86, pp. 420-428.
- Skarlicki, D. P. and R. Folger (1997), "Retaliation in the workplace: The roles of distributive, procedural, and interactional justice," *Journal of Applied Psychology*, Vol. 82, pp. 434-443.
- Spector, P. E. and S. Fox (2005), "Concluding thoughts: Where do we go from here?" In S. Fox & P. E. Spector (Eds.), *Counterproductive Work Behavior: Investigations of Actors and Targets*, Washington, D.C.: American Psychological Association.
- Spector, P. E., S. Fox, L. M. Penney, K. Bruursema, A. Goh, and S. Kessler (2006), "The dimensionality of counterproductivity: Are all counterproductive behaviors created equal?" *Journal of Vocational Behavior*, Vol. 68, pp. 446-460.
- Stewart, S. M., M. N. Bing, H. K. Davison, D. J. Woehr, and M. D. McIntyre (2009), "In the eyes of the beholder: A non-self report criterion measure of workplace deviance," *Journal of Applied Psychology*, Vol. 94, pp. 207-215.

MODES OF PAYMENT AND REGIONAL SHOPPING BEHAVIOR

Matiur Rahman
McNeese State University

Lonnie Phelps
McNeese State University

Jeffrey Totten
McNeese State University

Journal of Contemporary Business Issues
Western Illinois University
Volume 24, Number 1, 2019

MODES OF PAYMENT AND REGIONAL SHOPPING BEHAVIOR

A survey was conducted in 2017 in Southwest Louisiana for primary data collection to explore interdependence between the purchases of different types of goods and the modes of payments using cash, credit cards, personal checks, and debit cards. Selected students collected the data over two consecutive semesters from 512 adults living in the region. Cross-tabulations and Chi-square tests were used to analyze the data for drawing inferences. The consumers in the Southwest Louisiana region depicted a relatively stronger affinity for use of cash and personal checks to pay for various items of daily basic necessities compared to credit cards and debit cards. They, however, did use credit cards to buy more costly durable goods. The use of credit cards remained limited in general. The use of debit cards was relatively marginal.

INTRODUCTION

The determination of consumer preference regarding payment modes is intricate and complex because of glaring heterogeneities in personal financial situations, demographics, cultural values, and pre-ordained religious beliefs, among other factors, because they interact differently with consumer payment choices. Today, consumers have a wider range of choices for making payments for the consumer goods they purchase. Available payment options (e.g., checks, credit cards, or debit cards) likely influence their buying intentions. D'Silva (2009) reports that the U.S. payment system collects no less than 2 percent of annual U.S. GDP. So, it is very important to understand how consumers elect to pay for purchase of various items to derive utility from consuming and enjoying them. Put forward are a number of ideas on a theoretical plane to understand consumer payment decision making. The theories, in most parts, are behavioral based on bounded rationality.

Typically, payments in cash and checks entail no explicit pecuniary cost, but they immediately deplete personal wealth. Credit cards delay depletion of wealth but only if not paid in full in thirty days; pecuniary costs rise depressing future consumption. To make credit cards more attractive, users are given reward points by many issuing financial institutions. In general, debit cards have no explicit costs at the time of usage, but any overdraft bears fees. Credit cards users tend to currently overspend, even though they have to eventually pay back more at a higher interest rate. Credit cards are preferred to pay for durable goods, while debit cards are preferred to pay for perishable goods, enabling users to exercise some self-restraint. Such behavioral explanation is given in Prelec (2009).

Thaler (1999) provides a complementary alternative theory based on mental accounting. This theory argues that consumers place payments in different "mental accounts," and they value payments based on which account the payments fit into. Thus, explicit payment costs that the consumer feels are easily avoidable may confer disutility. Small payments that are "decoupled" from the expenditure may not be tracked at all, and thus, the consumer does not respond to them. Mental accounting may correlate with financial accounts, so that a consumer prefers to place expenditures in debit and credit accounts based on the expenditure's associated mental account. These sorts of issues are highly complicated to test empirically.

In the backdrop of the above discussion, this paper explores the behavioral aspects of consumers in Southwest Louisiana in terms of the purchase of a wide variety of items and how they pay for these items using cash, debit cards, personal checks, or credit cards. This issue is important because methods of payment will likely influence consumer shopping behavior with important bearing for retail marketing strategies [e.g., Chatterjee and Rose, 2012; Hirschman, 1979; and Hirschman, 1982. A deeper understanding of these issues has profound implications for marketers of financial services firms as well. At the same time, the findings of this paper shed some light on the extent of credit card market access of consumers in relatively less affluent states and the business opportunities for retail marketers and innovative financial services firms. The data used in this study are limited in scope because of a regional focus. But the findings of this paper may be applicable to a host of U.S. states that still lack in financial inclusion to bring poor people to the formal banking sector from financial shadows (e.g., Joseph and Varghese, 2014; Kamboj, 2014).

People with no or inadequate access to regular banking services and credit markets still primarily use cash to make their purchases, especially for small purchases. Although the U.S. is moving toward being a cashless society due to ongoing financial innovations, many people still need some cash for convenience and liquidity. In other words, the society will never be entirely cashless. Thus, cash transactions will always play some role in the shopping decisions of consumers. Cash accounts for a considerable percentage of retail small payments of \$20 or less, but the use of cash is slowly declining, and the use of personal checks is also on the decline nationwide. The number of electronic transactions today exceeds check payments. Checks lose out to on-line banking and direct deposits while use of debit cards is on the rise (e.g., Arvidsson and Markendahl, 2014; Carton and Hedman, 2013; Hedman, 2012).

Credit card usage is also on the rise, driven partly by increased merchant acceptance as well as expanded reward and affinity. Perceptually, people use credit cards for purchases of big ticket, durable items. Recently, they are being increasingly used for small purchases as well. Credit cards together contribute to the overall economic growth by promoting speed and efficiency in financial transactions. The trend is simply a reflection that the people in the U.S. are gradually moving away from a cash-based society. For purchases made in the past with cash, people are now increasingly using plastic cards for them (e.g., Carton and Hedman, 2013; and Hedman, 2012). When a choice was given for payment forms to U.S. shoppers, 40 percent selected credit cards, 35 percent selected debit cards, and 11 percent selected cash. In the everyday spending categories, debit cards still remain a strong payment choice, as a result (TSYS, 2016).

In sum, a rise in the demand, supply, and technology-driven transformation in methods of retail payment has been an ongoing process since the 1990s. Consumers have become more familiar with the methods available to them. Although paper checks and cash continue to exist, the vast majority of U.S. consumers still use checks and cash, resulting in a declining trend. Over the past 30 years, paper checks and cash have gradually been replaced by other methods of payment, including credit cards, debit cards, and electronic payments, such as online bill payments.

The remainder of the paper proceeds as follows. The second section provides a brief review of the related literature on consumer buying behavior and payment methods. The third section

outlines empirical methodology and reports findings. The fourth section offers summary of results and conclusions.

BRIEF REVIEW OF THE RELATED LITERATURE

Exchanging money for goods and services is one of consumers' most routine activities. Research in mental accounting shows that prior spending influences a consumer's decision to make new purchases (Heath and Soll, 1996; Soman, 2001). Soman and Lam (2002), using the acquisition liability episode during which a purchase is made accompanied by a commitment to pay (e.g., using credit cards) and the payment episode during which the consumer's wealth actually gets depleted (e.g. paying credit card bills), arrived at the same conclusion. In economic decision-making, individuals consider the relative costs and the benefits of the transactions (Kreps, 1990).

An understanding of the cognitive mechanisms that consumers use to track these costs and benefits results in the study of mental accounting (Thaler, 1999). This brings together psychological and economic approaches to understand how consumers value outcomes, how they code and organize these valuations, and how they budget and make spending decisions (Kahneman and Tversky, 1979; Henderson and Peterson, 1992; Thaler, 1980; Thaler, 1985; Heath and Soll, 1996; Soman, 2001; and Thaler and Shefrin, 1981).

Consumers plan budgets for various spending categories (Zelizer, 1994). As a result, spending in a given category reduces the likelihood of future spending in the same category (Heath and Soll, 1996; and Soman, 2001). Heath and Soll (1996) suggest that consumers proactively set limits, track and deduct expenses from an account, and then use the unspent amount in each category as an input into the next spending decision. Soman (2001), however, argues that, in addition to the dollar value of the expense, psychological factors like salience and memorability also influence impact on future spending. Also, research shows that, as temporal separation between the prior spending and the pending decision increases, prior spending has a smaller impact on future spending and the pending decision (Gourville and Soman, 1998). Common to all of these streams of research is the underlying finding that recent expenses reduce the likelihood of future spending. They, in turn, influence modes of payment for various types of purchases.

Heath and Soll (1996) proposed that consumers mentally allocate (i.e. budget) their money to a number of spending categories (like food, entertainment, and clothing). They track and record cumulative expenditures within each spending category, and their purchase behavior at any time is driven by the money available in each category (Heath and Soll, 1996; and Heath, 1995). Therefore, the likelihood of incurring a given expense is inversely related to the size of prior spending in that particular agency. Accordingly, consumers decide which method of payment to select.

Heath and Soll's (1996) representation of the budgeting process is a relatively mechanical one in which consumers monitor expenses and are aware of the unspent (e.g., available) amounts at any given point in time. At the end of the budgeting period, accounts are replenished, and the process continues in a cyclical manner. Noting that this model is a good approximation of behavior but not a good descriptor of process, Soman (2001) argued that consumers practice a more intuitive form of accounting called retrospective accounting. When faced with a purchase opportunity, a

consumer might ask himself/herself how much he/she has spent on similar products in the recent past and form a mental representation of the level of this past spending. This mental representation drives future spending decisions and has been referred to variously as the "adverse impact or behavioral impact of payment" (Gourville and Soman, 1998; and Soman, 2001) or the "pain of payment" (Prelec and Loewenstein, 1998). The term "adverse impact" is used here to describe the mental representation of past spending. More generally, one would expect this adverse impact to have both cognitive and affective antecedents. The cognitive antecedents have to do with the economic valuation and memory of the expense; the affective antecedents have to do with the pain and the agony experienced on parting with money (Zellermayer, 1996). As a result, the use of cash for purchases diminishes.

The adverse impact depends not only on the dollar value of the previous expense but also on the timing and format of the expense. Soman (2001) argues that payment mechanisms in which the consumer can mentally rehearse the amount paid (e.g., a check where the shopper is required to write the final amount or a cash transaction in which the right amount has to be counted and change accepted) has a greater impact than payment mechanisms involving no rehearsal (e.g., a credit card payment in which the consumer simply signs a receipt). Further, Soman (2001) also showed that the impact was lower for what he called "in process payments," which he defined as situations where "an expense had been incurred, but the consumer's wealth has not yet been depleted." Gourville and Soman's (1998) results show that the aversive impact of payment depreciates as more time elapses from the time of payment.

In modern days, consumers have an array of payment modes (Pulina 2011; Soman 2001, Soman, 2003; and Raghuram and Srivastava, 2008) which facilitates payment transactions by being more convenient, acceptable, and accessible (Soman 2001). The payment mode is an important contextual component in any purchasing transaction (Raghuram and Srivastava, 2008). When credit cards are easily acquired, they can provide buyers with a cushion in unexpected expense situations. Since their main function is to facilitate economic exchanges (Hirschmann, 1979), credit cards have become a regular mode of payment (Mendoza and Pracejus, 1997).

Past studies have addressed the subject on how payment mode influences consumer spending behavior (Chartejee and Rose, 2012; Faber and O'Guinn, 1988; Feinberg, 1986; Prelec and Loewenstein, 1998; and Soman and Cheema, 2002). Since the 1970s, growing evidence supports the conjecture that credit cards encourage spending. This is described as the "credit card effect." As referred to by Feinberg (1986), credit cards act as "spending facilitating stimuli."

To add further, Thaler, 1985 and 1999 define mental accounting as a process applied by individuals to track their expenditures. This is similar to the bookkeeping process where individuals and households organize, assess, and keep track of financial events by mental bookkeeping, meaning individuals psychologically group their money into different accounts, they evoke the account every time a spending decision is to be made, and sometimes expenditures are inhibited by implicit and explicit budgets (Thaler, 1999). Studies also suggest that past expenditures influence future spending behavior because it diminishes available budgets (or an individual's wealth) that results in a reduction of purchase intention (Soman, 2001).

When individuals intend to purchase goods or services which they cannot afford at a specific moment, they could either start saving or take a credit card loan. Hahn, et al (2013) suggest that consumers tend to prefer such a loan over savings, and one possible reason is that credit cards allow for immediate consumption. Credit cards have become a common tool by which consumers purchase goods (Mendoza and Pracejus, 1997) and has increased enormously over the past two decades, mostly due to financial innovation and liberalization which provided credit access to borrowers who were previously deprived of access (Girouard, Kennedy, and Andre, 2006). Credit cards are a common way of obtaining credit (Mendoza and Pracejus 1997), and they also allow for immediate consumption. In other words, credit cards allow for a temporal separation of payment from transaction benefit which is said to cause relevant difference in the hedonic effect that individuals associate with the transaction (Prelec and Loewenstein, 1998; and Soman and Gourville, 2001). Moreover, Mendoza and Praceju's (1997) research suggests that since, credit card use, in general, results in instantaneous benefits and desire fulfillment. This can possibly result in a greater focus on benefits relative to cost considerations (Charterjee and Rose, 2012), thus inciting greater probability of spending behavior.

Siemens (2007) suggests that, when using credit cards, sunk costs are less likely to be perceived because it allows separation of the payment to benefit the consumer's mind. Temporal separation of the payment may also diminish the pain of payment (Gourville and Soman, 1998). This mental association effect is known as 'coupling' and is defined as a psychological connection between the payment and the benefits related to consumption (Siemens, 2007). When a payment is decoupled from the consumption of a benefit, for instance, the sunk cost's effect of the payment upon the decision to consume is reduced (Prelec and Loewenstein, 1998; and Soman and Gourville, 2001). This is so because less attention is paid to earlier sunk costs and has less influence when deciding future consumption (Siemens, 2007).

To better understand the impact of an electronic payment system on consumer purchase decision making, Prelec and Simester (2001) conducted an experiment which proved that willingness-to-pay is significantly higher with a credit card as compared with cash, holding the other conditions constant. Previous research conducted by Loewenstein and Prelec (1992) and Soman (2009) stated that the physicality of cash creates an acute awareness that something of value is being transferred. Thaler (1980) discussed mental accounting where an individual categorizes, creates code, and then evaluates economic outcomes. The author further expressed that people subjectively frame a transaction in their minds to determine the benefits and the degree of satisfaction they expect to receive. Hirschman (1970) stated that the use of electronic money increases the propensity to spend more as compared to cash. Soman (2001) examined that those who generally use credit cards as a mode of payment spend more on purchase than when payment mode changes to check.

To add further, consumer attitudes towards life-style, age, education, income, rewards, payment size, and single-homing, influence buyers' payment choices (e.g., Schuh and Stavins, 2009; Stavins, 2001; Ching and Hayashi, 2008; Klee, 2008; David and Francois, 2009, Armstrong, 2006; and Rochet and Tirole, 2006). Among these factors, Rysman (2007, 2009) found strong support for age and income in determining payment types but mixed evidence for education.

The level of consumers in the U.S. without a bank account has been under 10 percent in several recent SCPC (Survey of Consumer Payment Choice) surveys. In the 2015, 8.2 percent of consumers were unbanked, and 24.2 percent were underbanked. Following the FDIC definition, SCPC defines from a nonbank underbanked, if they have a bank account but have also purchased services from a nonbank institution (money order, cashier's checks, check cashing, remittances, and/or payday loans), and/or have used personal property to secure a loan at a pawn shop, used rent-to-own services, or taken out a tax refund anticipation loan. Unbanked and the underbanked consumers are primarily low-income and minority (e.g., Cole and Greene, (2016), and Greene and Shy, (2015).

As most payment instruments access a bank account, unbanked consumers have a very limited set of choices for ways to conduct their transactions. Not surprisingly, the unbanked pay very differently from the way people with a bank account pay. In the 2014 SCPC, 82 percent of the transactions for the unbanked were paid with cash, and 11 percent were paid with a prepaid card. In contrast, the shares for U.S. consumers with a bank account were 25 percent with cash and 1.0 percent with a prepaid card (Cole and Greene, 2016).

Recently, a number of researchers (Bagnall, et al., 2016); Hernandez, Jonker, and Kosse, 2016; Van der Crujisen, Hernandez, and Jonker, 2017; Huynh, Schmidt-Dengler, and Stix, 2014; Arango, Huynh, and Sabetti, 2011; and Bounie, Francois, and Van Hove, 2016) studied the same issue in other developed countries. They help provide a comparative picture with the U.S.

Bagnall, et al. (2016) analyze consumers' use of cash on diary surveys from several countries: Canada, Australia, Austria, France, the Netherlands, and the U.S. They found that, even though cash use differs across countries, the share of cash transactions remains high in all the countries, especially for low-value transactions, even when several other payment methods are available everywhere. In the countries studied, use of cash is negatively correlated with transaction size.

Hernandez, et al. (2016) and Van der Crujisen, et al. (2017) discussed payment behavior in the Netherlands. Hernandez, et al. (2016) show that consumers find debit cards to be more useful for monitoring their household finances than cash. Van der Crujisen, et al. (2017) found that consumer payment habits tend to be persistent, explaining why substitution from cash to debit cards in the Netherlands has been slower than previously expected. Again, similar patterns of slow payment evolution have been found in the U.S. Huynh, et al. (2014) used detailed payment diary data from Austrian and Canadian consumers to show that lack of card acceptance at the point-of-sale is the reason why cash continues to have a large market share in those countries. They find that cash use falls with an increase in card acceptance.

Arango, et. al. (2011) used the Bank of Canada 2009 Method of Payment Survey, a two-part survey of adult Canadians, containing a detailed questionnaire and a three-day shopping diary, to analyze consumer payment behavior in Canada. They estimated the effect of consumer socioeconomic characteristics, payment instrument attributes, and transaction features on the probability of using cash, debit card, or credit card at point-of-sale. They find that cash is still used intensively for low-value transactions, due to speed, merchant acceptance, and low costs, while debit and credit cards are used more frequently for higher transaction values, due to safety, record keeping, the ability to delay payment, and credit card rewards.

Bounie, Et al. (2016) used data from a shopping diary to measure French consumers' payment preferences and matched these with data from a French merchant survey. They found that consumer preferences can influence merchant card acceptance. The higher the probability that the transaction is paid for by a card, the higher the probability that the merchant will accept cards. The study provides empirical evidence for the existence of network externalities in the card market.

EMPIRICAL METHODOLOGY AND FINDINGS

The primary data were obtained by administering a questionnaire face-to-face to 512 adult shoppers in 2017. Students from several business courses were carefully selected for data collection across the five-parish area (Allen, Beauregard, Calcasieu, Cameron, and Jefferson Davis) in the region over two consecutive semesters. The total population in this region is 300,000, of which nearly 75 percent are 18 years of age and above, living in rural areas and small cities. Questions pertained to four commonly available modes of payment involving two broad categories of consumer goods. Ten percent of the above respondents were randomly selected for cross-checking the reliability of the collected primary data. Code numbers were used with each respondent's name, address, and contact phone number to ensure confidentiality. Data collectors were appropriately trained prior to sending them to administer face-to-face interviews.

The χ^2 (chi-square) test has been used for statistical interdependence between the payment methods and the types of purchase items. The purchase items are classified into the daily necessities plus frequent purchase items (groceries, clothing, medicines, electronics, and toys), and big-ticket items of durable goods (automobiles, computers, furniture and major household appliances). The computational formula for the χ^2 - test is as follows:

$$\chi^2 = \sum \frac{(O - E)^2}{E}$$

Where:

O = Observed frequency

E = Expected frequency and degree of freedom (df) = (r-1)(c-1)

Here, r = number of rows in the contingency table and c = number of columns in the contingency table.

The testable null hypothesis (H_0) for each category of items and methods of payment and its accompanying alternative hypothesis (H_A) are specified below.

H_0 : The methods of payment and the types of purchase items are independent of one another.

H_A : The methods of payment and the types of purchase items are not independent of one another.

The calculated value of χ^2 and its critical values at different conventional significance levels (1%, 5%, and 10%) are compared for statistical inferences by rejection/acceptance of null hypothesis.

The findings of this empirical investigation are reported in Table 1 as follows:

Table 1
OBSERVED FREQUENCIES

Consumer Goods	Cash	Credit Card	Check/Debit	Total
• Groceries	125 (24.41%)	47 (9.18%)	340 (66.41%)	512
• Clothing	118 (23.05%)	117 (22.85%)	274 (53.52%)	509
• Electronics	100 (19.53%)	136 (26.56%)	251 (49.02%)	487
• Utilities	85 (16.60%)	30 (5.86%)	389 (75.98%)	504
• Medicines	122 (23.83%)	67 (13.09%)	302 (58.98%)	491
• Toys	158 (30.86%)	53 (10.35%)	232 (45.31%)	443

Table 1 shows the dominance of the combined uses of personal checks and debit cards for various purchase items of the daily necessities and frequent items in the Southwest Louisiana region followed by cash purchases. The use of credit cards is the least dominant method of payment in this region. Consumers have less than adequate access to them due to a significant number of unbanked and underbanked poor adults, as well as less than adequate availability of electronic payment means. Factors on the demographic front may include a shrinking active-age population and an increasingly aging population. Low relative per capita income, religiosity leaning toward frugality, unique culture, values, small payment sizes, and net out-migration of working-age skilled manpower may help partially explain the above in the recent past.

For testing statistical independence in terms of H_0 pertaining to Table 1, χ^2 statistics have been reported as follows in Table 2.

Table 2
COMPUTATIONAL DETAILS OF χ^2

<i>Expected Frequencies - (row total x column total)/n</i>							
Modes of Payment	Groceries	Clothing	Electronics	Utilities	Medicine	Toys	Total
• Cash	123.0468	122.3259	117.0387	121.124236	118	106.4644	708
• Credit	78.20774	77.74949	74.389	76.9857434	75	67.66802	450
• Check	310.7454	308.9246	295.5723	305.89002	298	268.8676	1,788
Non-durable Goods	Observed	Expected	(O - E)	(O - E)^2	(O-E)^2/E		
• Cash/Groceries	125	123.0468	1.953157	3.81482157	0.031003		
• Cash/Clothing	118	122.3259	-4.32587	18.713113	0.152978		
• Cash/Electronics	100	117.0387	-17.0387	290.31718	2.480523		
• Cash/Utilities	85	121.1242	-36.1242	1304.96044	10.77374		
• Cash/Medicines	122	118	4	16	0.135593		
• Cash/Toys	158	106.4644	51.53564	2655.92235	24.94659		
• Credit/Groceries	47	78.20774	-31.2077	973.922993	12.45303		
• Credit/Clothing	117	77.74949	39.25051	1540.60247	19.81495		
• Credit/Electronics	136	74.389	61.611	3795.91507	51.02791		
• Credit/Utilities	30	76.98574	-46.9857	2207.66008	28.67622		
• Credit/Medicines	67	75	-8	64	0.853333		
• Credit/Toys	53	67.66802	-14.668	215.150941	3.179507		
• Check/Groceries	340	310.7454	29.25458	855.830596	2.754121		
• Check/Clothing	274	308.9246	-34.9246	1219.73073	3.948312		
• Check/Electronics	251	295.5723	-44.5723	1986.69005	6.721503		
• Check/Utilities	389	305.89	83.10998	6907.26871	22.58089		
• Check/Medicines	302	298	4	16	0.053691		
• Check/Toys	232	268.8676	-36.8676	1359.22119	5.055355		
		df = 10		chi-square	195.6392		

The critical values of χ^2 at 1, 5, and 10 percent significance levels are 2.558, 3.940 and 4.865, respectively. A comparison of the calculated value of χ^2 at 195.6392 with the above critical values rejects the null hypothesis of statistical independence between the methods of payment and types of purchase items. Their dependence depends on the nature of purchase items, as observed in Table 1.

Next, the same issues are investigated for methods of payment and purchases of durable goods. The relevant observed frequency distribution in Table 3 is as follows:

Table 3

OBSERVED FREQUENCY DISTRIBUTION

Durable Goods	Cash	Credit Card	Borrowed	Total
Automobile	121 (25.53%)	34 (7.17%)	319 (67.30%)	474
Computer	205 (43.25%)	184 (38.82%)	39 (8.23%)	426
Furniture	267 (56.33%)	139 (29.32%)	40 (8.44%)	446
Major Household Appliances	219 (46.20%)	169 (35.65%)	41 (8.65%)	429

As observed in Table 3, to finance purchases of automobiles, consumers used borrowed funds, mostly arranged by automobile dealers from third-party financing entities. For computers, they used both cash and credit cards nearly equally. The borrowed funds were used the least for these items. For furniture, they used cash the most and next was the use of credit cards. Again, borrowed funds were used the least. The same patterns also apply to the purchases of major household appliances. In this region, usage of cash remains the most dominant payment method, although wealth depletion is immediate.

The percentage of female population is somewhat larger than male population. Perhaps, both segments of population exercise some self-restraint in spending. Also, they may be averse to credit card debt accumulation in view of high explicit pecuniary costs. In addition, a shortage of a high-skilled workforce with premium wage is another likely reason for relatively lower usage of credit cards for payment. In contrast to the recent past, things have started improving in this region following addition of \$100 billion in new investment in the oil and gas sector due to Industrial Tax Exemption Program (ITEP). Again, population is increasing, in-migration of the skilled workforce is rising, businesses are flourishing, labor market is tightening, wages are rising, and technical training is expanding. Together, they portray a better economic future for the Southwest Louisiana. This region is emerging as an important national LNG hub.

Likewise, the χ^2 -test is applied. The computational details are reported in Table 4 as follows.

Table 4

COMPUTATIONAL DETAILS OF χ^2 STATISTICS

<i>Expected Frequencies - (row total x column total)/n</i>					
Modes of Payment	Automobile	Computer	Furniture	Major Household Appliances	Total
• Cash	590.041	72.13667	73.98633	75.8359909	812
• Credit	382.2187	46.72893	47.92711	49.1252847	526
• Borrowed	117.0996	105.7355	110.1823	105.982555	439
Durable Goods	Observed	Expected	O - E	(O - E)²	(O-E)²/E
• Cash/Automobile	121	590.041	-469.041	219,999.462	372.8545321
• Cash/Computer	205	72.13667	132.8633	17,652.6633	244.7113553
• Cash/Furniture	267	73.98633	193.0137	37,254.2758	503.529159
• Cash/Major Household Appliances	219	75.83599	143.164	20,495.9335	270.2665748
• Credit/Automobile	34	382.2187	-348.219	121,256.248	317.2431255
• Credit/Computer	184	46.72893	137.2711	18,843.3468	403.2479895
• Credit/Furniture	139	47.92711	91.07289	8,294.27183	173.0601394
• Credit/Major Household Appliances	169	49.12528	119.8747	14,369.9474	292.5163169
• Borrowed/Automobile	319	117.0996	201.9004	40,763.7691	348.1119231
• Borrowed/Computer	39	105.7355	-66.7355	4,453.6282	42.12045915
• Borrowed/Furniture	40	110.1823	-70.1823	4,925.55941	44.70371449
• Borrowed/Major Household Appliances	41	105.9826	-64.9826	4,222.73244	39.8436558
Degrees of freedom	6			Chi-square	3,052.208945

The calculated value of χ^2 is overly high at 3,052.209. The critical values of χ^2 at 1, 5, and 10 percent significance levels are 0.872, 1.635, and 2.204, respectively. As a result, the null hypothesis is rejected. This confirms interdependence between modes of payment and types of purchase items, as explained in introduction and literature review sections with relevant citations.

SUMMARY AND CONCLUSIONS

The consumers in Southwest Louisiana have stronger preference to use cash over credit cards for purchases of various types of daily necessities. They also use personal checks and debit cards to purchase such items. Except for automobile purchases, the consumers of this region use both cash and credit cards to purchase various types of durable goods. The use of cash still dominates the use of credit cards. This is presumably due to financial exclusion of the economically and socially disadvantaged in this region.

The χ^2 -tests reveal discernible interdependence between the modes of payment and the purchases of various types of items included in both the basic necessities and consumer durables categories. The financial and economic implications of the above findings include a need for further inclusive financial development in this region. Credit cards issuing financial firms have

high potential for marketing their financial products and services in this region in view of remarkably improving economic and business prospects, as stated earlier. In closing, the findings of this paper should be considered with due caution for any generalization because of the regional nature of the primary data.

REFERENCES

- Arango, C., K. P. Huynh, and L. Sabetti (2011), "How Do You Pay? The Role of Incentives at the Point-of-Sales," ECB Working Paper No. 1386.
- Armstrong, M. (2006), "Competition in Two-Sided Markets," *Rand Journal of Economics*, pp. 668-691.
- Bagnall, J., D. Bounie, K. P. Huynh, A. Kosse, T. Chmidt, S. Schuh, and H. Stix (2016), "Consumer Payment Usage: A Cross-Country Comparison with Payment Diary Survey Data," *International Journal of Central Banking*, Vol. 12, No. 4.
- Borzekowski, R., E. K. Kiser, and S. Amhed (2008), "Consumers' Use of Debit Cards: Patterns, Preferences and Price Response," *Journal of Money, Credit and Banking*, Vol. 40, No. 1, pp. 149-172.
- Carton, F. and J. Hedman (2013), "Proceedings: Second International Cashless Society Roundtable (ICSR)," Financial Services Innovation Centre.
- Chartterjee, P. and L. R. Randall (2012), "Do Payment Mechanisms Change the Way Consumers Perceive Products?" *Journal of Consumer Research*, Vol. 38, No. 6, pp. 1129-1139.
- Ching, A. and F. Hayashi (2008), "Payment Card Rewards Programs and Consumer Payment Choice." Working Paper.
- Cole, A. and C. Greene (2016), "Financial Inclusion and Consumer Payment Choice," Federal Reserve Bank of Boston Research Data Report No. 16-05.
- CPSS (2013). "Statistics on Payment, Clearing and Settlement Systems in the CPSS Countries: Figures for 2012," Bank of International Settlements.
- D'Silva, V. (2009), "Payments in Flux: Megatrends Reshape the Industry," in R. E. Litan and M. N. Baily, *Moving Money: The Future of Consumer Payments*, Washington: Brookings Press, pp. 19-35).
- David, B. and A. Francois (2009), "Cash, Check or Debit? The Effects of Transaction Characteristics on the Use of Payment Instruments," Working Paper.
- David, B., F. Abel, and L. Van Hove (2016), "Consumer Payment Preferences, Network Externalities, and Merchant Card Acceptance: An empirical Investigation," *Review of Industrial Organization*, pp. 1-34.
- Faber, R. J. and T. C. O'Guinn (1988), "Compulsive Consumption and Credit Abuse," *Journal of Consumer Policy*, Vol. 11, No. 1, pp. 97-109.

- Feinberg, Richard A. (1986), "Credit Cards as Spending Facilitating Stimuli: A Conditioning Interpretation," *Journal of Consumer Research*, Vol. 13, No. 3, pp. 348-356.
- Girouard, N., M. Kennedy, and A. Christophe 2006, "Has the Rise in Debt Made Households More Vulnerable?" Working Paper 535, OCDE Economics Department, Paris.
- Gourville, J. T. and S. Dilip (1998), "Payment Depreciation: The Behavioral Effects of Temporally Separating Payments from Consumption," *Journal of Consumer Research*, Vol. 25, No. 2, pp. 160-174.
- Greene, C. and O. Shy (2015), "How Are U. S. Consumers Using General Purpose Reloadable Prepaid Cards? Are they Being Used as Substitutes for Checking Accounts?" Federal Reserve Bank of Boston Research Data Report No. 15-3.
- Hahn, L., E. Hoelzl, and M. Pollai (2013), "The Effect of Payment Type on Product-Related Emotions: Evidence from an Experimental Study," *International Journal of Consumer Studies*, Vol. 37, No. 1, pp. 21-28.
- Heath, Chip and Jack B. Soll. (1996), "Mental Budgeting and Consumer Decisions," *Journal of Consumer Research*, 23 (1), 40-52.
- Heath, C. (1995), "Escalation and De-Escalation of Commitment in Response to Sunk Costs: The Role of Budgeting in Mental Accounting," *Organizational Behavior & Human Decision Processes*, Vol. 62, No. 1, pp. 38-54.
- Hedman, J. (2012), "Proceedings First International Cashless Society Roundtable (ICSR)," Copenhagen Finance IT Region, Copenhagen, Denmark, April 18-19.
- Henderson, P. W. and R. A. Peterson (1992), "Mental Accounting and Categorization," *Organizational Behavioral and Human Decision Processes*, Vol. 51, pp. 92-117.
- Hernandez, L., N. Jonker, and A. Kosse (2016), "Cash Versus Debit Card: The Role of Budget Control." *Journal of Consumer Affairs*, Vol. 51, No. 1, pp. 91-112.
- Hirschman, E. C. (1979), "Differences in Consumer Purchase Behavior by Credit Card Payment System," *Journal of Consumer Research*, Vol. 6, pp. 58-66.
- Hirschman, E. C. (1982). "Consumer Payment Systems: The Relationship of Attribute Structure to Preference and Usage," *Journal of Business* Vol. 55, pp. 531-545.
- Hirschman, E. C. (1997), "Differences in Consumer Purchase Behavior by Credit Card Payment System," *Journal of Consumer Research*, Vol. 6, pp. 58-66.
- Huynh, K. P., P. Schmidt-Dengler, and H. Stix (2014), "The Role of Card Acceptance in the Transaction Demand for Money." CEPR Discussion Paper No. DP10183.

- Joseph, J. and Varghese. T. (2014), "Role of Financial Inclusion in the Development of Indian Economy," *Journal of Economics and Sustainable Development*, Vol. 5, No. 11, pp. 6-15.
- Kahneman, D. and A. Tversky (1979), "Prospect Theory: An Analysis of Decision Under Risk," *Econometrica*, Vol. 47, pp. 263-291.
- Kamboj, S. (2014), "Financial Inclusion and Growth of Indian Economy: An Empirical Analysis." *International Journal of Business and Management*, Vol. 2, No. 9, pp. 175-179.
- Klee, E. (2006), Paper or Plastic? The Effect of Time on the Check and Debit Card Use at Grocery Stores, unpublished manuscript, Board of Governors of the Federal Reserve Bank.
- Klee, E. (2008), "How People Pay: Evidence from Grocery Store Data," *Journal of Monetary Economics*, Vol. 55, pp. 526-541.
- Kreps, D. M. (1990), *A Course in Microeconomic Theory*, Princeton, N.J.: Princeton University Press.
- Loewenstein, G. and D. Prelec (1992), "Anomalies in Intertemporal Choice: Evidence and an Interpretation," *Quarterly Journal of Economics*, Vol. 107, pp. 573-597.
- Mendoza, N. A. and J. W. Pracejus (1997), "Buy Now, Pay Later: Does a Future Temporal Orientation Affect Credit Overuse?" *Advances in Consumer Research*, Vol. 24, pp. 499-503.
- Prelec, D. (2009), "Consumer Behavior and the Future of consumer Payments," in R. E. Litan and M. B. Neil, *Moving Money: The Future of Consumer Payments*, Washington, D.C.: Brookings Press, pp. 77-101.
- Prelec, D. and D. Simester (2001), "Always Leave Home Without it: A Further Investigation of Credit-Card Effect on Willingness to Pay," *Marketing Letters*, Vol. 12, No. 1, pp. 5-12.
- Prelec, D. and G. Loewenstein (1998), "The Red and the Black: Mental Accounting of Savings and Debit," *Marketing Science*, Vol. 17, No. 1, pp. 4-28.
- Pulina, M. (2011), "Consumer Behavior in the Credit Card Market: A Banking Case Study," *International Journal of Consumer Studies*, Vol. 35, No. 1, pp. 86-94.
- Raghubir, P. and J. Srivastava (2008), "Monopoly Money: The Effect of Payment Coupling and Form of Spending Behavior," *Journal of Experiential Psychology Applied*, Vol. 14, No. 3, pp. 213-225.
- Rochet, J. C. and J. Tirole (2006), "Two-Sided Markets: A Progress Report." *RAND Journal of Economics*, pp. 645-667.
- Rysman, M. (2007), "An Empirical Analysis of Payment Card Usage." *Journal of Industrial Economics*, Vol. 55, pp. 1-36.

- Rysman, M. (2009), "The Economics of Two-Sided Markets," *Journal of Economic Perspectives*, pp. 125-143.
- Schuh, S. and J. Stavins (2009), "Why are (Some) Consumers (Finally) Writing Fewer Checks? The Role of Payment Characteristics." Federal Reserve Bank of Boston Working Paper No. 09-1.
- Soman, D. (2003), "The Effect of Payment Transparency on Consumption: Quasi Experiments from the Field," *Marketing Letters*, Vol. 14, No. 3, pp. 173-183.
- Soman, D., and A. Cheema (2002), "The Effect of Credit on Spending Decisions: The Role of the Credit Limit and Credibility," *Marketing Science*, Vol. 21, No. 1, pp. 32-53.
- Soman, D., and J. T. Gourville (2001), "Transaction Decoupling: How Price Bundling Affects the Decision to Consume," *Journal of Marketing Science*, Vol. 21, No. 1, pp. 32-44.
- Soman, D., and V. M. W. Lam (2002), "The Effects of Prior Spending on Future Spending Decisions: The Role of Acquisition Liabilities and Payments," *Marketing Letters*, Vol. 13, No. 4, pp. 359-372.
- Soman, D. (2001), "Effects of Payment Mechanism on Spending Behavior: The Role of Rehearsal and Immediacy of Payments," *Journal of Consumer Research*, Vol. 27, No. 4, pp. 460-474.
- Stavins, J. (2001), "Effect of Consumer Characteristics on the Use of Payment Instruments." *New England Economic Review*, Vol. 3, pp. 19-31.
- Thaler, R. H. (1980), "Toward a Positive Theory of Consumer Choice," *Journal of Economic Behavior and Organization*, Vol. 1, pp. 39-60.
- Thaler, R. H. (1985), "Mental Accounting and Consumer Choice," *Marketing Science*, Vol. 4, pp. 199-214.
- Thaler, R. H. (1999), "Mental Accounting Matters," *Journal of Behavioral Decision Making*, Vol. 12, No. 3, pp. 183-206.
- Thaler, R. H. and H. M. Shefrin (1981), "An Economic Theory of Self-Control," *Journal of Political Economy*, Vol. 89, pp. 392-406.
- TSYS. (2016). 2016 U.S. Consumer Payment Study, Columbus, G.A.
- Van Der Crujssen, C. L. Hernandez, and N. Jonker (2017), "In Love with The Debit Card but Still Married to Cash," *Applied Economics*, Vol. 49, No. 30, pp. 2986-3004.
- Zelizer, V. (1994), *The Social Meaning of Money: Pin Money, Paychecks, Poor Relief, and Other Currencies*, New York: Basic Books.

Zellermayer, O. (1996), "The Pain of Paying," doctoral dissertation, Pittsburgh, PA: Carnegie Mellon University.