QRBD

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FROM THE EDITORS

The August issue of *QRBD* begins with the research of Denise Ferguson, Michael Smith, and Bonnie Efird. Their paper surveys global fracking and activism. It offers a measurement framework that addresses the impact of media and political systems on the environment for public relations relevant to the hydraulic fracturing debate. Charles Lubbers, Allison McNamara, Yuxiao Lu, and Tanner Sifferath conducted research on organization responses from the ten largest breaches during 2014 in U.S. healthcare and business/retail industry using Coombs' crisis communication response strategies. This is a large and important field for future research.

The exploratory study of Alan Abitbol and Miglena Sternadori investigates the effects of femvertising on consumer attitude and purchase intention based on company-cause fit. Their results offer both theoretical and practical implications for scholars, corporations, and advertisers. Rahul Kale, Paul Fadil, and Dag Naslund delve into shipper performance benefits on the electronic logistics marketplace (ELM). The simulation model in this study is based on real world shipment data and demonstrates benefits to shippers participating in ELM. Our final paper was written by Tish Matuszek and Diane Bandow. It is a discussion of the "sandwich generation" – adults who provide care to children and parents. This research notes a literature gap and examines what could become a crisis situation.

Margaret A. Goralski, *Quinnipiac University*, Editor-in Chief Kaye McKinzie, *University of Central Arkansas*, Associate Editor

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CONTENTS

ARTICLES

Measuring the Impact of Activism on Hydraulic Fracturing Policy Globally Denise P. Ferguson, Michael F. Smith, Bonnie Efird	81
A Study of Organizational Responses to Major Data Breaches in the Retail & Healthcare Industries Charles A. Lubbers, Allison McNamara, Yuxiao Lu, Tanner Sifferath	101
You act like a girl: An examination of consumer perceptions of "femvertising" Alan Abitbol, Miglena Sternadori	117
Shipper Performance Benefits on an Electronic Logistics Marketplace Rahul Kale, Paul Fadil, Dag Naslund	139
Human Resources Responsibilities for Employee Caregivers: Reconsidering Policy Tish Matuszek, Diane Bandow	157

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MEASURING THE IMPACT OF ACTIVISM ON HYDRAULIC FRACTURING POLICY GLOBALLY

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ABSTRACT

Hydraulic fracturing, or "fracking," is a practice energy companies use globally to pump large volumes of water, sand, and chemicals to crack shale, releasing natural gas into wells. Communities and environmental organizations have mobilized globally to protest fracking, citing dangers to people, animals, communities, and the natural environment. While the U.S. is the undisputed leader in shale gas development and use, the practice has been explored, proposed, or instituted globally in a number of countries. This paper surveys global fracking and activism, offering a framework for developing specific measures of that impact. We propose three key measurement criteria for judging effectiveness: (1) goal attainment (i.e., whether desired outcomes are obtained, and the progress of proposed policy through the legislative or bureaucratic process); (2) participation, influence, and share of voice (i.e., which actors are participating in public debate, which actors are not participating, presence and issue engagement online, what is the nature of the debate, and evidence that the activists and their positions are considered credible and valuable to the debate); and (3) organizational maintenance (i.e., whether the organization has needed resources and whether it is growing) Our measurement framework also addresses the impact of media and political systems on the environment for public relations practice that are relevant to the issue of hydraulic fracturing debate.

Keywords: activism, public relations, hydraulic fracturing

INTRODUCTION

The public relations efforts of activists—individuals organized in groups with the goal of influencing one or more target organizations through action—are a legitimate area of public relations scholarship (Coombs & Holladay, 2007; Smith & Ferguson, 2010). One important social role of activists and their organizations is to elevate a society's value standards; for example, environmental groups have pushed for higher environmental standards in the United States and globally in countries exploring the practice of hydraulic fracturing. While many studies have examined either activist or organizational campaigns, it is the clash of messages between activist and target organizations that produces and reproduces issue definitions and influences the development of the conflict (Smith, 1995). Greater understanding of this clash is required in order to understand and predict how relationships between activists and organizations develop (Smith & Ferguson, 2010). To best understand the influence of activists on policy change over time, longitudinal studies that examine the interactions between community

members, activist organizations, and their targets' responses are needed (Smith and Ferguson, 2001). Assessing the influence of activists on public opinion and policy change requires comprehensive, specific, and measurable outcome criteria.

This study surveys the practice of hydraulic fracturing globally and anti-fracking activism, and offers a framework for developing specific measures of that impact on public opinion and policy decisions. We propose three key measurement criteria for judging effectiveness: (1) goal attainment; (2) participation, influence and share of voice; and (3) organizational maintenance. Our measurement framework also addresses the impact of media and political systems on the environment for public relations practices that are relevant to the issue of the hydraulic fracturing debate.

Public Policy Issues and Fracking

Hydraulic fracturing, or fracking, is a process by which fissures holding pockets of natural gas deep within the shale are broken up (fractured) by high-pressure injections of up to five million gallons of water mixed with sand and chemicals so that gas may be released and pumped to the surface (Sjolander, Clark, Rizzo, & Turack, 2011; Smith & Ferguson, 2013). Two processes are used to extract natural gas trapped in shale formations: first, drilling down to the sedimentary rocks, sometimes as far as ten thousand feet and, second, drilling sideways for a mile or more (McBride & Sergei, 2015). The water used in fracking usually returns to the surface during drilling, where it must be stored and disposed of (Ferguson & Smith, 2012a).

Growth and extent of fracking in the United States. Approximately one million American wells have been fracked since the practice began in the 1940s (Brantley & Meyendorff, 2013). The majority are vertical wells that tap into limestone or porous sandstone. Since the 1990s, however, gas companies have had the technology to harvest the gas trapped in the original shale source through hydraulic fracturing, a type of horizontal drilling (Brantley & Meyendorff, 2013). An increase in drilling in 2008-2013 led to the U.S. becoming a leading natural gas producer and potential gas exporter (McBride & Sergie, 2015), development that has been designed to reverse a decades-long trend of increasing reliance on foreign oil and gas. By 2012, the U.S. Energy Information Administration (EIA) reported that more than one-quarter of U.S. natural gas production was from shale, and is estimated to increase to one-half by 2035 (McBride & Sergie, 2015).

While the U.S. is the undisputed leader in shale gas development and use, the practice has been explored, proposed, or instituted globally in a number of countries.

International fracking development. Globally, shale exploitation is significantly behind the scale in the United States; political and economic circumstances that fostered development in the U.S. are hampering international exploration (McBride & Sergie, 2015; McMahon, 2015). As fracking in the United States has increased and global energy prices have fallen, other countries are studying the U.S. example and exploring tapping their shale resources. The 2013 ARI analysis of global shale formations outside the United States revealed that more than half of the world's shale oil resources are located in China, Argentina, Libya, and Russia.

China is in the early stages of a fracking revolution, attempting to replicate the rise in U.S. shale-gas production in an effort to combat unhealthy levels of pollution and meet a surge in energy demand. China began hydraulic fracturing in 2012, and within five years output is expected to reach 15% of all the nation's gas production (Sjolin, 2015). China is sitting on almost as much shale as the United States and Canada combined (potentially the largest shale gas deposits in the world), but mountainous terrain, water shortages, and technological and market challenges hamper exploration (McBride & Sergie, 2015).

Argentina is estimated to hold the world's second largest reserves of shale gas and the fourth largest reserves of shale oil, second to China ("Energy companies eye Argentina...," 2015). The government crafted a strategic plan to guide the development of these reserves and passed energy regulations to attract companies to invest, but the country lacks the domestic technology and experience in hydraulic fracturing. Similarly, Libya's production has drastically slowed down due to the country's civil and political upheaval (Kaufman, 2015).

Some countries see their shale resources as having the potential to transform geopolitical regions. In particular, Turkey, Ukraine, and Poland, which is set to focus on coal and shale gas, and renewable energy sources, envision reducing their dependence on conventional gas from Russia and Iran (McBride & Sergie, 2015; Zehr, 2013). However, Turkey's production has been stalled due to terrorist attacks and civil unrest (Kashi, 2013). Ukraine, presumed to have Europe's third-largest shale gas reserves, is poised with government approval and energy company investments to begin fracking explorations, but civil unrest and no specific legislative framework for shale gas exploration have stalled development plans ("Shale development in Ukraine," 2016). Experts say that the fighting serves Russia in delaying fracking exploration by energy companies, and that Ukraine's push for shale development is one of the key reasons Russian separatists are fighting, since development would endanger Russia's monopoly over the multi-billion euro gas supplies to Europe (Batkov, 2015).

Russia holds the world's largest natural gas reserves—five times that in the U.S.—yet the country is still nearly 15 years away from commercial production of shale. Threatened by low oil prices as a result of hydraulic fracturing, Russia has been charged with financing the antifracking movement in the United States and spreading misinformation to destabilize shale (McMahon, 2015; Pashley, 2015; Rogan, 2015). However, to preserve its stake in the global energy mix and maintain its geopolitical influence in the world, Russia is being pushed toward developing shale and other unconventional gas deposits (Pashley, 2015). Russia's confrontation over Ukraine has delayed hydraulic fracturing development, and has restricted American energy companies from offering fracking technology, equipment, and services to Russian drilling projects (McBride & Sergei, 2015).

Global opposition to fracking. The global green community has been nearly unanimous in opposing hydraulic fracturing (Brantley & Meyendorff, 2013). Opposition has been most prevalent in Europe, where environmental concerns have blocked fracking. France (which relies heavily on nuclear energy) and Bulgaria—countries with the largest shale-gas reserves in Europe—are the only European Union nations to have banned fracking. Although Greenpeace and other environmental organizations dismiss the claim, NATO chief Anders Fogh Fasmussen charges that Russia has funded anti-fracking activism across Europe as well as in the U.S.:

Well-organized and well-funded environmental opposition to fracking in Europe sprang up suddenly in countries such as Bulgaria and Ukraine, which had shown little prior concern for the environment but which are heavily dependent on Russia for energy supplies. Similar movements have also targeted Europe's plans to build pipelines that would offer an alternative to reliance on Moscow. (McMahon, 2015, para. 5)

Protesters are blocking potential drilling sites in Poland and England (Brantley & Meyendorff, 2013). Lithuania has strengthened environmental restrictions for developing shale-gas technologies, requiring an environmental impact study and public consultations before explorations can begin (Zehr, 2013). The anti-fracking movement in Spain's Basque region has utilized diverse activist tactics such as covering towns and villages in No Fracking (Fracking EZ) flags, holding hundreds of meetings, and building alliances with Basque Parliament and local municipalities. As a result, Parliament passed a "triple filter" of laws that prevent hydraulic fracturing, and in July 2015 the Basque Country hosted Frackanpada, the first international gathering of fracking activists "from Kurdistan to Brazil, from Ukraine to Portugal and Algeria," (Rushton, 2015, para. 1). That this international gathering of hundreds of activists occurred on land that was intending for fracking is a strong statement of the movement's global successes.

Despite the government interest and incentives in developing shale deposits in Argentina, national and local officials are in a power struggle with municipalities and environmental groups that opposi hydraulic fracturing. Public opposition led 50 municipalities to invoke fracking bans. The Assembly of Fracking-Free Territories, a network of groups opposed to hydraulic fracturing, works to preserve the will of the people and their right to live in their hometowns and to protect their water from pollution ("Energy companies eye Argentina...," 2015).

Environmental impact of fracking

Although the boom in hydraulic fracturing has been accompanied by increased profits for energy companies, the injection of business from energy company employees into communities, financial benefit to citizens in lease payments for drilling on their land and, more recently, falling global energy prices, there are concerns about the costs of fracking and the risks to health and the environment by analysts, environmental and community groups, and government.

Hydraulic fracturing since the 1990s has used greater volumes of chemical-laden water, injected at higher pressures. Methane gas can escape into the environment out of any gas well, creating the real, though remote, possibility of dangerous explosions. Water from the gas wells often returns to the surface, containing extremely low but measurable concentrations of radioactive elements and heavy concentrations of salt, a mixture that can be detrimental if not disposed of properly (Brantley & Meyendorff, 2013). In addition, because fracking puts a previously inaccessible supply of carbon into the atmosphere, it contributes to global climate change (Brantley & Meyendorff, 2013).

Scientific studies of the impact of fracking have found conflicting results. A 2014 New York state health department report synthesized multiple studies carried out across the United States, finding serious concerns including respiratory health, drinking water, seismic activity, soil

contamination, and impact of new roads and infrastructure on local communities (McBride & Sergie, 2015). In June 2015, however, a report from the Environmental Protection Agency (EPA) found no "widespread, systemic impacts" on drinking water (McBride & Sergie, 2015).

Who gets to set fracking policy?

The nature of complex public policy disputes is that policy decisions are made at many different levels of government and can take a variety of forms (Smith & Ferguson, 2013. For some issues, no clear national mandate exists to regulate particular activities, and thus many issue battles are fought locally. Toth (2006) argued that for organizations to be successful, leaders must understand and build public policy relationships through active collaboration with local and national public officials.

From a strategic standpoint, government entities might be more receptive to a particular industry or environmental group's concern either because of an industry's significant presence in a particular location or the political climate, such as when an election produces a legislature more amenable to business interests. Thus, a key strategic decision for issue managers is to determine an appropriate place, or locus, where a policy should be developed and determined. In cases where the legal authority over decisions is clear, there is little to debate about the locus of decision making and limited strategic positioning. However, in complex issues with policy propositions that could be decided by any number of agencies or governmental units at the local, national, or international level, the potential exists for issue managers to argue over the appropriate locus of policy decision making. Establishing the legitimacy of the locus of decision making helps increase the chance that a policy resolution is more widely accepted and implemented (Coombs, 1992; Toohey, Dailida, & Bartholomew, 2003). It is not surprising, then, that claims and counter claims about the legitimate locus of policy decision making would arise in issue management discourse.

PUBLIC RELATIONS AND PUBLIC POLICY

Issue management

Issues management is the process by which various advocates identify, prioritize, define, analyze, promote, and seek to influence the resolution of questions of public policy (Botan & Taylor, 2004; Crable & Vibbert, 1985; Heath & Palenchar, 2009; Jones & Chase, 1979; Smith & Ferguson, 2013). Botan and Taylor (2004) argued that "at the heart of issues management is a belief that organizations and publics can engage each other in ways that allow for one or both parties to change" (p. 654). Issues management research suggests that issue advocates must draw attention to the problem, position themselves as legitimate advocates, and successfully argue for their recommended resolutions to the problem (Crable & Vibbert, 1985; Heath, 1997; Vibbert, 1987). Issues are commonly described as having a lifecycle comprising five stages: early, emerging, current, crisis, and dormant (Crable & Vibbert, 1985). As the issue moves through the first four stages, it attracts more attention and becomes less manageable from the organization's point of view. Through its public relations activities, an organization communicates its positions on issues, solicits support for action and, ideally, engages target organizations in policy discussions (Ferguson & Smith, 2012b).

Issues Management and Activism

In democracies, policy formation is often contested in public, and involves multiple parties. Interacting with activists is something that many governments and organizations resist (Smith & Ferguson, 2001). In early research, activists were viewed as problems for organizations (see L. Grunig, 1992). J. Grunig (1989) argued that "when members of active publics join activist groups, they contribute to the constraints on organizational autonomy that create a public relations problem and bring about the need for a public relations program" (p. 3). Smith (1995) argued that activists are often treated as threats to other organizations because they may disrupt an organization's routine, influence the development of issues that may be threatening to an organization, use tactics that may appear threatening, and are perceived as being made up of members whose commitment to a cause is threatening. More recently, the public relations efforts of activists have become a legitimate part of public relations scholarship (Smith & Ferguson, 2010).

Activism centers on effecting policy change on issues, which evolve over time and tend to be either a question ready for decision (Jones & Chase, 1979), an organizational decision that creates problematic conditions for publics (Grunig J., 1989; Grunig & Hunt, 1984), or a condition to which people attach meaning and create arguments (Crable & Vibbert, 1985). For example, if an environmental or community organization believes that government policy would resolve an environmental problem, it utilizes public relations tactics designed to generate support for legislative remedies (Smith & Ferguson, 2001).

Issues management theorists have contended that issues are cyclical—that is, they rise and fall in status on the public's agenda (see Crable & Vibbert, 1985; Downs, 1972; Hainsworth, 1990; Jones & Chase, 1979). As issues gain status, activist organizations gain attention, members, and resources. When issues appear to be resolved or otherwise fall from the public's agenda, activist organizations suffer (Ferguson & Smith, 2012b). Activists "recognize issues earlier and package them to shape the interpretation of others" (Zietsma & Winn, 2008, p. 71). To survive, activist organizations must adjust to changes in their "issues environment" (Jopke, 1991; Smith, 1995).

Public relations and activist goals

Activist organizations engage in public relations for two primary, interrelated purposes: 1) to rectify the conditions identified by the activist publics; and 2) to maintain the activist organization or sustain the movement (Smith & Ferguson, 2010). For example, environmental groups pursue environmental issues; anti-war activists seek an end to an armed conflict. Activist organizations operate in the "tensions between what is and what ought to be" (Heath & Palenchar, 2009, p. 201), or oppose institutional behaviors that violate what the activists believe would be more legitimate and socially responsible. Activists pursue a preferred resolution to an issue, which provides the first goal of activist public relations—achieving the outcome desired by the organization. There are three sorts of goals activist organizations pursue: (1) to elicit or resist change on the part of a target organization or, more broadly, an industry or field; (2) to seek public policy or regulatory changes that would, in turn, effect change in institutional or public behavior; and/or, most broadly, (3) to change social norms (Smith & Ferguson, 2010).

A number of studies have examined how activists apply public relations techniques to achieve their goals. These studies have primarily looked at public relations strategies, or the general approach to communicating to achieve a goal and/or objective, and tactics, or the particular tools used in public relations, such as news releases, websites, social media, and other computer-generated, technology-dependent techniques. Several of the studies in this area seek to add to our understanding and refine the typologies of tactics used by activists and by institutions in responding to activism. In a review of 34 cases of activism, L. Grunig (1992) concluded that activists' tactics ranged along a continuum and included contact with the media, direct solicitation campaigns aimed toward the public or regulators, lobbying, public forums, petition drives, litigation, pseudoevents, public education, picketing, boycotts, and sit-ins.

MEASURING ACTIVISM'S IMPACT

Measuring the outcomes of public relations efforts has long been a quest undertaken by both scholars and practitioners. From Cutlip, Center and Broom's (1985) Preparation, Implementation, and Impact (PII) Model and Nager and Allen's (1984) PR Management by Objectives to the recently revised Barcelona Principles (Jackson, 2015), many models have been developed to measure the impact of public relations. The development of the Barcelona Principles indicates that identifying and measuring public reations outcomes is a global concern. However, as Likely (2015) observed,

...these models have not been compared to each other in any systematic way, nor have they been tested and peer reviewed. The result is that the profession has a variety of competing models – and no standard for a multi stage goal setting and measurement process... (para. 6)

Like much of the study of public relations management, many of these models were developed primarily for corporate and institutionalized nonprofit organizations to justify the use of public relations and to identify the most effective and efficient strategies for achieving results.

To the extent that the management of activist organizations has been studied at all, much of the research has focused on how the organizations were formed (J. Grunig, 1989) and the strategies employed to influence their institutional targets (Gamson, 1990; Jackson, 1982). Less attention has been paid to the goals of activist organizations and the measurement of those outcomes.

The first step in measuring activists' impact on target organizations and/or public policy is to determine the purpose of activists' communication efforts and the criteria by which those outcomes would be measured. This section refines and expands the two purposes of activist organizations discussed above (to rectify a condition and to maintain the organization), especially as they pertain to public policy formation in a global context, and proposes specific measurement methods.

Activists have a variety of options available to them when attempting to rectify problematic conditions, including direct negotiations with target organizations. Spar and La Mure (2003) suggested that

...an NGO identifies a problem that it and its supporters feel passionately about redressing. In an effort to gain maximum impact from their finite resources, they select a target with the greatest potential to affect the problem at hand and the greatest susceptibility to external pressure. (p. 81)

While the target may be a specific organization, often activists try to influence the development of laws or government regulations meant to address specific issues. With this in mind, this essay proposes three major criteria for evaluating activist organizations' outcomes: (1) the impact on the public policy process, or the extent to which a public policy that rectifies the problematic conditions identified by the activists is adopted, and the progress of the proposed policy through the legislative or bureaucratic process; (2) participation, influence, and share of voice, the extent to which the activist organization is allowed to participate in the public policy debate and is deemed a credible and valued voice that influences public opinion; and presence and issue engagement online; and (3) organizational maintenance, or the extent to which the activist organization can sustain itself (i.e., secure needed resources, maintain support, and grow).

Public Policy Process and Resolution

The public policy formation process provides the opportunity for activists to leverage the enforcement power of the government over a number of target organizations within an industry (Kriesi, 2004). In the United States, laws are passed by legislative bodies at the local, state, and federal levels (Smith & Ferguson, 2013). Regulations are instituted typically by agencies or departments, and often have the force of law.

Very generally speaking, a number of policy outcomes might ameliorate or rectify a problematic condition. With regard to the hydraulic fracturing issue, these outcomes could include restrictions on where fracking takes place, how it is done and, at the extreme, whether fracking is allowed at all. Actual public policy often contains provisions that are much more subtle than these broad outcomes, and are often borne of negotiation among policy-makers, industry targets, experts, and activists as the policy is developed. However, the main point for evaluation purposes is that the policy outcome reflects the activist organization's desired solution to the problem.

A final policy decision does not happen quickly. Indeed, there are a number of incremental steps that, depending on the structure of the legislative or regulatory body, present numerous opportunities for evaluation throughout the policy campaign (Kriesi, 2004). Thus, while a ban on fracking may not have been passed, legislation to do so might have been introduced in committee and sent along for debate before the full assembly. In tracking the public policy outcomes sought by an anti-hunger lobbying organization, Smith (1995) discovered that the organization regularly reported the incremental introduction of favorable legislation and claimed each advancement as a victory for the group. A number of these policy waypoints exist, depending on the structure of the legislative or regulatory unit developing the policy. These waypoints may include the point at which a policy proposal is adopted for consideration in committee; the extent to which the policy is deliberated within the committee structure; the point at which the proposal proceeds through committee, as well as the extent to which desired provisions remain intact; the point at which the policy recommendation proceeds to the full assembly for deliberation; and the points at which the policy recommendation is put up to a vote, adopted, and implemented. Of course, at any of these points, the proposed policy may be defeated or rejected.

Assessing activists' goal achievement. The measurement of public policy process and formation thus features two dimensions: (1) an evaluation of the extent to which the proposed policy reflects the activist group's desired resolution of the issue, and (2) a record of how the proposed policy proceeds through the legislative or bureaucratic process.

One common tool for evaluating policy outcomes vis-à-vis the organization's desired outcome is a so-called "scorecard." These scorecards review legislative and regulatory action over a certain period of time (usually annually) and judge the outcomes. Sometimes, as in Clean Water Florida's legislative scorecard, the evaluative scale is qualitative—"good" or "bad" (Clean Water Florida, n.d.). Other scorecards award grades or attempt to put a numeric value on the outcome. For example, legislation that completely reflected activists' desired outcome may be ranked from one to ten on a ten-point scale; anything that represented either a compromise or did not reflect the organization's positions at all would be ranked lower. It should be noted that these scorecards are subjective, and reflect an organization's approach to policy making and its desired remedy to a problematic situation.

A number of tools exist to track policy proposals as they proceed through the legislative or regulatory process. Several major research firms, such as Lexis-Nexis, offer tracking services for a subscription fee. In the United States, some legislative units provide tools via their websites to allow citizens to monitor the status of a particular bill. The United States' Congress, for instance, hosts its own tracking service at Congress.gov. An independent website, GovTrack.us, also allows users to track legislation through the various regulatory agencies. An independent Web site, GovTrack.us, also allows users to track legislation through the various regulatory agencies. Even the news alert tools built into browsers (e.g., Google) can allow activists to track the progress of important bills.

Participation and Public Influence

The second major criteria by which activist outcomes may be evaluated is the extent to which the activist group is allowed to participate in public discussions about the issue and relevant legislative process, and activist organizations' influence over public discussion of the issue. Fracking is an issue that has generated a great deal of debate globally. In most democracies, robust public debate involves a variety of actors, including politicians and regulators, organizations within the energy industry itself, citizens who perceive they are affected by the practice, and activist organizations. Each of these organizations seeks to gain a voice in the debate as well as a seat at the table when policy is formulated and enacted. An activist organization cannot claim to be effective if it does not participate in attempts to influence the policy process and the public deliberations over various policy options.

Legitimacy occurs when a society and its actors grant approval to organizations to operate (Stokes, 2013). While this approval is sometimes formal (e.g., through licensure), more often it occurs when organizations earn trust, credibility, and the right to participate in public policy debates. Two outcomes—the extent to which activists (a) gain legitimacy for their role as issue advocates and (b) demonstrate the legitimacy of their positions on those issues—form the foundation for evaluating participation and influence (Smith & Ferguson, 2010).

Assessing activists' legitimacy. Several indicators can demonstrate the extent to which an activist organization has become a legitimate advocate for an issue. For instance, when

government bodies begin to formulate policy, are representatives from an activist organization invited to participate or testify at public hearings related to the issue? Do organizations representing the industry target, body(ies), or other stakeholders acknowledge the activist organization, or engage in direct discussions with its members? Do third-party observers of the debate, such as the news media, recognize that the activist organization as a credible source for opinion and information about the issue?

These questions about the activist organization's legitimacy as issue advocate may be answered using a variety of methods. Official statements from either industry actors, such as individual energy companies, or from industry trade groups that clearly identify an activist organization may be a sign that the organization has gained the right to participate in the discussion, even if there is disagreement. Third-party accounts and media coverage of the issue that cite an activist group, interview its leaders as experts, or acknowledge the activists' influence may be taken as signs of legitimacy. Traditional media and social media tracking techniques can be utilized in this instance. During the policy formation and deliberation process, the number of appearances to testify in support of a policy before a legislative body may be counted; subsequent media accounts of that testimony may be assessed for tone and accuracy.

With regard to whether the activist organization's position on an issue has gained wider legitimacy, acceptance and influence, there are several indicators that might be examined. These indicators are familiar to many public relations professionals, since they are widely used. Traditionally, activists have been able to monitor news media coverage of their issues, seeking the same data that businesses utilize: placement of news releases and stories authored by activist organizations, number of mentions in media coverage originating from news outlets or other sources, and the tone of the story (e.g., positive, negative, or neutral). Rather than looking for mentions of a product, however, an activist organization looks for mentions of its organization, issue and its policy solutions. A number of media monitoring tools and services exist for this purpose.

More recently, the explosion of online news media, bloggers, and social media means that not only are issues covered, but they are also discussed and debated online. For organizations operating in this environment, the metric called "share of voice" has become increasingly important. In some respects, share of voice is similar to traditional media monitoring in that it seeks to determine whether an organization is mentioned online and the sentiment or tone of those mentions. Share of voice monitoring takes this one step further by comparing organizations' and other actors' presence to one another. For instance, if one activist organization has been mentioned online 500 times in one month, but another group has been mentioned 1000 times, then the first activist group has a smaller share of the conversation. This is important because it is assumed that conversations win converts to a cause or issue in online activism. As with traditional media monitoring, there are many options encompassing free tools and paid services to develop reports based on share of voice (Lasica, 2011).

Finally, an activist organization's influence over public opinion is often a result of its participation in public conversations, media coverage, and presence on social media. The central questions here are whether the organization has gained public awareness of the issue and generated positive public opinion toward the policy solutions it advocates. In addition to

monitoring media coverage, organizations can examine public opinion polling on the issue, and proposals regarding its resolution.

Activist Organization Maintenance

The final major criteria for measuring activism's success is the extent to which the activist organization can sustain itself over time by gathering the necessary human and financial resources. While this is an important public relations function for activist organizations (Smith & Ferguson, 2010), relatively little attention has been paid to it. For instance, Giugni (2004) claimed that activist communication strategies were aimed at two distinct audiences: political officials and the general public. However, Smith and Ferguson (2013) argued that an activist group must recruit members and coordinate their activities, including advocacy on particular issues, communicating to keep the organization's issue(s) relevant, and fundraising to sustain the organization. Sociologists have found that despite the loose-knit grassroots organizations that characterize a movement's early phases, successful policy initiatives are led by strong, centralized, well-organized activist groups (Gamson, 1990; Giugni, 2004).

Assessing maintenance of activist organization. A range of indicators can be used to assess an activist organization's health, including membership levels, donation levels, support for specific initiatives, the number of members participating in organizational initiatives (e.g., rallies, lobbying efforts), and the ability to marshal resources to maintain basic organizational functions. Annual reports and other financial records, as well as reports on an organization's owned media platforms, such as the website or newsletters, can provide some evidence of the organization's sustainability.

In review, we have attempted to create a framework for evaluating the impact of activist organizations on the public policy process from a public relations measurement standpoint. The framework proposes three main criteria for evaluating the work of activists: public policy outcomes, public participation and influence, and organizational maintenance. A number of methodological tools already exist or are emerging to provide data to determine the influence activists have had on public policy.

Interrelatedness and Contextual Factors

Interrelatedness of criteria and outcomes. Before turning to how these three criteria might be applied to measuring the outcomes of fracking activists, two important observations should be made. First, the three categories each contribute to the outcomes of an activist group's effort; thus, these broad outcomes are interrelated. Having a sustainable structure helps an organization earn legitimacy in the eyes of government officials; the ability to influence public opinion on an issue may also increase the ability to move a policy proposal through the legislative process. For activist practitioners, this means that a multi-pronged approach to both goal setting and evaluation is necessary. For researchers, this means that describing and analyzing activist organizations' advocacy efforts requires a broad methodological approach to judge activists' impact.

Cultural and environmental factors. The second and, perhaps more important, observation is the recognition that while we believe this framework can be universally applied to analyzing

activist activity in any particular country, making comparisons between countries and drawing general conclusions about the impact of activism is highly dependent on the political, cultural, and economic context of the countries being examined. Sriramesh and Vercic (2003) proposed that the practice of public relations in a particular country is influenced by a country's cultural factors such as its economic, political, and legal infrastructure—and its history of activism. Based on his ethnographic study of public relations practices in India, Sriramesh (1992) argued that as the instrument of communication with external constituencies, public relations "will thrive only in a society that possesses a potent external environment consisting of alert and challenging media, conscientious environmental and consumer advocacy groups, and special interest groups" (p. 230). Public relations scholars also believe that societal culture has a significant impact in shaping an organization's culture and its practice of public relations (Grunig & White, 1992). Sriramesh (1992) argued that "because a society's culture affects the way its members communicate, culture also should have a direct bearing on the public relations practices of organizations" (p. 11).

Hofstede (1980) identified four key dimensions of national culture: individualism/collectivism, power distance, uncertainty avoidance, and masculinity-femininity. In the measurement of activists' success, the first three dimensions are most relevant. Power distance refers to the extent to which power, prestige, and wealth are distributed disproportionately among people of different social strata or classes (Hofstede, 1980; Vercic, L.A. Grunig, & J.E. Grunig, 1993). Power distance has been found to correlate positively and significantly with authoritarianism, while low power distance countries are democratic (Hofstede, 1980). A high level of power distance is likely to induce government and organizations in that society to operate in a domineering manner, paying "little attention to public perception; neither are they challenged by specific publics or competitors" (Sriramesh, 1992, p. 239). The emphasis by government and powerful institutions, then, is on how to manipulate the public to accept the government or organization's positions and/or policies (Ferguson, 1998). *Individualism-collectivism* represents the degree to which a society emphasizes that everyone is expected to look after himself/herself with loose ties between individuals, or integrates people from birth onward into strong, cohesive in-groups, often extended families, which continue protecting them in exchange for unquestioning loyalty (Hofstede, 1980; Vercic et al., 1993). Uncertainty avoidance reflects the degree to which a society tolerates ambiguity (Hofstede, 1980). At the root of a society's mechanisms to deal with uncertainty is its cultural heritage, which is typically transferred through basic social institutions such as the family, the school, and the state. These mechanisms, therefore, are reflected in the collectively held values of the members of a society. Freedom, for example, breeds uncertainty because individuals have a greater amount of leeway to formulate and enforce their actions. Totalitarianism tries to counter this uncertainty by curtailing freedom (Sriramesh, 1992).

Embedded in Hofstede's (1980) cultural dimensions are a variety of cultural factors, including the society's history and government system. Additionally, the structure of the media industry in a country shapes the practice. In a broad sense, freedom of expression in a society is essential to citizens' participation in government decision making (Emerson, 1963). Not only does the extent to which citizens and the media are allowed freedom of expression predict whether media outlets exist to challenge organizations and government, but also the degree of expression permitted impacts many aspects of a society's cultures. Government and government officials in cultures

where broadcast media are controlled by the state, for example, rarely face opposition from radio and television outlets. In free speech societies, media can highlight the opposition of external constituencies to the activities of organizations and government or, by their challenging of organizational actions, behave as activist publics (Ferguson, 1998). Because organizations must pay increased attention to these activist groups and their ability to influence public opinion, proactive media relations becomes an increasingly vital aspect of public relations strategy (J.E. Grunig, 1989).

Thus, culture, activism, and public relations are interconnected, and this interconnection is uniquely manifested. As Giugni (2004) observed, ""strategies that work in a given context may simply be ineffective in other political settings and vice versa" (p. 25). Thus, while it may be desirable to identify some transnational postulates about activism's influence on policy, it is also nearly impossible to do. While one nation's political structure may allow relatively open access to activists, another country's system might be relatively closed (Decock, 2015). Cultural and contextual factors also make it difficult to support claims of causality (i.e., that a particular strategy directly resulted in a specific outcome). Finally, even in an individual nation, conditions for activism may change over time. Longitudinal studies that attempt to capture the influence of activism on particular issues may offer some common points of comparison both within single countries and in comparison with others (Giugni, 2004; Smith & Ferguson, 2010).

MINI-CASE APPLICATION TO FRENCH BAN OF FRACKING

As the practice of hydraulic fracturing has increased in the U.S., more countries have begun exploring drilling options, development, and production. These three criteria for measuring activist success in banning or stalling fracking offer ways to assess the effectiveness of activists' efforts in achieving the two goals of rectifying a problematic situation (i.e., fracking) and maintenance of the activist organization (i.e., anti-fracking activists). Such studies may examine activist strategies and tactics in a single country or in a comparative study. For example, in a rare comparative study, Kadar (2014) found that although the anti-fracking movement was the most important impetus behind the French ban, Polish fractivists' influence failed to extend beyond a local presence, with no long-term policy impact.

We offer the following mini-case study of activists' efforts and impact on the banning of hydraulic fracturing in France, one of only two European Union countries to ban fracking, using the three criteria proposed above: 1) goal attainment; 2) participation and influence, and share of voice; and 3) maintenance of the activist organization(s).

France reportedly has the second largest shale reserves in Europe, located in several regions of the country ("Shale development in France"). However, hydraulic fracturing has been used only 15 times, and any use of fracking techniques to explore or develop gas reserves has been banned since 2011.

Activist Impact Test 1: Achievement of Activist Goals—EFFECTIVE

In March 2010, the French Ministry of Ecology, Energy, and Sustainable Development (MEESD) approved three corporations' requests for "exploration authorizations" in southeaster France (Keeler, 2016). By February 2011, after waves of protest, opposition in social and

traditional media, and political maneuvering by left and right parties, the government temporarily suspended the three exploration permits for shale gas and created parallel consultative teams: one industry and energy entity and one focused on the environment and sustainable development (Keeler, 2016). Both were charged with submitting reports documenting the environmental consequences of extracting shale gas. Five bills that banned hydraulic fracturing or shale gas extraction under any condition were submitted to parliament, weeks before the commissioned reports were completed.

The government supported the Jacob Bill, which banned fracking on the grounds that it violated the Environmental Charter that was passed in 2005, but allowed for the possibility of shale gas extraction if a "clean and safe" alternative to fracking were developed (Keeler, 2016). After parliamentary debates in March-May 2011, the Jacob Bill passed by the National Assembly; on June 30 it received a majority in the Senate, and became law on July 13, 2011. This ban on fracking, the first in the world, occurred only 15 months after the first MEESD decision.

The final state of the Jacob Law process was on October 11, 2013, when the appeal by Schuepbach Energy LCC was upheld by the French Constitutional Council ("France cements fracking ban," 2013; Keeler, 2016).

Activist Impact Test 2: Participation and Influence, and Share of Voice—Effective

In March 2010 when the exploratory permits were approved, public consultation was not required prior to such an authorization; this provision had been struck down in 1994. Neither were the research applications required to state the specific technique that would be employed in exploration, nor was there a requirement to quickly and widely disseminate the information to elected officials and the public (Keeler, 2016).

Thus, it took months for the French public to learn about the authorizations to explore hydraulic fracturing, and until October 2010 for the first highly provocative article to appear in a French publication, criticizing MMESD official Jean-Louis Borloo for approving the permits and citing the newly released anti-fracking American documentary *Gasland*; this documentary played a significant role in mobilizing French opposition to hydraulic fracturing.

By late December 2010 and January 2011, people rose "as one bloc to express their radical refusal" of shale exploration and began holding information meetings and displaying unified identification through bumper stickers, t-shirts, and posters (Keeler, 2016, p. 6). Activists in France avoided creating a formalized structure for the anti-fracking movement, but did organize Collectif to centralize information, manage primary website 7 a (http://www.stopaugazdeschiste07.org/), and coordinate activities. (For this reason, and due to space constraints, the third test for activist impact, organizational maintenance, will not be examined in this mini-case of France hydraulic fracturing.)

Opposition to fracking was spreading by social media and local activists' networks (Keeler, 2016). Regular stories appeared in traditional media outlets (e.g., Badkar, 2011), websites (e.g., www.stopaugazdeschiste07.org and www.nongazdeschisteinfos.com and blogs, as well as songs and videos on Youtube. References to shale gas in Google Trends registered no activity until late December 2010, but spiked dramatically over the next two months (Keeler, 2016). Raoul (2011)

called the internet "a powerful too, a sort of permanent a la carte general assembly in which each could participate when and how he wanted" (p. 23).

By February 26, 2011, the movement and its allies had organized the largest anti-fracking protest in France with 20,000 attending a demonstration in Velleneuve-de-Berg (Keeler, 2016). Even in a country where anti-government protests are common and part of a revered tradition, the 2011 anti-fracking protest movement in France have been considered to be "extraordinary in its intensity, scope and ultimate impact" (Keeler, 2016, p. 7; see also Badkar, (2011; see also Fracking: Big business wants, 2014).

Although this case study of the anti-fracking movement in France is brief, it reveals the effectiveness of French activists in attaining their goal of effecting public policy banning hydraulic fracturing, and highlights some of their participation and influence from late 2010 when the public became aware of three exploration permits through May 2011 when fracking was banned by the French government. In a comprehensive case study analysis, measurement tools discussed above would be employed, and the extent to which the social collectives organized to oppose fracking have been maintained would be assessed. In addition, the influence of historical, political, economic, media, and other cultural dimensions would be examined.

CONCLUSION

Our paper has reviewed global fracking and activism, and offers a framework for developing specific measures of that impact. Examining the purposes of fractivists' strategies and tactics using these measurement criteria and considering the influence of political, economic, media, and other cultural factors would provide insights about the effectiveness and impact of their efforts to effect change.

This framework for measuring activists' effectiveness in achieving desired goals; mobilizing participants, and achieving a significant voice and influential role in public debate; and securing resources for organizational maintenance, takes into account traditional as well as digital and social media. The anti-fracking movement is particularly adept at organizing online through social media, as seen in the mini-case study of the . The extensive use of free or low-cost online platforms has both facilitated grassroots participation and increased organizational efficiency (Helman, 2013). Measurement of share of voice, following, and engagement will further understanding of how social and digital media advance an activist organization's influence and mobilizing supporters to effect change.

Based on the number of countries exploring and practicing hydraulic fracturing and the related activism by the energy industry and community and environmental organizations, application of these criteria would provide avenues for research into the foreseeable future and could inform measurement of activism efforts on a variety of issues.

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A STUDY OF ORGANIZATIONAL RESPONSES TO MAJOR DATA BREACHES IN THE RETAIL & HEALTHCARE INDUSTRIES

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ABSTRACT

Coombs' crisis communication response strategies were used to conduct a content analysis of corporate responses to data breaches in the U.S. healthcare and business industries. Twenty of the largest incidents of a data breach during 2014 were studied. The organization's responses from the ten largest breaches during 2014 in U.S. healthcare and business/retail industry categories were studied to learn common practices when responding to data breaches. A content analysis instrument was developed that incorporated categories of responses identified by Coombs and others. Two coders reviewed the organization's response and recorded the appropriate information on the coding sheet. Efforts were taken to ensure inter-coder reliability. This exploratory research discovered that four of Coombs' response strategies were regularly employed across the responses studied and that content from eight categories identified during the coding was located in at least half of the corporate responses. There is a great opportunity for further research, as little research has been conducted for such a large and important field.

Keywords: data breach, response strategies, crisis communication

INTRODUCTION

"It's the phone call everyone dreads making. The one to your credit card company, asking why your MasterCard didn't work at Trader Joe's. You listen to awful elevator music for thirty minutes, before you're granted the privilege of talking to some grumpy bank employee. When you finally are allowed to speak to a human being, she asks if you really did buy five thousand plastic pink flamingo decorations on November 15th, 2013. Of course you say, 'No, I didn't do that.' That's when you find out someone stole your identity. That's when you find out what a data breach is; that it doesn't matter how careful you are, or that your bank is careful too. At any rate, you definitely need to find out if you can be reimbursed for those five thousand flamingos' (Dwyer, 2014, p. 6).

Dwyer's (2014) scenario highlights a growing problem, identity theft from stolen information. How that information secured, however, determines whether you have been the victim of a data breach as a result of an organization's failure to secure your private information. The Identify Theft Resource Center (ITRC) defines a breach "as an event in which an individual's name plus

Social Security Number (SSN), driver's license number, medical record, or a financial record/credit/debit card is potentially put at risk – either in electronic or paper format" (2013). Unfortunately, data breaches have become more common.

Frei (2014) notes that "the frequency with which data breaches occur and the number of records that are lost in those breaches has increased considerably within the past decade. Figure 1 depicts the top ten largest data breaches of the past decade as of January 2014. Half of these breaches occurred in 2013 alone, with a total of 512 million records lost that year" (4). The growth in 2013 is significant, since Kumar (2014) notes that the number of security breaches rose 62% in 2013.

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1	Oct 2013	Adobe Systems, Inc	152 M	US
2	Mar 2012	Shanghai Roadway D&B Marketing Services Co. Ltd	150 M	CN
3	Jun 2013	Multiple South Korean businesses	140M	KR
4	Jan 2009	Heartland Payment Systems	130 M	US
5	Dec 2013	Target Brands, Inc.	110 M	US
6	Jan 2007	TJX Companies Inc.	94 M	US
7	Apr 2011	Sony Corporation	77 M	JP
8	Mar 2013	IRS agents allegedly seized 60M records of 10M people	60M	?
		during raid		
9	Aug 2008	Government agencies, state firms, telecom companies	50M	US
10	Apr 2013	LivingSocial Inc	50M	LIS

Figure 1. Top 10 Data Breaches of Past Decade – as of January 2014

Apr 2013 LivingSocial Inc. 50M US

Top 10 Largest Data Breaches with Number of Lost Records in Millions [Source: DataLossDB]

Data breaches affect a wide variety of organizations. The ITRC analysis of breaches in the US during 2013 and 2014 led to Figure 2. Clearly the business sector suffered the most breaches, with approximately one-third of the breaches and around 80% percent of the records in both years. The category with the largest percentages of the breaches was the medical/healthcare industry, with nearly 43% of the breaches both years, but those breaches accounted for just under 10% of the records.

Banking, Credit, Financial	3.7%	1.4%	5.5%	1.4%
Business	33.9%	81.7%	33.0%	79.7%
Educational	9.0%	5.6%	7.3%	1.5%
Government, Military	10.2%	3.3%	11.7%	7.8%
Medical, Healthcare	43.1%	8.1%	42.5%	9.7%
	# Breaches	# Records	# Breaches	# Records
	=614	= 92M	=783	= 85.6M

Figure 2. US Data Breaches in 2013 and 2014 by Industry Category

Data Breach Category Summary for 2013 and 2014 [Source: ITRC, 2014]

The overall cost of cybercrime and cyberattacks is staggering. According to Watkins (2014), the annual cost of cybercrime has been estimated to be \$385 billion around the globe, however,

businesses in some nations are more likely to be the target of such crime. "The UK National Audit Office estimates cybercrime costs the UK between 18 billion (\$30 billion) and 27 billion (45 billion) a year. In the US that figure is estimated to be roughly \$100 billion" (Watkins, p. 2-3).

Organizations in the United States are significantly more likely to be the targets of cybercrime. In 2013, 54% of cyberattacks targeted an entity in the US (Watkins, 2014). U.S. Homeland Security estimates over 1,000 US businesses have been infected by malware that captures customer payment information (Perlroth, 2014). Home Depot's data breach reported in early September of 2014 added to a growing list of US retailers that had been victims of such breaches, including U.P.S., Target, Michael's, eBay and Neiman Marcus.

LITERATURE REVIEW

Data Breaches

Costs to the organization/data handlers

Costs to an organization that has been a victim of a cyberattack vary depending on the extent of the breach and a number of other factors. However, Malecki (2014) offers some averages for the costs. He reports that in 2011 the Poneman Institute interviewed officials at 49 companies that had been the victim of an attack that led to the loss of customers' data. The results found that the average total cost of a data breach was \$5.5 million. This included losses in revenue as well as the costs associated with dealing with the breach. These figures are based on breaches that occurred up to 2011.

As noted earlier, the frequency and intensity of the breaches has been increasing rapidly. For example, Lafuente (2014) argues that the pervasive use of "big data" has led to even larger damage from data breaches, because of the large amounts of data that are now stored. As the number of records stored/released increases, so does the cost of responding to a breach. Pearson (2014) notes that one of the primary costs in responding to a crisis is the requirement to notify the individuals whose data has been compromised. "For a business that operates online, such as a retailer, the costs of informing all their customers alone could be crippling"(p. 12). Kumar (2014) reports that companies based in the US paid an average of \$246 per record that was compromised in the data breach. As the number of records and the frequency of attacks continues to grow, so do the costs for companies.

However, the costs to the company are not strictly in monetary terms. "Cyber attacks can cause significant loss of business intelligence and intellectual property, drive up the cost of security, disrupt workflow, and damage company reputation. Companies reporting major attacks suffer a 1-5% drop in stock value, while some companies recover, others lose everything" (Watkins, 2014, p. 3). What is not commonly understood is that the majority of those costs in the private sector may come from the loss of intellectual property, which is estimated to account for three-fourths of the losses (Watkins, 2014).

Costs of data breaches are tangible and intangible

Certainly for an organization there are both tangible and intangible negative aspects of data breaches. The costs an organization pays to inform customers or the fines to be paid are tangible. However, an organization can also incur intangible harm to their reputation, image and brand. The same can be said for the individuals who have their information released. There are the tangible costs of repairing damage to your identity, as well as intangible costs to the individual's state of mind.

Acqulisti (2014) argues that the harms faced by individuals who have had personal information breached should be thought of as being exposed to subjective harms and/or objective harms. Subjective harms are those anticipated perceptions of harm. "Subjective harms include anxiety, embarrassment, or fear; the psychological discomfort associated with feeling surveilled; the embarrassment associated with public exposure of sensitive information; or the chilling effects of fearing one's personal life will be intruded upon" (p. 83). Subjective harms are difficult to quantify. Objective harms, on the other hand, are "the unanticipated or coerced use of information concerning a person against that person" (Acqulisti, 2014, p. 83). They would include incidents of high harm (identity theft) or low harm (spam emails or junk mail). There is also the issue of the probability of a harm occurring. While the probability of getting more junk mail may be high, the probability of the high harm of identity theft is relatively small.

Havov's and Gray's (2014) stakeholder analysis of the breach at TJX, an American apparel and home goods company, divided the consumers whose information was disclosed into three distinct groups. First, were the consumers who suffered identity theft resulting in financial and more subjective harms. Second, were the consumers whose credit card information was leaked, but was never used. These consumers suffered no objective, financial harm, but they may have been subjected to, in Acqulisti's (2014) taxonomy, subjective harm associated with the anxiety. This second group was very large. The final group of consumers discussed by Havov and Gray were those who took advantage of the special discounts offered by TJX. Not only did they suffer no objective harm from their information being leaked, but they also benefited from the special discounts provided. Thus, Havov and Gray would argue that those individuals who have had their personal information leaked should not be thought of as a single, cohesive group.

Responses to increasing threat of cybercrime

It was inevitable that there would need to be responses to deal with the increasing number of data breaches. These responses have materialized on several levels. There have been responses by governments, organizations who handle the data and by individuals.

An obvious response to the threat of a cyberattack is to increase the organization's e-security. Kumar (2014) reported the results of a survey of IT professionals saying that only 37% thought their organization was building products with security in mind. The biggest reasons for failing to increase security were a lack of management approval, training and support. However, the same report found that the security of websites has been increasing, with the number of serious vulnerabilities dropping from 1,000 per site in 2007 to 56 per site in 2012. Yet, the vulnerabilities remain.

In addition to increasing their security procedures, many businesses are now buying insurance to help them recover from a cyberattack. Perlroth and Harris (2014) found that specialized polices that deal with cyberattacks are being offered by about 50 carries and that demand for those policies is increasing. They noted that demand for the policies increased 21% from 2012 to 2013 alone. All of these policies are leading to increased premiums – from \$1 billion in 2012 to #1.3 billion in 2013.

Watkins (2014) also reports significant growth in the purchase of insurance for cyberattacks. However, he notes that such insurance has limits. While the insurance can help an organization to repair the systems and recoup the costs of dealing with the breach, most policies do not compensate the company for the loss of intellectual property. Malecki (2014) reports the results of a study of insurance payouts from 137 cyberattacks between 2009 and 2011. The study by NetDiligence found that the average total payout per event was \$3.7 million. Of that figure payouts in legal settlement per event was \$2.1 million and for legal defense it was \$582,000.

As the number and magnitude of data breaches has grown, nations and many US states have moved to pass legislation for the protection of individuals. These laws all vary in the actions required. However, according to Pearson (2014), the laws tend to give regulators more power and make the data handlers more liable, as evidenced by larger fines being allowed, greater regulation, and requirements for the notification of individuals whose data was compromised. However, Kumar (2014) notes that companies operating in the European Union are required by EU regulations to provide an appropriate level of protection of consumer data against cyberattacks. The US has no similar requirement, although, as noted above, individuals may turn to the courts for restitution. Kumar also notes that China has taken a more proactive approach by "...restricting use of certain applications and products in order to safeguard themselves from cyber threats" (4).

Data breaches involving health information are not exempt from potential litigation, despite the fact that federal HIPPA rules do not allow individuals to bring an action for such a breach. Individuals can simply use state laws or torts to bring "... a steady stream of primarily databreach cases being filed in state courts" (Terry, 2014, p. 838).

Crises and Crisis Response Strategies

For the organization and the individuals involved, data breaches can easily constitute a crisis in many ways. Coombs (2014) defines a crisis as "...a significant threat to operations or reputations that can have negative consequences if not handled properly." The main concern in any crisis is public safety. Public safety includes the potential of psychical, emotional, mental, and financial harm to members of the public (2014). Crisis management is designed to control the crisis and defend the stakeholders and organization from potential harm.

Crisis management is divided into three main sections: pre-crisis, crisis response, and post-crisis. The pre-crisis phase is intended to prevent a crisis, but also should contain several pretested crisis communication materials (press releases, dark websites, statements, etc.). The crisis response phase involves responding to the crisis in an effort to control damage to stakeholders and the organization. The post-crisis phase involves learning from the mistakes made that led to

the crisis. Also, providing follow-up information to the public and return to business as usual (Coombs, 2014).

In any crisis, the organization involved needs to respond. Responses must be well planned and strategic. The first stage of a crisis response is the initial response. Coombs (2014) outlines three important elements of the initial response: be quick, be accurate, and be consistent. The most effective communication during a crisis is face-to-face (FTF), which means the CEO, or other spokesperson, should be prepared to do a press conference or release a video statement within an hour after a crisis starts or is announced (Nikolaev, 2010).

Not only is it important to have a response within the first hour of a crisis, but also to be available to the media. If the organization does not talk to the media, other people will talk to the media, and the organization will lose its power to tell the story. Coombs describes a crisis causing a vacuum. The media will rush to suck up any information possible, especially with the advent of social media (2014).

"Stealing Thunder" in crisis communication is a relatively new strategy that involves an organization reporting the crisis to the public before news media can report the story. The practice of stealing thunder comes from law, when a defendant reports damaging information, instead of the prosecution (Williams, Bourgeois & Croyle, 1993). The idea is that the defendant looks more honest, and can possibly sustain less damage by self-reporting (Arpan & Roskos-Ewoldsen, 2005; Claeys & Cauberghe, 2012).

All facts that can be disclosed should be disclosed to an organization's publics when releasing information during a crisis (Nikolaev, 2010). Besides making a spokesperson seem untrustworthy, hiding facts or keeping information from the public can damage the reputation of an entire organization. Responses should include "what happened, when, where, who, and how many people are involved, what is being done, and what kind of and when first recovery results can be expected," (Nikolaev, p. 273). Disclosing information shows that the organization has taken control to fix problems and gives people hope that the issues will be resolved. In the event that the crisis management team does not have all of the information by the time a response should be given, the spokesperson should only disclose information that is known for sure. According to Nikolaev, the organization's spokesperson should follow three basic rules: "do not go off record, do not speculate, do not disclose liability," (2010, p. 274).

During a crisis, an organization should not be endorsing itself through advertising or other forms of promotion. Commercials and advertisements should be removed from all media, as dealing with the crisis should be the top priority. Nikolaev uses the example of an airline crash: "it is not a time to show people safely flying with your company and happily eating peanuts," (2010, p. 272).

Websites are a major channel of communication for organizations. Organizations can control the information being posted, offer a central location for stakeholders to gain information, and information can be posted and updated quickly. A growing and large segment of the population turns to organization's websites for relevant and updated information (Holcomb, Gottfried & Mitchell, 2013).

The use of social media to respond to a crisis has proven to be a new and useful tool to organizations. According to Holcomb, et al. (2013), social media allows for immediate and updated messages delivered to the masses. Also, social media allows for consumers to directly respond and communicate with the organization, creating a dialogue between the impacted group and the organization.

After the initial response has taken place, the next step is to start rebuilding the organization's reputation. This goal is achieved in a variety of ways. Listed below are the top strategies discussed by Coombs (2014).

- 1. Attack the accuser: crisis manager confronts the person or group claiming something is wrong with the organization.
- 2. Denial: crisis manager asserts that there is no crisis.
- 3. Scapegoat: crisis manager blames some person or group outside of the organization for the crisis.
- 4. Excuse: crisis manager minimizes organizational responsibility by denying intent to do harm and/or claiming inability to control the events that triggered the crisis.

Provocation: crisis was a result of response to someone else's actions.

Defeasibility: lack of information about events leading to the crisis situation.

Accidental: lack of control over events leading to the crisis situation.

Good intentions: organization meant to do well

- 5. Justification: crisis manager minimizes the perceived damage caused by the crisis.
- 6. Reminder: crisis managers tell stakeholders about the past good works of the organization.
- 7. Ingratiation: crisis manager praises stakeholders for their actions.
- 8. Compensation: crisis manager offers money or other gifts to victims.
- 9. Apology: crisis manager indicates the organization takes full responsibility for the crisis and asks stakeholders for forgiveness.

The preceding list provides several common strategies used by crisis management practitioners. Attribution to a crisis is a major concern in crisis management. People tend to attribute a crisis to an organization or a situation. It is important for crisis management practitioners to try to place the attribution on the situation, rather than the organization. If attribution to a situation is done properly, organizations can avoid lasting damage to the brand, loss of potential sales, and negative word-of-mouth (Coombs & Holladay, 2006).

Expressing concern for stakeholders during a crisis is crucial. Whether the crisis is the organization's fault or due to an outside source, expressing concern can not only help lessen the damage to an organization's reputation, but it can also reduce financial loss following an incident and reduce the number of lawsuits against an organization (Cohen, 1999; Kellerman, 2006). Constructing an effective message of concern should be done as soon as possible after a crisis occurs to let stakeholders know that the organization is apologetic and cares for them. Without this message, the publics may think the organization does not care, which can further damage a reputation (Hearit, 2007).

Keeping the spokesperson in the public eye is important in both the crisis-response phase and the post-crisis phase. This means that it is a good idea to schedule press conferences throughout the crisis in to ensure FTF communication from an organization to its publics and to provide updates on the crisis. If the CEO is the spokesperson, he or she should be delivering updates to show the organization's high level of involvement in the crisis and to provide credibility and expertise (Nikolaev, 2010). An organization needs to inform its publics with as much information as it can disclose as soon as that information is available. By being open and honest throughout a crisis, an organization lessens the chance of long-term damage on its reputation.

During a crisis, it is important to monitor what the public and the media are saying about the crisis and those involved. Monitoring involves keeping track of media coverage and the public's reaction to the crisis team's efforts (social media posts, comments on new stories, etc.) Once a crisis has been resolved, use the media coverage and responses as tools for learning (Nikolaev, 2010). Perhaps the statements that had been pre-drafted were not accepted favorably by the public, or maybe the CEO could not deliver messages in an effective way. Organizations can analyze what happened to see what worked and what did not. If improvements need to be made, then the crisis plan should be updated to reflect the changes (Coombs, 2014).

The previous review of literature notes that data breaches are a significant problem for organizations and the problem is growing. The purpose of this research project is to determine current strategies used by organizations to respond to crises caused by data breaches. Due to the exploratory nature of this research, the project was designed to attempt to answer the following research questions.

RQ1: To what extent do organizations use Coombs' crisis response strategies in their data breach crisis response?

RQ2: Are there additional response strategies or content employed by organizations in response to data breaches?

RQ3: What attributions do organizations make in their data breach crisis responses?

METHODS

Selection of Data Breaches

The selection of data breaches was made possible through the work of the Identity Theft Resource Center. On January 15, 2015 the Identity Theft Resource Center published a report consisting of all the known data breaches that took place in 2014. The breaches were broken into five different industry groups: Banking/Credit/Financial, Business, Educational, Government/Military, and Medical/Healthcare. We then chose to research the top two categories based on the number of records breached. The Business category contained 68,237,914 records breached in 2014, followed the Healthcare/Medical category containing 8,277,991 records breached during the same year.

Because they impacted the most individuals and also were most likely to have an official organizational response, the top ten organizations in terms of records breached for the business

and healthcare/medical categories were chosen for analysis. Due to the lack of access to an official organization response statement from one organization in the business category and two in the health care category, we expanded our analysis to the top 11 breaches in retail and top 12 in health care. The result was an analysis of the top ten organizational responses for each category that were available for analysis. Table 1 lists the top data breaches in the medical and retail categories for which the official statement was analyzed in this research.

Table 1. Top data breaches in retail and health care sectors during 2014 for which an official response could be found and were included in the study.

Business/Retail Organizations	Date of Breach	#of Records Exposed
Home Depot	April & September 2014	56 million
Michael's	May 8, 2013 to January 27, 2014	2.6 million
Staples	August 10, 2014 to September 16, 2014; and July 20, 2014 to September 16, 2014	1.16 million
Neiman Marcus	July 16, 2013 to October 30, 2013	1.45 million
Goodwill	February 10, 2013, to August 14, 2014	868,000
Variable Life Insurance	Thursday, October 25, 2007	774,723
Spec's	October 31, 2012 through March 20, 2014	550, 000
Paytime, Inc	April 7 to April 20, 2014	233,000
Aaron Brothers	June 26, 2013 to February 27, 2014	400,000
Walgreens	March 3, 2014 to April 14, 2014	160,000
UPS	January 20, 2014 to August 11, 2014,	105,000
Health Care Organizations		
Community Health Systems / Tennova /Complete Heal	April & June 2014	4.5 million
St. Joseph Health System	December 16 to December 18, 2013	405,000
Sutherland Healthcare Solutions	February 5, 2014 to March 7, 2014	342,197
Touchstone Medical Imaging, LLC	May 9, 2014 to September 5, 2014	307,528
Indian Health Service – Maryland	August25, 2014, to August 29, 2014	214,000
Barry University (Foot and Ankle Institute)	May 14, 2013	136,000
Community Health Center	January 1, 2014	130,000
NRAD Medical Associates, P.C.	April 24, 2014	97,000
Patient Care Services at Saint Francis, Inc.	January 1, 2011	84,000
Aventura Hospital and Medical Center	September 13, 2012 – June 9, 2014	82,601
Central Dermatology	August 9,2013 to September 25, 2014	76,258
Visionworks	October27, 2014	74,944

Analytical Tool

After selecting the data breach cases to be analyzed, we developed an analytical tool using the response strategies found in Coombs' Crisis Management and Communication (2014). Coombs presented and defined twelve response strategies typically used in crisis communication, which led to the building of our code sheet. The response strategies were described in the review of literature and are also listed on Table 2. After analyzing twenty organizational responses to the

data breach, we found several common categories of content. The discovery of eight new content categories led to the development of a second code sheet that was comprised of the content categories. The content categories are identified in Table 3, discussed below.

Coding

The format for the organization's response varied. Some organizations communicated with a letter, while others issued a statement or a press release. Two individual coders analyzed each message sentence-by-sentence, looking for response strategies defined by Coombs. If the message contained a response strategy, the coder would directly copy the content and place it in the code sheet with the corresponding strategy. After the two individuals coded the twelve communication messages independently, the coders compared the code sheets. In the few instances of disagreement between coders the coders discussed the category and recoded.

After the initial coding, we found that our code sheet based on Coombs' response strategies did not account for eight common content categories that appeared in many of the messages from the organizations. This led to the implementation of a second code sheet to account for those categories. Again, the coders independently analyzed the messages and copied the content found in the message and placed it in the code sheet with the corresponding strategy. Next, the two coders compared and merged their finding into one code sheet.

Inter-coder Reliability

Coding of the initial communication from the organization was separated into two sectors, business retail and healthcare. A team of two was assigned to code the available, official response from top ten healthcare and business retail data breaches. Each team member individually coded the response and used the twelve response strategies identified by Coombs. If the coder found a response strategy, they directly copied the content and placed it in the code sheet with the most fitting Coombs response strategy. After individually coding, each team attempted to create on final coding sheet. The inter-coder reliability was very high, with a 87% agreement between the healthcare response coders. The business retail coders also shared a high level of agreement, citing 91% agreement. Each team of coders negotiated amongst themselves, and easily created one, final code sheet was used for the results in the next section.

RESULTS

The results section presents the results of the coding of the top-10 corporate responses to data breaches in the retail and health-related sectors. The presentation of the results follows the research questions posed earlier.

RQ1. To what extent do organizations use Coombs' crisis response strategies in their data breach crisis response?

Table 2 presents the frequency counts for the 12 strategies identified by Coombs. The results identified four commonly used strategies, one strategy that was used one time and the remaining

seven strategies were not identified in any of the 20 official response statements from the organizations.

Table 2. Use of Coombs' Response Strategies in Data Breach Crisis Response Strategies

Strategy	Health	Retail	Row
	Org	Org	Total
Scapegoat	7	10	17
Compensation	10	7	17
Justification (minimize)	9	7	16
Apology	9	7	16
Reminder	0	1	1
Attack the Accuser	0	0	0
Denial	0	0	0
Ingratiation	0	0	0
Excuses			
Provocation	0	0	0
Defeasibility	0	0	0
Accidental	0	0	0
Good intentions	0	0	0
Column Total	35	32	67

The results make it clear that four strategies were in favor when organizations respond to a crisis from a data breach. In 17 of the 20 cases studied the strategies of scapegoating and compensation were employed. In 16 of the 20 cases the strategies of justification/minimize and apology were employed. Each of these four strategies is discussed in greater detail below.

Scapegoating. Since the vast majority of the breaches were the result of actions of individuals outside of the organization, it was easy for organizations to use scapegoating. The statement of the Indian Health Services of Maryland noted that "a physician employed by a staffing company under contract with the IHS had improperly accessed protected health information from three IHS facilities." A statement in the official press release of UPS regarding their data breach named the scapegoat as "malware." In a letter to the parents of minors whose information may have been compromised, St. Joseph Health Systems said, "SJHS experienced a security attack in which hackers gained unauthorized access to one server on its computer system." Malware and/or hackers were the most common groups identified as the scapegoats.

Compensation. All ten of the health organizations and seven of the retail organizations offered compensation to those effected by the data breach. In all cases, the compensation offered to those effected was some form of credit monitoring service. For example, "The Home Depot continues to offer free identity protection services, including credit monitoring, to any customer who used a payment card at a Home Depot store in 2014, from April on." Most organizations provided at least a brief description of the free services being provided as well as information on how to contact the organization providing those services (e.g. ID Experts, AllClearID and Experian).

Justification/Minimize. In 16 of the 20 cases coded, the official statement of the organization included efforts to minimize the extent of the crisis. As noted in the literature review, much of the harm associated with a data breach is the anticipation that your information will be used by

others, as opposed to the actual theft of an identity. It is possible that the individuals crafting these official responses were attempting to alleviate some of that anticipation by noting the minimal risk involved. In some cases organizations chose to minimize the risk by noting that very sensitive information was not exposed. For example, Home Depot noted that the files taken "...did not contain passwords, payment card information or other sensitive personal information." Other organizations noted that there had been no reports of the misuse of the data. Touchstone Medical Imaging said, "We have no knowledge and there is no indication that any of your information has been used improperly. However, we are now sending you this letter in an abundance of caution to let you know this happened." Barry University's Foot and Ankle Institute said, "To date, Barry University is not aware of any reports of identity fraud, theft, or other harmful activity from this incident."

Apology. Whether the organization attributed the cause of the breach to external sources or not, 16 of the 20 cases reviewed included an apology. The Variable Life Insurance company echoed the words of many of the statements when it said, "We value the trust you have placed in our company and apologize for any concern this matter may have caused you." Those words were echoed by Spec's, the online glasses company, when they said, "We are deeply distressed about this incident and sincerely apologize for the worry and convenience this may cause you."

The organizations chose not to employ the attack the accuser or denial strategies. It is likely that this decision is based on the fact that often the notification of the data breach came from official sources or the organization itself, so these strategies would likely be counterproductive. The two similar strategies of reminding stakeholders of past good deeds and ingratiation were only employed in one case of the 20. Only one organization (Goodwill) chose to remind stakeholders of its past good deeds. Given the mission of Goodwill Industries, such a reminder was an appropriate choice. However, for for-profit organizations that could attribute the cause externally, there likely was little incentive to use the strategies discussed thus far.

Interestingly, there were no examples of excuses being made. Again, the fact that most of these crises had external causes may have meant there was no need to offer an excuse. It should be noted that in the initial coding, 20% of the cases were coded as having offered a provocation excuse. However, after the discussion among the coders, during the second coding it was determined that those provocation statements were actually examples of scapegoating alone. The coders noted that given the data breach cases under analysis, that there appeared to be few substantial differences between the scapegoating strategy and the provocation excuse.

The results for the first research question note the overwhelming use of four of Coombs' strategies when responding to data breach crises. It is interesting to note that the results in table 2 make it clear that for the cases examined there were no significant differences in the selection of response categories dependent on the industry. The four response categories were the same for both health and retail organizations, and they were used in nearly identical amounts.

RQ2. Are there additional response strategies or content employed by organizations in response to data breaches?

In addition to applying the Coombs' strategies to responses for data breach crises, the current investigation also looked for additional content that was commonly used across the response categories. Table 3 provides the data for the most common content elements identified by the coders. In all 20 of the official organizational statements there was a description of the type of data that had been breached. The statements also included description of what steps the organization took immediately upon disclosure (17), expressions of the organization's commitment to the security of information (16) and the explicit statement of a phone number to speak to someone for further information (15). Expressions of the organization's commitment to security were often tied to apologies.

Health Retail Row **Recurring Content Elements** Org Org Total Present information on the type of data breached 10 20 10 Describe the immediate actions taken by the company 9 17 8 Express their commitment to security and/or privacy of information 9 7 16 Provide a call center for questions. 9 6 15 Note that they are/have been working with law enforcement 6 8 14 Suggest additional strategies for protecting their credit/identity 8 6 14 Describe future actions to be taken 9 11 2 Provide details on compensation (credit monitoring, etc.) 3 7 10 57 Column Totals 60 117

Table 3. Eight Recurring Content Elements in Responses

Over one-half of the official statements analyzed included content noting that the organization was or had worked with law enforcement (14), provided additional strategies for protecting the customer's credit or identity (14), described future actions the organization would be taking (11) or provided additional details regarding compensation, including the offer to provide free credit monitoring services (10). The eight recurring content elements listed on table 3 provide organizations a list of the most commonly used content across the health and retail organization examples analyzed.

RQ3. What attributions do organizations make in their data breach crisis responses?

Previous research has found that the attribution of the source of the crisis can play a role in the selection of the appropriate response strategy. To ascertain the attribution the coders also determined if the official organizational response attributed the source to the organization or to some external factor. For the coding, attributions to the organization in general or an employee of the organization were viewed as internal/organizational attribution.

The results of the current research demonstrate that in the case of data breaches the vast majority of the attributions are to external sources. Table 4 presents the counts for the attribution in terms of the health care and retail organizations. It is important to note that in all cases it was possible for the coders to ascertain the organization's attribution. The three internal references in the health care category included a reference to an employee by job title (radiologist) and two references to an unnamed employee who had done something to cause the breach. The only incidence in the retail category of an internal attribution was to an unnamed employee. Eighty

percent (16) of the attributions were to external factors and the vast majority (12) named hackers or malware. The focus on hackers and malware is expected given the nature of the crises. Other external factors included contract employees (2), a former employee and computer thieves. Both incidences of contract employees as an external agent appeared in the health care industry, an industry category where contracting workers from another organization is more common.

Table 4. Crisis Attribution by Industry

Attribution	Health Org	Retail Org	Row Total
Organization/Internal	3	1	4
External	7	9	16

DISCUSSION & CONCLUSIONS

The current research found that almost all 20 of the businesses studied had used at least one or more of the following crisis response strategies: scapegoating, compensation, justification/minimization, and/or apology. Because data breaches have become a more common problem in recent years, it is likely that affected businesses will continue to use these response strategies when providing customers with information following a breach. Combined, the strategies mentioned can be a basic "guide" for businesses dealing with a data breach.

Previous crisis communication research has identified 12 common response strategies. However, this study found that of the list of Coombs' 12 crisis response strategies, the four strategies mentioned in the previous paragraph are the most effective to use when dealing with a data breach. Because data breaches are a relatively new problem, there is little research pertaining to how businesses can, and should, respond.

In addition to the four strategies commonly employed, the current investigation also identified eight types of content that commonly appear in data breach responses from organizations in the business and healthcare sectors that were studied. These recurring content elements are presented in table 3, and they also offer guidelines about what types of content are likely to be included in the organization's response to a data breach. The eight content categories are used in one-half or more of the organizational responses studied.

Although the study found that there are a number of response strategies that are used almost universally when dealing with a data breach, further research can be done on this subject. This research examined breaches that occurred in 2014 in the healthcare and retail industries. Future investigations could include different industries that have been affected, more years of breaches, and more than the top ten largest breaches per year. Future research could also be expanded to feature response strategies from multiple sources including social media, letters to customers, and website posts, as opposed to looking at a single official organizational response.

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YOU ACT LKE A GIRL: AN EXAMINATION OF CONSUMER PERCEPTIONS OF FEMVERTISING

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ABSTRACT

The amount companies invest in social causes has grown extraordinarily in recent decades. One social cause that has gained momentum with companies is "femvertising"—the celebration of women empowerment through advertisements. Examples include Dove's "real beauty" campaign and the "like a girl" challenge by Always.

High levels of perceived company-cause fit are known to enhance consumer attitude. In the case of femvertising, however, such a link is not always evident. Companies as diverse as Verizon, Dodge, and Under Armour have released commercials encouraging women to acquire or proudly display traditionally masculine traits, such as athleticism, ambition, decisiveness, and courage. Most femvertising campaigns also reference feminine traits, including a focus on appearance and nurturing and the construction of the ideal androgynous woman: pretty, yet strong; decisive, yet gentle. While androgynous-woman scripts have been used in advertising as early as the 1970s and 1980s, this is the first time large corporations have taken an essentially activist (feminist) stance.

This exploratory study investigates the effects of femvertising on consumer attitude and purchase intention based on company-cause fit. Through focus groups, it examines the knowledge and attitudes of men and women toward femvertising and companies that engage in it. The results offer both theoretical implications for CRM scholars and practical ones for corporations and advertisers considering gender welfare causes within a marketing strategy.

Keywords: Femvertising, CRM, gender, corporate social responsibility, company-cause fit

INTRODUCTION

In today's ever-competitive business environment, the support of social causes by companies has experienced extraordinary growth during the past two decades. This evolution is expected as a result of the positive outcomes corporations experience in their cause-related marketing (CRM) initiatives (Brown & Dacin, 1997; Varadarajan & Menon, 1988). CRM is a corporate social responsibility (CSR) strategy aimed to persuade consumers to engage in prosocial behaviors in areas such as environmental efforts, community involvement, and public and gender welfare (Kotler & Zaltman, 1971).

One CRM cause that has recently regained momentum but has not been examined extensively is the promoting and advocating of woman empowerment. For almost a century now, companies have occasionally used advertising to promote and celebrate women. The first widely known instance is the 1929 Torches of Freedom march staged by Edward Bernays. To promote smoking among women, he hired 10 women to publicly light cigarettes at the Easter Sunday Parade (Gladwell, 1998). Bernays, who was paid to promote the products of the American Tobacco Company, was astute enough to realize that women were an untapped consumer base. A similar approach was used by Philip Morris several decades later in its ads containing messages such as "We make Virginia Slims especially for women because they are biologically superior to men" and "There's a little Eve in every woman" (Shirk, 2014).

Currently known as "femvertising," this revamped approach to advertising features storylines of women empowerment and has proven to have positive influences on sales (Castillo, 2014). Dan (2016) reports that, of the women polled in a recent industry survey, 51% said they liked femvertising messages and 52% had purchased a brand's product specifically because of the positive portrayal of women in the brand's advertising. One of the best-known examples of femvertising is Dove's 2004 "real beauty" campaign designed to broaden the definition of true beauty for women (Molitor, 2008). The original campaign featured non-models wearing only their underwear publicizing Dove products. The idea behind the campaign was to show that women of all shapes and sizes should feel comfortable in their own skin. This approach was followed by a 2013 campaign to boost women's self-esteem through a video where a sketch artist drew sketches of women based on how they described themselves and compared those sketches to ones based on how others described the women. The results showed that the sketches based on the description from others were more flattering than the ones based on how the women described themselves; showing that the women are more beautiful than what they thought. Within a month of its release, the sketches video became "the most viral ad video of all time" (Stampler, 2013). In 2014, in the same vein, Always launched its "like a girl" campaign to provide a positive message that challenges what it means to be "like a girl."

These pro-women, female-empowerment CRM campaigns are distinctive because they attempt to build a relationship with a specific consumer base (females) through depictions of "real" and "ordinary" girls by highlighting their unique and personal experiences.

Because femvertising messages promote gender equality, definitionally speaking and in principle, they can be considered feminist. However, they also explicitly encourage consumption of advertised products, which contradicts feminist scholars' belief that women's empowerment is not simply a matter of money and purchasing choices, but also of the existence and enforcement of social policies and practices (Ramazanoglu, 1989). Thus, femvertising messages contain an inherent conflict between its function as carriers of individual consumption and feminism's intrinsically political and social causes. Could this intrinsic conflict undermine the messages' persuasiveness?

Only limited research has been done on the effectiveness of these campaigns and the degree to which its success depends on the company's business and its specific product lines. Little is also known about what topics evoke the most public attention or dialogue. Scholars believe that consumers will have a more positive reaction to a company's CRM campaign if the CRM issue aligns with the company's mission or business model (Menon & Kenon, 2003). The fit between company and cause is important because it influences how much thought people put into their relationship with a brand, the specific types of thoughts generated, and consumers' evaluation of

both the company and its chosen social cause (Becker-Olsen, Cudmore, & Hill, 2006). Research has shown that high levels of perceived company-cause fit enhance consumer attitudes toward the company because consumers view the company's actions as appropriate (Aaker, 1990; Keller & Aaker, 1992; Till & Busler, 2000).

Among companies that have implemented advertising campaigns centered on women empowerment, the level of fit between company and cause has varied. On the surface, at least, brands that target mostly women, such as Dove, Always, and Pantene, have a somewhat natural fit with such campaigns because their female customers presumably would like to feel more accepted and comfortable in the social world they inhabit. However, companies associated with gender-neutral products (used by both men and women), such as Verizon, Dodge, Sears, Nike, Under Armour, and even Sport England (a public body in the United Kingdom) have also launched campaigns depicting and endorsing women empowerment. By launching these campaigns, do gender-neutral companies run the risk of alienating male customers or being perceived insincere by audiences across gender lines? In attempting to answer these questions, this exploratory study aims to investigate femvertising messages' effect, if any, on purchase intentions and consumer attitudes toward both the brand and feminism as a social cause. The main potential moderating variable that will be considered is company-cause fit.

LITERATURE REVIEW

To pose specific research questions, we begin by examining the literature on (a) corporate social responsibility, including cause-related marketing and company-cause fit; and (b) the reception of women-empowerment advertising messages, including through the perspective of framing social reality (Goffman, 1974).

Corporate Social Responsibility

CSR is the socially or ecologically activity of a company that ultimately benefits society. It is defined as a company's "obligation to take action to protect and improve both the welfare of society as a whole and the interest of organizations" (Davis & Blomstrom, 1975, p. 6). Company involvement in social causes began in the form of early philanthropic efforts, voluntarily undertaken by public-spirited corporations (Strop & Neubert, 1987). However, the motivations varied. Keim (1978) points out that some corporate philanthropic efforts have aimed to improve profits. Others have been done for purely altruistic reasons. For decades, corporate philanthropy was limited by law to donations justifiable as being in the direct interest of stockholders (Morris & Biederman, 1985). In other words, CSR was only a business strategy to maximize returns to shareholders (Friedman, 1970). However, more recently, companies' support of social causes has begun to reflect an "enlightened self-interest" (Stroup & Neubert, 1987), viewing social responsibility as a path to gaining a competitive advantage and investment to improve long-term organizational performance. Within this perspective, CSR is seen as part of a proactive social response articulating a company's continuing role in a dynamic social system (McGee, 1998; Brown & Dacin, 1997).

Socially responsible initiatives can take many forms. These include: (a) philanthropy (i.e., corporate donations); (b) corporate social marketing (CSM), which comprises a company's

initiatives that aim to persuade people in order to engage in socially beneficial behaviors (Bloom, Hussein, & Szykman, 1997); and (c) cause-related marketing (CRM), defined as the alignment of corporate philanthropy and business interest (Varadarajan & Menon, 1988). CRM, which is the most commonly studied form of CSR (Peloza & Shang, 2011) and also the one most relevant to this study, is reviewed in detail in the following subsection.

Cause-related marketing. CRM's objective is to improve a company's performance while helping worthy causes. Typically, it involves a company promising to donate money to a social cause or to a nonprofit organization when a consumer purchases its products or services (Nan & Heo, 2007). Although companies routinely tie CRM efforts with sale-promotional tactics (i.e., discounts and refunds), this is not the defining characteristic of this practice. Rather, "the distinctive feature of CRM is the firm's contribution to a designated cause being linked to customers engaging in revenue-producing transactions with the firm" (Varadarajan & Menon, 1988, p. 60).

Companies have long attempted to enhance their corporate image as well as consumer attitudes toward their brands through CRM, which can influence consumer perceptions of the company and even their willingness to purchase its products. Smith and Alcorn (1991) found that 56% of consumers think it is important for a company to contribute to a charitable cause. Customers tend to view CRM efforts as positive (Webb & Mohr, 1998), assuming they understand the factors behind the company's social investment. What is communicated about a company's socially responsible behavior can impact consumers' support for a company. For example, when a CRM message showcases an obvious fit between the brand/company and its chosen social cause, consumer attitudes toward the brand are more favorable, but this positive effect is evident only among customers with high-brand consciousness (Nan & Heo, 2007). High-brand consciousness is commonly defined as the trait that characterizes a consumer oriented in buying well-known branded products (Shim & Gehrt, 1996). In other words, the more someone is brand-conscious, the more that brand is seen as a reflection of one's own personality.

Company-cause fit. In highlighting a specific service or product, a company must pay close attention to its messages, which can impact consumers' understanding of the content and the ways they associate it with the company itself. One approach is to emphasize an appropriate topic, one of which is logically tied to a company's mission or values (Chandler & Werther, 2014). Company-cause fit is the link between a company's brand or product and the cause it supports (Varadarajan & Menon, 1988). Company-cause fit "is important because it influences: (1) how much thought people give to a relationship (e.g., increased elaboration about the firm, the social initiative, and/or the relationship itself when perceived inconsistencies with prior expectations and information, (2) the specific types of thoughts generated, and (3) evaluations of the two objects" (Becker-Olsen et al., 2006, p. 47).

Company-cause fit can be accomplished in different ways. For example, fit can exist if the company's consumer base overlaps with the target audience supporting a specific social cause (Nan & Heo, 2007). Fit can also be high if a company and a social cause share similar values (e.g., the American Red Cross and first-aid products from Johnson & Johnson). The enhancement in consumer attitude toward the company resulting from a good company-cause fit (Menon & Kahn, 2003) likely reflects public perceptions of the company's motives in undertaking a social cause (Elving, 2013; Kim & Lee, 2012).

These perceptions have been explained by attribution theory (Jones & Davis, 1965; Kelley, 1967, 1972), which posits that people draw conclusions based on how they perceive a subject's motives. Forehand and Grier (2003), when examining the attribution theory in marketing research, found that consumers attribute two primary types of motives to companies: public-serving (benefitting elements external to the company) and company-serving (benefiting the company itself). Consumers will view a company's actions as public-serving if the potential benefit for the company is not salient, but will react negatively if they perceive company actions as company-serving. In the context of CSR, the level of sincerity perceived by consumers plays an important role in a program's success (Kim, 2011). But what is likely to be perceived as sincere? Forehand and Grier (2003) found that consumers perceive a company's motives to be sincere when the social cause highlighted in corporate messaging is closely related to the company's business. Further, Nan and Heo (2007) discovered that consumers favored a company when a company's social responsible efforts were congruent with the company's mission. What does this mean for messages that endorse women's empowerment? This question is the subject of the following section.

(Re)Constructing Gender in Ads

Berger and Luckmann's theory of social construction of reality (1966) posits that people should be viewed as social actors who are constantly performing on a socioculturally constructed stage. Their performances are shaped by their mental images of reality and of each other. These images stem from cultural narratives that may be uniquely determined by one's geographic and chronological location. However, they are also unified across space and time by a tendency to disadvantage less powerful groups, including women and racial or religious minorities. These social "constructions" of reality are in constant interplay with mediated narratives, by being not only reflected in mediated content, but also shaped and reinforced by it.

Scripted gender communication was not systematically analyzed until the 1970s. Erving Goffman's (1979) book *Gender Advertisements* was one of the first to offer an elaborate analysis of men's and women's idealized social performances, arguing that advertisements serve to translate confusing social occurrences and expectations into comprehensible and obvious messages. Arguing that advertisements often showcase gendered "celebrations ... performed either by persons acting to one another or acting in concert before a congregation" (p. 1), Goffman enumerated and pointed to the visual and textual cues that routinely depict women as childlike, submissive, daydreamers, and needing instruction from men.

Although comprehensive, Goffman's categorizations may not have included the full range of variations in ads depicting women. There were also plenty of "women empowerment" ads in the 1970s, but Gornick (1979) argues that they failed to be perceived as credible or realistic by the public. She writes:

One has to only look at an advertisement showing a woman carrying an attache case, or reading 'The Wall Street Journal', or wearing a white coat in a laboratory setting—the words "For the woman with a mind of her own" scrawled across the ad—and then consult one's own instinctive incredulity, to know the truth ... There comes suddenly to mind the memory of old-time vaudevillians in black-face—powerless people "playing" even more

powerless people—and it occurs that these images in advertising of women playing at being serious people are a true mock-up of life... (p. ix)

To recognize the importance of how women are depicted in ads, we must first establish that these portrayals have social implications beyond a company's bottom line. Advertisements are considered one example of mediated representations of reality, which have been shown to influence audiences' mental images (Scheufele, 1999). But if that is the case, why would images of supposedly empowered women fail to change people's existing mental images, as Gornick (1979) suggests in the above quote?

Theoretically speaking, portraying women as men-like citizen-consumers is indeed not enough to end misogyny or change the gendered status quo. In part, this is because attitudes (a term used here as roughly synonymous with mental images) are extremely difficult to change. Presenting evidence that contradicts one's beliefs about a product or an issue is not likely to result in an immediate (or any) attitude change (O'Keefe, 2015). In some cases, as Gawronski and Strack (2004) report, the cognitive dissonance that arises from the pondering of arguments that contradict one's own beliefs may change explicit attitudes (i.e.,"I believe men and women should be equal") but not implicit attitudes ("I spontaneously and unconsciously associate women with the home and men with the office.")

Consumer reception of feminist ads. Femvertising messages have long lacked credibility not simply because they represent staged performances of women's power. Because few companies' have a business or a mission explicitly related to gender equality (used in this paper as synonymous with feminism), corporate social efforts related to women's empowerment have been and continue to be viewed as insincere by many. Goldman, Heath, and Smith (1991) referred to the trend as "commodity feminism," and Baxter (2015) labels the latest wave of women-empowerment advertisements "faux activism." Scholars have observed a long history of feminist messages being appropriated for marketing purposes.

This appropriation is especially evident in the marketing of beauty products, as illustrated by an analysis of *Seventeen* ads with feminist subtext over four decades (Budgeon & Currie, 1995) and a study of women's magazines ads explicitly supporting the goals of feminism's Second Wave (Busby & Leichty, 1993). In the same vein, Goffman's (1979) collection of gendered advertisements include one for Bulova featuring a male and a female wrist, both adorned with expensive watches, with the message "Equal Pay. Equal Time" (p. 29).

The use of women's empowerment messages to sell merchandise and encourage consumption continues in the 21st century, thanks to the neoliberal ideology of the consumer-citizen (Mol, 2009). For example, Nickelodeon's productions forge an implicit connection between consumer brands and individual (feminist) empowerment through depictions of strong girls who are also avid consumers (Banet-Weiser, 2004). Consumption of specific products—including elite and mostly unaffordable items designed by self-identified feminist designers like Prada and Diane von Furstenberg—has frequently been cast as a path to empowerment, in both ads and news articles (Mendes, 2011; Sternadori & Hagseth, 2014). Such "feminist' purchases are simply forms of consumer self-therapy in a modern political climate of systemic gender discrimination," (Marcus Reker, 2016, p. 2).

Some femvertising messages appear to have had success in targeting at least some consumers. After all, the perceived sincerity of women's empowerment messages from corporations depends on consumers' definition of women's empowerment. Does a woman's power lie in her youthful good looks? Or does her empowerment lie in gaining actual political and financial power, comparable to that of men? And, most importantly, is women's empowerment about personal gain and individual progression, or is it about sweeping changes to the gendered status quo?

It would be in the interest of most companies producing inexpensive beauty products for women (i.e., mainstream cosmetic brands) to embrace the former and limited view of women's empowerment. It would also make sense for companies producing inexpensive hygiene products for the female body to focus on women's physical power and positive body image (i.e., Dove and Always). Little wonder, then, that Pantene's "not sorry" campaign, which had nothing to do with women's body image, was perceived by consumers less positively than Dove's "real beauty" and Always's "like a girl" campaigns.

What complicates the literature on how consumers perceive femvertising is the fact that these messages represent a radical departure from the typical representation of women in advertising as mere objects and luxurious items of pleasure for men (Sirr, 2015). The stark contrast between the usual objectifying messages and the more empowering ones may explain femvertising's positive influences on sales mentioned earlier. A 2014 SheKnows survey indicated that polled women tended to remember pro-women ad campaigns compared to ads that do not feature women-empowerment themes; 92% were aware of at least one campaign that portrays women positively (Castillo, 2014). Not only individual product sales but companies themselves have also benefited from femvertisements. After Dove's initial Real Beauty campaign, its parent company Unilever reported a 3% overall growth in sales.

Many have attributed the success of femvertising to its focus on the female consumer. This strategic rationale has led other companies, such as Google, Chevrolet, Verizon, and Procter & Gamble to champion women's empowerment in marketing campaigns targeting female consumers (Davidson, 2014). Others suggest it is the grassroots nature of social media that helps boost the spread of corporate messages that take an activist stance. For example, according to Wood (2014), "advertising often reflects the concerns, anxieties, dreams and aspirations of society. Right now in society, social media is laying bare the extent of hidden misogyny that affects women all round the world" (para. 7).

Others believe that femvertising's success lies in the product that is being sold. Although ads championing women may positively impact a company's bottom line in the short term, sustained growth is possible only by creating products and services espousing the principles of gender equality, which may be easier for companies that make female-centered rather than male-centered or gender-neutral products (Davidson, 2015).

Based on the literature reviewed so far here, the following research questions emerged:

RQ1: How do young adults verbalize their evaluations of femvertising messages?

RQ2: How do young adults' self-reported perceptions of fit between the message and the advertised product affect their evaluations of femvertising commercials?

RQ3: What are young adults' perceptions of the effectiveness of femvertising messages in changing their attitudes toward the advertised product and/or brand?

RQ4: What are young adults' perceptions of the effectiveness of femvertising messages in changing their attitudes toward women, women's empowerment, and gender equality?

METHOD

Because this study's aim is to gauge perception and evaluation of femvertising rather than to predict behavior as a result of exposure to femvertising messages, qualitative inquiry appeared to be the most appropriate approach (McCracken, 1988). We chose to seek answers to the research questions through focus groups because they provide significant flexibility in question design and follow-up, and allow participants to clarify their thoughts and opinions (Stewart, Sharndasani, & Rook, 2006; Wimmer & Dominick, 2010).

Discovering and understanding the meaning of participants' positions regarding a particular subject is imperative in exploratory research. Specifically, focus groups "properly seeks answers to questions by examining various social settings and the individuals who inhabit these settings" (Berg, 2009, p. 8). Furthermore, focus groups can stimulate thinking in an attempt to generate or operationalize second-degree constructs and scientific hypotheses (Calder, 1977). This expected result was something we considered to be useful in a future survey on consumers' perceptions of femvertising messages, for which this exploratory study is intended to serve as a stepping stone.

Participants and Procedure

Three focus-group discussions, with seven to 10 participants each, were conducted in search of reliable result patterns (Wimmer & Dominick, 2010). It is recommended that focus groups should be between six and 12 participants as a group this size allows for simultaneous discussion without losing focus and control (Wimmer & Dominick, 2010). Two focus groups consisted of all female participants, and one was made up of all male participants. The choice to employ gender-homogenous groups intended to increase the comfort levels of participants in discussing a subject that has some potential to elicit negative comments about members of the opposite sex. Research has shown that focus-group participants who are surrounded by others who are similar to them are more likely to share their opinions openly (Stewart & Shamdasani, 2014). The use of two female-only groups and one male-only group reflected our expectations that femvertising messages, which often target female consumers, are likely to elicit more reflection and personal reactions from women.

The university's Institutional Review Board approved the study's protocol, data collection procedure, and participant selection before data collection began. The research participants (N = 25, of whom 17 were female) were recruited through the SONA research participation system from a population of undergraduate students enrolled at a large university in the U.S. Southwest. Participants' age ranged from 18 to 23 years. The recruitment script for each group included the

scheduled date and time as well as whether the focus group was for men or women only. Upon signing up, participants saw an information sheet explaining the study's purpose, benefits, and risks.

The focus groups were held at a university facility in the afternoon, and lasted approximately 60 minutes each. One female moderator managed the discussion during the female-only focus groups, and one male moderator managed the discussion during the male-only focus group. The choice to have moderators of the same sex as the participants reflected previous research indicating that this arrangement typically leads to more open and honest conversation (Morgan, 1996). Participants received extra credit and refreshments for participation. Each group was videotaped, and the discussions were transcribed verbatim.

Each focus group began with participants picking a seat around a conference room table. To keep confidentiality, as each participant entered the room, he or she was assigned a number. This number is what was used to identify the participant. Once all participants were in their seats, the moderator welcomed them and explained the purpose of the study. As the focus groups were semi-structured, the moderator encouraged participants to build off of, respond to, or question the responses of others in the discussion.

During each focus group, participants watched advertisements utilizing the femvertising strategy. Specifically, the following commercials were shown: Always' "like a girl," Ram Trucks' "courage inside," and Verizon's "inspire her mind." These commercials were chosen due to the differences in company-cause fit, style, and message. Following the showing of these ads, participants were asked what their attitudes/opinions were toward each of the ads and whether they believed the use of female-empowerment messaging was appropriate and effective in each specific case. In addition to questions centered on the commercials, the moderators also asked questions about what the participants like in ads in general, their thoughts on feminism, messaging, and willingness to buy products highlighted in ads.

Transcripts were coded in accordance with the constant comparative method (Glaser, 1965; Glaser & Strauss, 1967). Statements were first coded for subject matter; then re-coded as needed to identify new concepts. The coded statements represented the range of possible responses within conceptual themes. These themes were later reviewed and reduced through the narrowing and combining of concepts (Glaser, 1965).

FINDINGS

The findings of this study are summarized in Table 1. They are also outlined in more detailed in the subsections that follow.

Table 1. Summary of Findings

Research Question	Findings in Female Focus Groups	Findings in Male Focus
		Groups
RQ1: Evaluations of	Inspiring to some participants;	Perceived as trendy;
femvertising messages	patronizing and contrived to others;	trying to start a
	third-person effect; preference for	"movement"; third-
	"multidimensional" representations	person effect; preference
		for "multidimensional"
		representations
RQ2: Effects of perceived	Clear preference for fit; message must	Clear preference for fit;
company-cause fit on	coalesce with the company's already	message must coalesce
evaluation	proven style and image	with the company's
		already proven style and
		image
RQ3: Perceived effectiveness	Increased positive attitude toward some	No reported change; not
of femvertising in changing	brands; no purchase intent for self; third-	applicable for some
attitudes toward product/ brand	person effect	gender-specific products
RQ4: Perceived effectiveness	Across-gender third-person effect	Increased concern for
of femvertising in changing	(expectations of change in how men treat	women among
attitudes toward women's	women); increased awareness of	participants with
empowerment	stereotypes	younger sisters

Perception of Femvertising Messages

The first research question asked how young adults perceive femvertising messages. Overall, participants were split on how they felt about a company's use of pro-social messaging. Some participants loved the women-empowerment message, but did not necessarily show support for the product or the company itself. For example, one female participant believed the women-empowerment commercials that were shown were encouraging and impactful: "The Always commercial made me more aware of how easily we accept everything and just go with it. The RAM commercial is more encouraging to do something and be different."

Some participants believed that the impact of the commercials lay within others. One female participant stated that the "like a girl" commercial would have a strong impact on her parents: "I think if my parents saw it, it would be inspiring for them to encourage their little ones to be who they are and to run as fast as they could, to hit hard."

Both male and female participants praised messages that presented women as multidimensional beings (i.e. the RAM truck commercial, which showed diverse identities—athlete, mother, ballerina). "It shows different types of girls; like, if you are just a dancer or just a hunter, it reaches everyone, all the different types of girls," said an 18-year-old woman. By contrast, several participants said they disliked messages with limiting presentations of women, in which the presence of one trait or identity was depicted as inhibiting another trait or identity. For example, the Verizon commercial showing a girl encouraged to look pretty and discouraged from

exploration and discovery implies that the two identities are incompatible. Here is how a 20-year-old female participant explained her dislike of this approach:

Yeah, like it emphasized that she wore nail polish and put down the drill. Like, as she got older and older she was seen doing more girly things; like, she was being more restricted. Okay, why? I know that was the whole point of the ad, but it doesn't have to happen that way.

Similarly, a 22-year-old male said the Verizon commercial failed to refute stereotypes about girls and women:

They made it seem like she just was okay to doll herself up; like, you can choose to be sort of glamorous, or you can go and do the education and science route. They could have made it easily into one, but they made it that she had to choose or that her parents led up that decision at first, splitting between the glamorous and the science.

Other participants thought some of the femvertising messages were contrived, but not in the direction that we had assumed to be the most logical (i.e., the commonplace use of feel-good statements to sell things). For instance, most of the male participants saw femvertising as a veiled attempt to start a movement—rather than the much more likely possibility that companies are engaging in such advertising to solidify their brands and thus increase their sales and profits. For instance, a 20-year-old male participant, after seeing the Always "like a girl" campaign, said: "I think like every brand is doing it, but this one is trying to make it a movement. It is trying to open it much more and push things through much deeper and serious."

Several participants also brought up the notion of fab-feminism, referring to a popular-culture trend promoting the idea that "anyone can be a feminist" (Gambles, 2016) and the mainstreaming of feminist pride, often expressed through consumerism (FabulouslyFeminist, 2013). These participants stated that companies are only supporting women empowerment because other companies are doing it. They saw it more as a trend than a genuine socially responsible action. To capture this thought process, a 22-year-old male participant said: "It seems as if every brand has to be socially aware besides just what they are selling. So I do feel like it gets saturated a lot because you see it from all sorts of things, and they all have good messages, but there are so many of them."

The majority of participants saw some positives in the women-empowerment messages, even if they deemed the delivery awkward or ineffective. However, some dissenters made valid points. One female respondent thought the use of femvertising messages was doing more harm to women than good. Specifically, she felt that these messages patronize women and reestablish existing stereotypes: "I don't feel like you have to single out a group to be, like, you have to be this way to achieve feeling comfortable in your own skin." A 19-year-old male participant also noted that femvertising messages almost seem to reinforce what they are trying to refute: "You never see self-confidence commercials geared toward males. With Dove, it is usually always females trying to gain self-confidence." Indeed, it is not a secret that men also suffer from plenty of self-doubts.

Fit between Message and Product

The second research question explored participants' perceptions of company-cause fit, asking how their self-reported perceptions of the fit between the message and the advertised product affected their evaluations of femvertising commercials. The majority of participants believed the messages fit the advertised products. As previously mentioned, three commercials that utilized the femvertising strategy were shown to the participants. The first one, Always' "like a girl" commercial, was universally perceived to have strong company-cause fit. One 18-year-old female participant captured this perception by saying, "I thought that was a great way to tie what the girl can do with what their product can offer you." Male participants agreed with this sentiment. A 19-year-old male participant stated, "To me, it is mostly about keeping that message with your company and having that company maintain where it is. That is the whole purpose of this type of campaign."

The other two commercials featured a less obvious fit between message and product. The RAM truck commercial featured only women in an attempt to portray the trucks' ruggedness. In response to the RAM commercial, the consensus was that because the style and feel of the commercial matched the brand, the message itself fit perfectly. A 19-year-old male stated, "RAM trucks, they are built tough, so they are telling girls to be tough. Like they are doing a service by sticking up with this issue, but they are also coming at it with a marketing perspective."

The Verizon commercial took another approach, showing that girls, at a young age, may be into technology, but it is how they are treated by their parents and loved ones through their childhood and teenage years that may dissuade them from pursuing careers in engineering, science, and technology. Regarding Verizon's approach, most participants felt that the style of the commercial detracted from the message and the product. Most participants were confused as to how this commercial was empowering women and how it related to the company. Unlike in the Always and RAM commercials, in Verizon's message, neither the company nor the product was heavily featured. This ommission resulted in a confusing commercial, according to our participants.

Overall, most participants believed femvertising was a wise choice for the companies whose products were advertised unless the commercials failed to establish an immediate and clear connection between the cause and the brand. For companies that make products exclusively for women (i.e., Always), the fit is obvious, making this approach crucial if a company wants its commercials to stand out.

On the other hand, for companies catering to male or unisex audiences but trying to branch out, such as RAM and Verizon, the choice to use a women-empowerment strategy must coalesce with the company's already proven style and image, thus reaching a new audience without alienating their primary consumer base. Participants understood that straying too far from a company's established style has the potential to hurt the brand. Articulating the risks inherent in any perceived contrast between company and message, one 18-year-old female participant stated:

Dove and Always are well-established brands in the female community. So you take those, and they have more reason to go and do a lot of different things that empower women.

RAM is trying to advertise to a different audience. Not many women go and buy trucks. So RAM is going out and trying to target females.

Femvertising and Attitude Change

The third and fourth research questions asked how participants perceived and self-reported the effect of femvertising messages on their attitudes toward the advertised product and women's empowerment. Most participants claimed that the advertisements made them think but that their overall attitude toward women and the product or company did not change as a result of their exposure to femvertising messages.

One major limitation appears to be the average commercial's length. To some participants, sparking full attitude change is impossible to happen in seconds. A 20-year-old male participant captured this sentiment: "For a commercial, you are just trying to grab like 10 seconds of someone's attention. I am not jumping into the commercial thinking I need to tackle these social issues. I am just watching TV."

Attitudes toward women. A commercial may be a good vehicle for certain simple pro-social messages (i.e., don't drink and drive), but less so for complex ones, which may require an extensive and elaborative thought process. Furthermore, many of our participants seemed to deny and underestimate the potential effects of such messages on themselves. The so-called third-person effect (Davison, 1983) emerged over and over again. Participants stated that although their attitude did not change when exposed to these messages, they understood and believed others would experience a change in attitude.

Regardless of what may represent a lack of awareness of the effects of advertising, full attitude change may not be possible to accomplish with a single exposure to one commercial. In that sense, making consumers at the very least aware of the common and limiting stereotypes that tend to define women may ultimately be the most feasible goal of such pro-social messages. A statement by a 20-year-old male illustrated this point: "It makes me more aware and maybe reminds me of the commercial if I see it, but I don't think I would change. I am more aware of it, though."

An interesting finding was that some of the female participants assumed the advertisements would encourage men to change their attitudes toward women. Specifically, they believed (or possibly hoped) that ads celebrating women's empowerment would make men respect women more. For example, after watching the Always commercial, one female participant said: "I think it may lead to boys giving more respect to girls. Not necessarily the brand itself, but you know, not going to school making fun of girls or being a bully."

It is difficult to know whether this is indeed the case. In the male focus group, only participants who had younger sisters self-reported that femvertising messages affected their attitudes. They admitted to reflecting on how they treated their sisters and considered possible changes in their attitudes and actions as a way to show more respect for the obstacles their sisters may face in life. This concern for younger sisters as a motivator to consider the plight of women is consistent with a large body research showing that fathers of daughters are more likely to hold feminist beliefs

(Glynn & Sen, 2015). The importance of empathy stemming from personal experiences was illustrated in this statement by a 22-year-old male participant:

I know saying you run like a girl is an insult. It's the stupidest thing I have ever heard in my life. It is more like seeing how it affects them ... not that I said it but how it affects them will affect what I say.

Attitudes toward brands and products. Another element in understanding attitude change, specifically as a precursor to purchase intent, was the level of commitment participants had to a particular product or their need for information about the product. Femvertising messages did not elicit any self-reported purchase intent in any of the participants, although one woman said: "If I was a mom, I might buy [the product] for my daughter, but I wouldn't necessarily change how I was using it."

In the case of the Verizon commercial, several participants indicated that they did not even realize what the commercial was promoting until they saw the company's logo in the last frame. The lack of brand or product information throughout the narrative of the girl who grows up to choose lip gloss over participation in the science fair was considered confusing and obviously not conducive to any purchase intent.

There was also a concern that the pro-social cause may overshadow the basic information a company owes its customers, as expressed by one 20-year-old female participant during a discussion of the Always commercial:

I mean I think you will be more likely to support the cause ... but you won't go out and buy more tampons because you saw that commercial. Like, it overshadows their product. Like, the PSA of it is amazing, very moving, but it overshadows that it was made by them.

Participants who did not use or buy a product that was highlighted in a specific womenempowerment ad could appreciate the message but were indifferent to the entire commercial because the product was not for them. A 20-year-old female, referencing Dove, said the message gives her greater appreciation for Dove, but she wouldn't change her personal preferences just to support the company:

[The ads] could make me like Dove as a brand more, but if I don't have anything to do with Dove, I am not going to buy their product more. I could have more respect for Dove after that ad—like, they are doing something good; they are getting the message out. But, if I don't need soap or if I have enough soap, I am not going to buy Dove. Or if I have soap that I really like, I am not going to switch.

DISCUSSION

This study explored young adults' perceptions, evaluations, and self-reported attitude changes resulting from exposure to so-called femvertising messages. The results indicated that participants held conflicting views, in some cases simultaneously. On the one hand, they appeared mildly suspicious of the intent behind femvertising; on the other hand, they were supportive of what

appeared to be pro-social involvement by large corporations. One female participant stated about the effect of femvertising messages: "It won't be something that changes my outlook on life, but that day I may have a little more pep in my step because I am a woman, and I am powerful."

But is she? Femvertising's insistent requirement for individual women to overcome their self-doubts, often with the help of a brand or a product, is not unlike blaming the victim in domestic and sexual violence cases. The messages often fail to recognize that girls' and women's self-doubts are not the result of personal weakness or lack of intelligence. Rather, these doubts reflect long-standing gender hierarchies that praise them not for their brains, wit, work ethic, athleticism, or resilience, but predominantly for their appearance. Encouraging women's individual success, bravery, and progress is laudable, but it also appears hypocritical if the companies behind these messages sport a sizable gender pay gap or fail to give a paid maternity leave to their female employees.

However, none of the participants questioned how the companies using femvertising messages treated their own employees. If they perceived some of the femvertising messages as contrived, it was because they saw them as an attempt at political correctness or covert social activism—as in hiding behind a brand or a product to champion feminism rather than the much more likely scenario of appropriating feminism to sell products.

Among the few participants who knew that Axe and Dove were owned by the same company, there was also an understanding that it was hypocritical for one brand (Axe) to use highly sexualized messages and depictions of unrealistic female bodies while the other (Dove) promotes self-acceptance and positive body image. But there was also the perception that companies are going out of their way to create femvertising campaigns, which encouraged some to hope that profit was not the only goal. For example, an 18-year-old woman said:

I think some actually want to spark change. I do actually think Dove is trying to make things better, not just make a profit. I mean, that is definitely a goal because you need profit to keep the company afloat. But, I think it actually is more about change because if it wasn't, they wouldn't go and do the sketch campaign if they didn't care. I think they care, but maybe they don't.

In sum, Dove-Axe types of contradictions do little to further a corporation's effort to attract and keep female consumers. As previous research has shown, consumers can see through petty attempts to support a trending cause. The cause must, not only make sense for the brand, but the company needs to be transparent in how it reflects this company-cause fit. Femvertising messages seem more likely to be effective if they honestly reflect a company's internal values and culture.

Theoretical and Practical Implications

This study makes a contribution in several ways. First, it expands on the existing CRM literature as well attribution theory (Jones & Davis, 1965). It suggests that novice consumers, such as young adults, intensely question the advertisers' motives and are critical of messages they perceive as self-serving and insincere. None of the young adults participating in our focus groups reported likelihood to engage "in revenue-producing transactions with the firm" (Varadarajan & Menon,

1988, p. 60) as a result of exposure to women-empowerment advertising messages. Although it is impossible to generalize on the basis of this exploratory work, future research should investigate whether young adults might be particularly prone to cynicism—perhaps more so than their parents—in assessing companies' motivations. This line of research could have practical implications for companies targeting young adults by encouraging restraint in the crafting of what may be perceived as insincerely idealistic messages.

Second, this study adds to the literature on "commodity feminism" by suggesting that this long-standing trend persists in the U.S. because the value of individualism remains pervasive in American society. In our observations, young adults who were open to gender equality tended to embrace limiting notions of women's empowerment at the individual level. When they employed critical thinking, it generally followed a path questioning why companies produce femvertising messages. Our participants did not question the merit of the implicitly individualistic advice offered by the ads. For example, they were willing to accept that a manly product, such as a truck, can contribute to the empowerment of an idealized woman, whose individual willpower helps her succeed as a mother and an athlete. Thus, the "faux activisim" (Baxter, 2015) inherent in femvertising seems to encourage women to blame themselves if they fail to display similar willpower in beating social obstacles on their way to success.

The practical implications for companies persuing femvertising are that these messages could and should be used creatively to further the ideas of gender equality. The messages should be in line with what the company is known for or at least what they practice. Additionally, companies should go beyond promoting women empowerment in their messages, and begin practicing what they preach. Companies that embrace changes in its current workplace policies, for example, will be perceived genuine in its corporate messaging.

Limitations and Directions for Future Research

The findings of this study must be tempered by some limitations. First, the use of three focus groups (two with female and one with male participants) did not allow for saturation of presented opinions on all the questions we asked. We were particularly surprised by the richness and variety of perspectives coming from the male-only group, even though most femvertising messages did not directly target or concern them. For this reason, future research on femvertising should employ more than one male focus group.

The findings are also limited by the fact that we did not ask participants how they defined women's empowerment. It appeared that the majority of them accepted at face value the shallow definition implied in most femvertising messages, based around individual agency and self-confidence in overcoming any and all obstacles rather than around universal empowerment built upon women's social and sexual freedom and guaranteed equal pay. Future research should not only explore young adults' views on what constitutes "women's empowerment" but also seek a connection between their thoughts on feminism and their openness to femvertising messages.

In our focus groups, many participants declared that they support gender equality but did not want to define themselves as "feminists" because of the negative connotations attached to the word (i.e., radicalism, aggression, and unfeminine behavior). Those who said they were feminists generally

embraced the use of consumption goods as a road to empowerment, signaling that they saw themselves as a part of a community of consumers rather than the more old-fashioned notion of sisterhood. Thus, future research should investigate how contemporary views on feminism and gender equality inform the reception of femvertising messages.

CONCLUSION

Femvertising—even though it was only recently labeled as such—has been a successful marketing approach for almost a century, considering its unofficial start with the 1929 Torches of Freedom march aimed at increasing female smokers' consumption of cigarettes. Both this event and the women-empowerment ads of the late 1970s and early 1980s were riding on the coattails of major feminist waves. During these periods, consumers' perceptions and beliefs had already been primed by feminist victories—such as the women's vote, gained in 1921, and the profound legislative changes to expand women's rights in the 1970s.

By contrast, the contemporary explosion of femvertising messages does not follow any major recent legislation aimed at gender equality. Yet, these messages appear to be successfully eliciting and holding consumers' attention. Perhaps this is a result of what scholars have called the "Sex and the City" approach to feminism (Arthurs, 2003), which emerged in the 1990s and 2000s, and in which the consumption of goods is frequently equated with individual empowerment. The celebration of popular culture further contributes to this trend, as individual celebrities such as Emma Watson and Lena Dunham use their podium to proclaim their feminist beliefs. When a major pop star like Beyonce chooses to rock herself at the MTV Video Music Awards in front of the word "feminist" presented in giant glowing letters, it is clear that women's empowerment has become a cultural trend that in many ways deviates from the activist goals of "pure" feminism, according to Winfrey Harris (2016). Such "mainstream popular feminism is flawed, perhaps because of the ways it mirrors the complicated everyday practice of feminism—lived feminism," writes Winfrey Harris.

For advertisers, always on the lookout for fresh messages reflective of the latest cultural trends, these flaws in mainstream feminism are of little consequence. Creative copywriters could, however, have a field day with some of these controversies if they fully embraced their complexity. Considering women's rising incomes (the Institute for Women's Policy Research predicts that the gender pay gap will close nationally in 2058), it makes sense for companies to continue to create uplifting messages targeting ambitious, affluent, and upwardly mobile women of mostly childbearing age. However, in order to truly engage with these consumers, the messages must fit, or at least be parrallel with a company's brand and core values. Further, these messages must transcend their pop-culture roots and elicit not only eyes on screen, but also tangible purchase intent for specific products.

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SHIPPER PERFORMANCE BENEFITS ON AN ELECTRONIC LOGISTICS MARKETPLACE

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ABSTRACT

Electronic Logistics Marketplaces (ELMs) are exotic, technological innovations that have not taken off as much as electronic marketplaces (EMs) have. It has been argued that ELMs have a great potential to improve the transportation performance of the participants, but the literature on ELMs is very scarce at best. This article, using a simulation model based on real world shipment data, demonstrates the benefits that may be obtained by a shipper participating in such an ELM. Results clearly show that the benefits obtained by a shipper participating in such an ELM may be quite substantial. This is true even for those ELMs that have been configured with the primary intent of improving transportation carrier performance, without any regard to the performance of the participating shippers. Although much research needs to be done on ELMs, the mutual benefits these systems to shippers and carriers alike, should provide tangible incentives for further conceptual and empirical exploration.

Keywords: Electronic logistics marketplaces, electronic marketplaces, simulation, transportation performance

INTRODUCTION

One of the most promising outcomes of the internet revolution has been Electronic Marketplaces (EMs). Obviously, this business model which would not have been possible without the advent of the internet. Although the best known of these marketplaces, ebay, amazon, etc. cater mainly to consumers, other electronic marketplaces operate primarily in the business-to-business setting. An electronic marketplace is defined as an inter-organizational information system where buyers and sellers can meet to conduct business. Thus, an electronic marketplace is a form of intermediary that establishes electronic links between buyers and sellers interested in conducting transactions (Choudhury, Hartzel & Konsynski, 1998; Movahedi, Lavassani & Kumar, 2012). Travelocity in the airline industry and The Seam in the cotton industry are examples of a couple of EMs that exist today. Several electronic markets operate in the logistics field, bringing together buyers and sellers in areas such as transportation, warehousing, and manufacturing (e.g., Descartes Systems Group, Manhattan Associates, NTE (formerly National Transportation Exchange), and Transplace etc.). The purpose of this article is to model an electronic logistics marketplace (ELM) and demonstrate its potential benefits to participating shippers.

The next section presents literature relevant to EMs in general and then research that focuses on ELMs in particular. From these reviews we derive a research framework and develop a model while illustrating its experimental design. Finally, the results are presented and the paper concludes with managerial implications and directions for future research.

LITERATURE REVIEW

As EMs have proliferated, so have their definitions. Bakos (1991, p. 296) provides one of the earliest and broadest definitions of an EM as "an inter-organizational information system that allows the participating buyers and sellers to exchange information about prices and product offerings". EMs are very well researched and is a field of continuing scholarly inquiry in the functional discipline of Information Systems in particular and in other management disciplines as well. Interested readers are referred to seminal works on EMs such as Anandalingam, Day and Raghavan (2005); Grieger (2003); Wang, Zheng, Xu, Li, and Meng (2008) for a detailed summary of definitions and classifications of the EM landscape. It is argued that EMs provide various benefits to participants such as reduction in search and transaction costs, reduced prices, accessibility to a larger base of buyers and/or suppliers and business process automation etc. (e.g. Bakos, 1997; Grieger, 2003; Howard, Vidgen & Powell, 2006). EMs in the transportation or logistics domain have been termed as Electronic Transportation Marketplaces (ETMs; for example by Goldsby & Eckert, 2003), or Electronic Logistics Marketplaces (ELMs; for example by Wang, Potter & Naim, 2007). ELMs are internet services that bring together buyers (shippers) and sellers (transportation carriers) of transportation services in order to increase the efficiency of both shipper and carrier operations. One way these exchanges benefit shippers is that they allow a larger number of carriers to bid for shipments, thereby increasing supply competition and reducing prices. Carriers, too, may benefit from transportation exchanges by gaining access to a large pool of shippers, allowing for increased capacity utilization and reducing "dead-hauls" (Nair, 2005; Wang, Potter, Naim, & Beevor, 2011; Yilmaz & Savasaneril, 2012).

Open ELMs

ELM can be used for either spot sourcing of transport services or long-term collaboration. Spot sourcing refers to the ad-hoc procurement of transport service to fulfill an urgent, short term need and is a price driven, arm's length transaction between a shipper and carrier (Caplice, 2007). These types of ELMs typically are the so called "open" ELMs, with open platforms and hence had the same characteristics as generic open EMs in the sense that they adopted many-to-many transactions and utilized fixed and/or dynamic pricing (Gosain & Palmer, 2004). "Open" ELMs mean that any shipper/carrier may participate on the ELM and benefit from the services offered by the ELM (Wang et al., 2007). As with many other dot-com businesses, open ELMs have not been universally successful. Among the reasons most often cited for their failure is that shippers and carriers used ELMs to transact only a small percentage of shipments, and, shippers preferred to send loads via their trusted contract carriers rather than rely on ELM spot markets (Caplice, 2007; Cooke, 2001; Pinkham, 2001). As well, carriers were reluctant to participate in transportation exchanges in order to avoid reducing their businesses to "commodity" status, thereby eroding profit margins. The operational scope of open ELMs is usually limited to basic load posting and matching services with the benefits of lower search and coordination costs. As discussed above, this type of ELMs met with mixed success.

Closed ELMs

Long-term collaboration, on the other hand, implies a more partnership approach between shipper and transportation carrier. To increase their viability, some ELMs have focused on facilitating existing relationships between shippers and carriers, using the market to supplement rather than replace, existing relationships. This resulted in the development of closed ELMs, aiming not for a large volume of transactions, but to facilitate the existing, long-term collaborative relationships between shippers and their carriers. "Closed" ELMs are closed in the sense that the ELM is "owned" by a specific shipper and/or transportation carrier and the owner decides who participates and benefits from the closed ELM (Wang et al., 2007). The operational scope provided by closed ELMs goes beyond the basic services offered by the open ELMs, with complex offerings sometimes even encompassing complete order fulfillment services. The potential benefits of closed ELMs are enormous. Using the software provided by the ELM, shippers and carriers may form their own, closed ELMs on these web-sites to better manage their transportation needs and resources. Depending on the rules of the ELM, shippers may share shipment information with their core carriers and/or participating shippers, in order to increase capacity utilization and reduce short shipments. Participating shippers can also identify backhaul opportunities for their contract carriers and, in turn, get a price break from the carriers. Participating shippers may also collaborate to consolidate shipments to get price reductions from carriers (Cooke, 2001; Cullen, 2001; Ergun, Kuyzu & Savelsbergh, 2007a; Ergun, Kuyzu & Savelsbergh, 2007b; Nair, 2005). During our discussions with industry officials regarding closed ELMs, it was noted that no general rules govern all ELMs. In certain instances, the owner of the ELM sets the rules, whereas in others cases the rules are set through open discussions between the participating shippers and/or carriers. However, based on these same discussions, it was concluded that ELMs can generally be classified into three categories as shown in Figure 1. It is important to note that, from now on, ELM, unless otherwise specified, would mean a "closed" ELM.

The first is a "shippers' ELM". Typically, a shippers' ELM is geared towards improving the transportation performance of shippers. Shippers may share information on shipping requirements. If one shipper has extra needs, it can negotiate with a second shipper that has excess contracted capacity, thus creating cost savings for both shippers. The first shipper may receive below-market prices for carrier capacity, while the second shipper may avoid defaulting with its contract carrier for reneging on contracted capacity. With neutral ELM, shippers and carriers may participate together in sharing information on shipping requirements and capacity availability (e.g. Cooke, 2001). Though these communities may be owned by shippers, neutral communities typically strive to benefit all of the participating parties. Therefore, carriers may achieve higher capacity utilization and shippers fewer short shipments through the sharing of information on neutral exchanges. Finally, it is conceivable that carriers could create carriers' ELM to manage their relationships with shippers. Although no such arrangements (of which the authors are aware) currently exist, these communities would involve carriers sharing capacity and shipment information for their own benefit. Berman (2010) describes an ELM along these lines that started as a carriers' ELM; however, it seemingly does not claim to be such anymore.

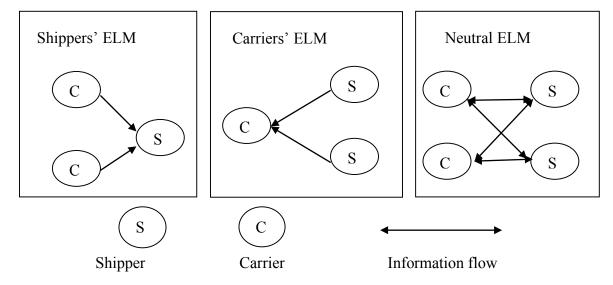
Research Question

A relatively recent article (Wang et al., 2011) concluded that research on closed ELMs is very scarce. Though there are several articles in the practitioner literature espousing the values and potential benefits of ELMs based on anecdotal evidence, there is very little rigorous research in the logistics and transportation literature. Especially, to the best of our knowledge, there is no large scale, archival data-driven empirical study in the academic literature that tries to investigate the impacts of these ELMs on the performance of the participating shippers and carriers. Given the scarcity of literature on ELMs and their great promise in substantially improving the performance of its participants, it is important to investigate the significance of benefits that may be obtained by its participants. With this background, this article would use real world data from a shipper and subject this data to the business rules of closed ELMs. Thus, this article presents valuable insights by answering the question: "what potential improvement may be expected if a given, real world shipper may have utilized an ELM to manage its transportation". Given that there are very few studies in the logistics and transportation academic literature related to the actual benefits of ELM accruing to its participants, this article makes valuable contribution by presenting such evidence of potential benefits of ELMs.

RESEARCH FRAMEWORK

The following discussion takes a shipper's point of view. Before we get into the simulation model, it is important to first describe how transportation is usually/conventionally managed, and then describe how they may be managed differently on ELMs. Consider a shipper-carrier dyad where the shipper has fairly stable transportation requirements between a pair of locations. One of the most common methods by which a shipper handles such requirements is to enter into a contract with a carrier. Both the shipper and carrier commit to a particular volume (q units), perhaps based on the average requirements of the shipper (S units) and transportation rate (T per unit).

Figure 1. Types of ELMs



Transportation Management through Conventional Transaction

Once the contract is set, day-to-day transactions ensue. A carrier sends a vehicle to the shipper with carrying capacity of q units. The shipper then tenders the shipment quantity of q units. However, occurrences are seldom deterministic. On a given day, either the shipper's requirements (S) or the carrier's availability (C) may deviate from q. If either C or S is greater than q, the excess may be handled via the spot transportation market. However, if C is less than q, then the shipper suffers in the form of either delayed shipments or lost sales. If S is less than q, then the shippers may end up either paying for unused capacity or paying for default penalties. With a conventional contractual relationship, the carrier becomes aware of the actual shipper requirements only when the carrier arrives at the shipper's dock. Similarly, the shipper becomes aware of the carrier's actual capacity only when the carrier arrives at the shipper's dock. By the time a party is aware of a contract default, it may be too late to take remedial actions. Therefore, the shipper suffers in terms of either delayed delivery or lost sales, whereas the transportation carrier may suffer in the form of reduced capacity utilization.

To illustrate how a conventional transaction works, let's consider an example from Table 1. In the first scenario, S = 100 and C is only 50. Thus, the shipper cannot sell all its shipments, it may only ship 50 and the remaining 50 shipments may result in lost sales. The same happens in scenario 2. Though the carrier has enough quantity as promised, the shipper happens to have a greater demand which would again result in lost sale. In scenario 3, the shipper actually has only 50 shipments, fewer than the contract amount of 100 units. Thus, it's now the carrier that has to go with 50 empty units in the truck and thus suffers reduced capacity utilization. In scenario 4, though the shipper has enough shipments per the contract, the carrier happens to have extra space which would now go unutilized. These scenarios should illustrate the problems faced by both, the shipper and the carrier, owing to uncertainties in shipper requirements and carrier's capacity availability.

Collaborating Collaborating SN Shipper Carrier Shipper Carrier

Table 1. Sample Scenarios

(In the above table, the contract size between shipper-carrier is 100 units. The contract size between the collaborating shipper (and its contract carrier) and the collaborating carrier (and its contract carrier) is also 100 units. Thus, in scenario 3 for example, the collaborating shipper has 50 units less than promised with its contract carrier. On the other hand, the collaborating carrier has 50 units more than what it committed to its contract shipper).

Transportation Management on an ELM

On an ELM, the participants are connected with each other electronically to facilitate visibility of operations and share the relevant information based on who owns the ELM. For example, on a shippers' ELM, the shipper owns the ELM and there is one-way information sharing; the participants, the shipper's contract carrier and other collaborating shippers and carriers share their information with the shipper that owns the ELM. In scenario 1, as the shipper has access to information about the participants' operations, the shipper knows beforehand that the contract carrier does not have enough capacity (a deficit of 50 units). At the same time, the shipper also knows that its collaborating partners have excess capacity available with them (50 with shipper and 50 with carrier). Thus, the shipper, instead of losing sale, may ship the remaining 50 units through either one of the two collaborating partners. Interestingly, though the shipper ELMs do not aspire to benefit carriers, the participating carriers may still get some benefit. For example, in scenario 5, the shipper only has 50 units, 50 units less that the contract amount. Thus, the shipper is in a risk of defaulting with its carrier. However, the shipper knows that its collaborating shipper has 50 additional units that it may want to ship. The shipper may combine its load with its collaborating shipper and present the contracted quantity of shipments to the carrier to avoid defaulting with the carrier. Thus, the carrier too is benefited by participating on a shippers' ELM. On a neutral ELM, all the participants share information with each other; that is, there is a two way sharing of information. As a result, the carrier too may benefit from information visibility and collaboration. For instance, in scenario 3, the shipper is 50 units short of the promised quantity and the carrier would be left with 50 units of unused capacity. However, the carrier may pool the 50 units of additional shipments available with the collaborating shipper and avoid underutilizing its capacity. Finally, a carrier ELM would be owned and operated by a transportation carrier to maximize its own capacity utilization. Though such ELMs are geared to maximize capacity utilization of the concerned carriers, shippers too, would get some benefit. For example, in scenario 1, the carrier has less capacity than the promised amount (only 50 units). The shipper is in a position to potentially lose sale. However, since the carrier knows that there is extra capacity available with its collaborating carrier, the carrier would then pass on these shipments to the collaborating carrier. As a result, the shipper's needs are taken care of and the carrier avoids defaulting on the contract with the shipper, a win-win scenario for both of them.

RESEARCH METHODOLOGY: SIMULATION

To investigate the performance benefits of ELMs, a large-scale empirical study using archival data from ELMs may be the preferred choice for this empirical research. However, the use of ELMs, as discussed in literature review, is still in its infancy. Further, companies tend to be very secretive when adopting new technology or business processes. This makes obtaining archival data a very difficult task. As well, since the use of such ELMs is not widespread, there will be serious concerns regarding any data that may be collected through questionnaires. Given the difficulties in obtaining archival data and/or survey data, and concerns in using such data in research, we propose using simulation modeling to investigate empirically the benefits of such ELMs to the participating parties. Simulation has often been used in logistics research literature to answer important questions and do meaningful research, especially where there is limited data availability.

Simulation Model

The simulation model is shown in Figure 2. Following are the independent and the dependent variables in our model.

Dependent variable: Order fulfillment. Order fulfillment measures the ratio of shipments that are shipped on time. Shipments that are not shipped on time either result in delayed delivery or lost sales, both of them being very detrimental to the shipper. For any shipper, order fulfillment drives sales revenues. That is, every time quantity shipped and hence order fulfillment increases, sales revenue also goes up. We propose to use "order fulfillment" as the performance measure for shipper performance. We prefer order fulfillment over quantity shipped because order fulfillment is a more commonly used performance measure in logistics (e.g. Kritchanchai & MacCarthy, 1999; McAfee, 2002). We define order fulfillment as

Order fulfillment = (quantity shipped) / (shipper requirements)

Shipper requirements (mean and variation)

Contract carrier capacity (mean and variation)

Type of collaboration (none, shippers', carriers' or neutral exchange)

Collaboration shipper requirements (mean and variation)

Collaboration carrier capacity (mean and variation)

Figure 2. Model of Shipper Performance

Independent variables

• Primary shipper's requirements: This construct measures the level or magnitude of the shipper's requirements and the variability of such requirements.

- Primary carrier's capacity: This construct measures the level or magnitude of the carrier's carrying capacity and the variability of this capacity.
- Collaborating partner's characteristics: A shipper may collaborate with either a shipper or another carrier, or with both. This construct measures the level or magnitude of the shipper's requirements or the carrier's capacity and the variability of these requirements and or capacity.
- Type of collaboration: Shippers have four alternatives to manage their transportation. They may manage their transportation using the conventional method, or they may manage their transportation using one of the three alternatives: a shippers' ELM, a carriers' ELM or a neutral ELM.

Input Data Analysis

We collected shipping records for truckload shipments of a major manufacturer of hardware and home improvement products. Every record pertains to a truckload shipment for an origin-destination city pair (lane). We collected data for an entire calendar year. We were provided in excess of 25,000 shipment records over 1,365 unique origin-destination city pairs or lanes. The number of records within a given lane varies from a maximum of 2,445 to a minimum of 1. The weights of the truckload shipments vary from a maximum of 45,390 pounds to a minimum of 2,740. Product diversity accounts for the wide variability of the weight of truckload shipments. To narrow down the number of lanes, and to obtain a better fit of the data with theoretical distributions, only those lanes that had 100 or more records over the course of the year were considered. Using this criterion reduced the number of lanes to 41.

We use the data we have collected for our empirical analysis. Standard theoretical probability distributions are fitted to the data, and the parameters of these fitted distributions are used to model the shipping requirements of the primary shipper and of the collaborating shipper. The data for these 41 lanes were fitted with a normal distribution. The normal distribution is widely used in business simulation studies. However, the normal distribution may generate negative values, and negative shipping requirements do not make practical sense. Hence any negative values were truncated to zero. Further, normal distribution will generate fractional values for the number of truckload shipments; we rounded fractional values to their nearest integers. The fit of the theoretical normal distributions to the data on shipping records on the 41 lanes was obtained using the input analyzer of Arena software. The data on shipping records of the 41 lanes were aggregated on a weekly basis. Thus, there were 52 data points for each lane, corresponding to 52 weeks of the year. Out of 41 lanes available a satisfactory fit was obtained on 10 lanes. The "chi-square test" was used to test for the goodness of fit. Of the 10 lanes, six were selected to model three different levels of shipping requirements for the primary shipper and the collaborating shipper. The maximum mean was 17.7 (corresponding to shipping requirements of approximately 17.7 truckload shipments per week) and the minimum was 2.4 (corresponding to a shipping requirements of approximately 2.4 truckload shipments per week). We present the six lanes that were selected in Table 2.

Lane	Lane	Number of truckloads per week			Fitte	d theoretical	Chi-square value		
Number	Miles	Minimum	Maximum	Total	Mean	Standard deviation	Coefficient of variation	Sample	Critical
1	2324	0	6	125	2.4	1.33	0.55	1.3	6.25
2	2424	1	13	336	6.46	3	0.46	4.26	9.24
3	502	1	30	740	14.2	6.46	0.45	1.5	12.02
4	177	0	9	166	3.13	1.94	0.62	3.96	9.24
5	400	1	12	261	5.22	1.95	0.37	3.1	9.24
6	1404	2	38	937	17.7	6.89	0.39	7.18	12.02

Table 2. Goodness of fit statistics of theoretical normal distribution for the selected lanes

The chi-square values for the lanes are well below the 90% confidence level, with critical chi-square values shown in the table (the input analyzer used different numbers of intervals in fitting the theoretical distributions for the different lanes. Hence the different lanes had different degrees of freedom and hence different critical chi-square values). Thus, at the 90% confidence level, there is not sufficient evidence to reject the hypothesis that the fitted distributions shown in the table do not adequately represent the data.

Experimental design

Simulation parameters and parameter values.

- 1. Mean and variation of the distribution of the primary shipper's shipping requirements. The theoretical fitted distributions are used to model the shipping requirements of the primary shipper. As mentioned earlier, the normal distribution is used to model these requirements. To capture the range of shipping requirements in our dataset, two extreme values reflecting "high" and "low" shipping requirements were chosen, as well as one value approximately in the middle showing "medium" shipping requirements were chosen from the ten distributions we obtained. Table 2 shows six of these fitted theoretical normal distributions. The first three lanes are used to model the shipping requirements of the primary shipper. The means of these lanes are 2.4, 6.46, and 14.2. As explained below, the means of the theoretical distribution form the basis for the contract size between the primary shipper and its contract carrier. Since the mean truckload shipping requirements has to be integers, we round these requirements to 2, 6 and 14 truckload shipping requirements per week. Further, the coefficient of variation of truckload shipping requirements of these lanes vary from 0.45 to 0.55. To represent this variation, we chose 0.5 for the coefficient of variation.
- 2. Mean and variation of the distribution of the primary carrier's available capacity. Given the practical difficulties in obtaining data from multiple organizations, we assumed that the contract carrier's carrying capacity has the same means and coefficient of variation as that of the primary shipper. Assuming the same means as that of primary shipper makes sense, as the contract carrier will commit the same amount of capacity asked by the primary shipper.
- 3. Mean and variation of the distribution of the collaborating shipper's requirements. We decided to model the shipping requirements of the collaborating shipper by using the same dataset we used to arrive at the shipping requirements of the primary shipper. Using the primary shipper's

shipping records to simulate the collaborating shipper's requirements should not create undue problems. On high traffic lanes, it is possible to have a large number of shippers with various levels of shipping requirements. Some of the shippers on these high traffic lanes may well match with the shipping requirements (means and coefficients of variations) of the primary shipper. The last three distributions in Table 2 will be used to model the shipping requirements of the collaborating shipper. The means of these lanes are 3.13, 5.22 and 17.7. Similar to the primary shipper-carrier pair, the means of these theoretical distributions will form the basis for the contract size between the collaborating shipper and its contract carrier. Hence, the mean truckload shipping requirements has to be integers. We round these requirements to 3, 5 and 18 truckload shipments per week. Further, the coefficient of variation of truckload shipping requirements of these lanes vary from 0.37 to 0.62. To represent this variation, and to keep the difference between these levels consistent at 0.2 (the corresponding coefficient for the primary shipper is 0.5), we chose 0.7 for the coefficient of variation. We decided to include 0.5, the primary shipper's coefficient of variation. In order to present a diverse set of examples, we also used one more value of 0.3. Thus, in all, we have three levels of variation for collaborating shipper's shipping requirements, 0.3, 0.5 and 0.7. In order to be consistent, the same set of coefficients of variation is used for the primary shipper as well. Further, we assume that the collaborating shipper profiles are available on every lane of the primary shipper. That is, every profile of the primary shipper had all these profiles for collaborating shipper as well.

- 4. Mean and variation of collaborating carrier's available capacity. Similar to primary carrier's carrying capacity, we assume that the means of the carrying capacity of the collaborating carrier are equal to the shipping requirements of its contract shipper. As well, the same levels of coefficients of variation for carrying are used for the collaborating carrier.
- 5. The contract quantity between the primary shipper-carrier. This is assumed to be equal to the primary shipper's requirements. This should make sense, as the contract carrier will gear its operations to satisfy the shipper's requirements.
- 6. The contract quantity between the collaborating shipper-carrier. Similar to above, this is assumed to be equal to collaborating shipper's requirements.

Table 3 shows the experimental design with the dependent and independent variables and their values. The contract size between the primary shipper-carrier pair takes three values, as shown in Table 3, and are treated as three different variables. Two dummies are used to represent the high and medium contract size. The low contract size serves as the base case. Dummy variables are used for the other independent variables as well, with the lower value for each independent variable serving as the base case.

As per the experimental design shown in Table 3, we have six variables at three levels. That gives us $(3^6 = 729)$ 729 parameter combinations in the simulation model. Fifty trial replications for the first combination of primary shipper's requirements and primary carrier's capacity (mean 14 units, coefficient of variation 0.7), and collaborating shipper's requirements and collaborating carrier's capacity (mean 18 units, coefficient of variation 0.7) were conducted. The results were used to find the required number of replications for obtaining 10% precision on shipper performance. The number of required observations was found to be 140. In order to be conservative, each parameter

combination is replicated 300 times. The methodology followed to arrive at the required number of observations to achieve a pre-determined level of precision in simulation results is outlined in Law and Kelton (2000, pp. 511-515). Finally, the simulation model was validated by manually computing the results for more than 1600 observations on the dependent variable and comparing these results to the ones obtained through the simulation program. No discrepancies were found and hence it was concluded that the model was valid.

Table 3. Simulation model parameters and parameter values

Simulation Parameters	Parameter Levels
Primary shipper's shipping requirements, primary	
carrier's carrying capacity and the contract size	2, 6, 14
between primary shipper-carrier pair	
Coefficient of variation for primary shipper's shipping	0.3, 0.5, 0.7
requirements	0.5, 0.5, 0.7
Coefficient of variation for primary carrier's carrying	0.3, 0.5, 0.7
capacity	0.5, 0.5, 0.7
Collaborating shipper's shipping requirements,	
collaborating carrier's carrying capacity and the	3, 5, 18
contract size between collaborating shipper-carrier pair	
Coefficient of variation for collaborating shipper's	0.3, 0.5, 0.7
shipping requirements	0.5, 0.5, 0.7
Coefficient of variation for collaborating carrier's	020507
carrying capacity	0.3, 0.5, 0.7

SIMULATION RESULTS AND DISCUSSION

Ordinary least squares regression is used for data analysis. Various available options for managing transportation form one set of the independent variables. As explained earlier, a shipper or a carrier has four options to manage its transportation: the conventional method, shippers' ELM, carriers' ELM and the neutral ELM. Further, each ELM provides three more options to manage transportation, collaboration with a shipper, collaboration with a carrier, and collaboration with both a shipper and a carrier. Thus, shippers and carriers have ten options to manage their transportation. These options are represented by nine dummy variables. The conventional method is used as the base case for the regressions.

Order fulfillment forms the dependent variable and the 21 dummy variables form the independent variables for the regression analysis (please refer to Table 4 for regression results). The model is highly significant (it is significant at 0.001% level) and the model R² statistic is 86.7%. Further, the coefficients on all of our independent variables are significant at 0.001% level.

There are several aspects worth noting about the results. First, a shipper receiving greater benefits in terms of increased order fulfillment on shippers' and neutral ELM than on a carriers' ELM. Shipper benefits on shippers' and neutral ELMs are almost twice as much as on a carriers' ELM. On a shippers' or a neutral ELM, a shipper takes a proactive role to improve its order fulfillment. Whereas, on a carriers' ELM, the improvement in shipper's order fulfillment is limited to the extent the primary carrier tries to avoid defaulting on the contract with its contract shipper. Second,

there is value in collaborating with more than one partner. On all the three ELMs, the benefits of collaborating increase as the number of collaborating partners increases from one to two. However, the added benefits from the second collaborating partner seem to be less than the benefits obtained from the first partner.

Table 4. Shipper performance model results: Dependent variable-Order fulfillment

Variable	Unstandardized Coefficients B Std. Error		Standardized Coefficients Beta	t	Sig.	
(Constant)	.820	.001		663.120	.000	
CI. LELM	Shipper	.074	.001	.362	63.142	.000
Shippers' ELM, collaborating with	Carrier	.075	.001	.363	63.279	.000
conaborating with	Both	.123	.001	.599	104.358	.000
	Shipper	.074	.001	.362	63.142	.000
Neutral ELM, collaborating with	Carrier	.075	.001	.363	63.279	.000
conaborating with	Both	.123	.001	.599	104.358	.000
G : LEYN	Shipper	.042	.001	.203	35.428	.000
Carriers' ELM, collaborating with	Carrier	.042	.001	.204	35.546	.000
conaborating with	Both	.068	.001	.332	57.807	.000
Primary shipper-	Medium	031	.001	237	-47.990	.000
carrier contract size	High	053	.001	407	-82.417	.000
Primary carrier	Medium	043	.001	328	-66.496	.000
coefficient of variation	High	081	.001	616	-124.812	.000
Primary shipper	Medium	021	.001	160	-32.391	.000
coefficient of variation	High	039	.001	295	-59.679	.000
Collaborating	Medium	.012	.001	.094	19.080	.000
partner's contract size	High	.037	.001	.286	57.834	.000
Collaborating	Medium	.005	.001	.040	8.010	.000
carrier coefficient of variation	High	.008	.001	.062	12.594	.000
Collaborating	Medium	.005	.001	.042	8.462	.000
shipper coefficient of variation	High	.009	.001	.071	14.371	.000

To verify this, we created Table 5 showing the impact of various collaboration options on all the shipper performance measures. The first set of variables is dummies for the independent variables. The first row is the base case in our regression, which is the constant of the regression equation for order fulfillment (82.0%). The second row shows the impact of the shipper collaborating with other shipper on a shippers' ELM (as indicated by value 1 for the dummy S FS). The column after

the dummy variables is our dependent variable, order fulfillment or shipper performance. Thus, the value in the second row of the "order fulfillment" column gives the order fulfillment when the shipper moves to a shippers' ELM and collaborates with other shipper (represented by the dummy S_FS). The value is the sum of the regression constant (0.820, please refer to Table 4) and the coefficient for the dummy S_FS in the regression equation (0.074 in Table 4). All the other values in Table 5 are obtained in similar fashion. From Table 5, on a shippers' ELM, when the number of collaborating partner increases from 0 to 1, order fulfillment increases from 82.0% to 89.4 %. When the number of collaborating partners goes up from 1 to 2, the order fulfillment increases from 89.4% to 94.3%. Thus, though order fulfillment increases with an increase in the number of collaborating partners, there seems to be decreasing marginal returns to collaboration, in terms of order fulfillment.

Table 5. Collaboration effects comparison table

Summary of the impact of various collaboration options for the primary shipper available in Internet logistics exchange on various shipper performance measures (collaboration comparison table)

Collaboration options for the shipper									Shipper performance measure
S_FS	S_FC	S_FSB	N_FS	N_FC	N_FSB	C_FS	C_FC	C_FSB	Order Fulfillment
0	0	0	0	0	0	0	0	0	0.820
1	0	0	0	0	0	0	0	0	0.894
0	1	0	0	0	0	0	0	0	0.895
0	0	1	0	0	0	0	0	0	0.943
0	0	0	1	0	0	0	0	0	0.894
0	0	0	0	1	0	0	0	0	0.895
0	0	0	0	0	1	0	0	0	0.943
0	0	0	0	0	0	1	0	0	0.862
0	0	0	0	0	0	0	1	0	0.862
0	0	0	0	0	0	0	0	1	0.888

S_FS/ S_FC/ S_FSB = Shippers ELM, collaborating with a shipper/carrier/both C_FS/ C_FC/ C_FSB = Carriers ELM, collaborating with a shipper/carrier/both N_FS/ N_FC/ N_FSB = Neutral ELM, collaborating with a shipper/carrier/both Order fulfillment

As for the desirable characteristics of the collaborating partners, referring to the results table (Table 4), the benefits in terms of order fulfillment are greater for higher contract sizes. Thus, the greater the volume of shipments of the collaborating shipper (S2) and the carrying capacity of its contract carrier (C2), the more the primary shipper will benefit by managing its transportation on ELM. Thus, it seems that bigger shippers and/or carriers may have more available slack to accommodate the primary shipper's shipping requirements.

Table 6 gives the impact of collaborating partner characteristics on shipper performance. This table is created in a similar way as Table 5. The collaborating partner characteristics form one set of variables. The last column pertains to order fulfillment or shipper performance. As seen earlier,

the base order fulfillment is 82.0%. From (collaborating partner table) Table 6, as the contract size between the collaborating shipper-carrier pair goes up from the base level to medium level, the order fulfillment increases to 83.2% (from the base level of 82.0%). On the other hand, when the collaborating partner's level of operations (or contract size) goes up to high level from the base level, the order fulfillment increases to 85.7%. Thus, in terms of order fulfillment, it is more beneficial to collaborate with a bigger partner.

Table 6. Collaborating partner characteristics effects table

Effect of collaborating partner characteristics on shipper performance.

Contract Size		CV Carrier		CV Sh	ipper	Shipper performance measure
Medium	High	Medium	High	Medium	High	Order Fulfillment
0	0	0	0	0	0	0.820
1	0	0	0	0	0	0.832
0	1	0	0	0	0	0.857
0	0	1	0	0	0	0.825
0	0	0	1	0	0	0.828
0	0	0	0	1	0	0.825
0	0	0	0	0	1	0.829

CV = Coefficient of Variation

Referring to the results table (Table 4), the variability of the shipping patterns of both, the collaborating shipper and its contract carrier (coefficients on all dummies of coefficient of variation) positively affect primary shipper's order fulfillment. From the base level of 82.0%, the order fulfillment increases to 82.5%, and 82.9% (please refer to Table 6) as the variability (coefficient of variation) of either the collaborating shipper or the collaborating carrier increases to 0.5 or 0.7 respectively, from the base case of 0.3 Thus, having a collaborating partner with erratic or unpredictable shipping patterns or carrier capacity increases the shipper's order fulfillment. With a high degree of variability in the shipping requirements of the collaborating shipper (S2) and the carrying capacity of its contract carrier (C2), there will likely be more mismatches between the collaborating shipper-carrier pair. This in turn creates more slack with the collaborating shipper and/or carrier, and will improve the order fulfillment of the primary shipper.

On the other hand, all other things being equal, higher contract sizes between the primary shipper-carrier pair are associated with lower order fulfillment for the primary shipper (please refer to the results table, Table 4). Thus, all other things being equal, higher shipping volumes will typically result in lower order fulfillment. This may be because problems get magnified with increases in shipping volumes. For example, at higher contract sizes, for any given coefficient of variation, there will be greater mismatch between primary shipper requirements and contract carrier capacity than at lower contract sizes. Since the collaborating partner's support remains the same, at higher contract sizes, this will result in lower order fulfillment.

However, it is important to note that the above interpretation depends upon the assumption that all variables other than the contract size remain the same. This assumption may not always be valid, as bigger shippers may have well established and stable shipping patterns and hence have lower coefficient of variation in their shipping requirements.

Table 7 (for convenience, also referred to as primary pair table) shows the quantitative impacts of primary shipper-carrier characteristics on various shipper performance measures. As the primary shipper-carrier contract size increases from the base case to medium and high level, the order fulfillment drops to 78.9% and 76.7% respectively, from the base level of 82.0%.

Table 7. Primary shipper-carrier characteristics effects table

Effects of primary shipper-carrier characteristics on shipper performance (primary pair table)

Contract Size		CV Carrier		CV Sh	ipper	Shipper performance measure
Medium	High	Medium	High	Medium	High	Order Fulfillment
0	0	0	0	0	0	0.820
1	0	0	0	0	0	0.789
0	1	0	0	0	0	0.767
0	0	1	0	0	0	0.777
0	0	0	1	0	0	0.739
0	0	0	0	1	0	0.799
0	0	0	0	0	1	0.781

CV = Coefficient of Variation

Further, the variability of the shipping patterns of the primary shipper and the carrying capacity of its contract carrier (coefficient on all dummies of related to coefficients of variation of primary shipper's requirements and its contract carrier capacity) negatively affect shipper's order fulfillment (please refer Table 4). For the quantitative values of these impacts, please refer to the primary pair table (Table 7). With the increase in the variability (coefficient of variation) of the primary shipper's requirements from a base case of 0.3 to 0.5, and 0.7, the order fulfillment drops to 79.9% and 78.1% respectively, from the base level of 82.0%. In case of the variability of carrier capacity, order fulfillment drops to 77.7% and 73.9% for the respective increase in variability. Thus, having erratic or unpredictable shipping patterns or carrier capacity availability harms the shipper's order fulfillment. In terms of order fulfillment, variability in contract carrier capacity seems to be much more harmful than variability in shipper requirements.

LIMITATIONS

These findings increase our understanding about the impacts of ELMs on the performance of the participating shippers and thus make valuable contributions to the logistics literature. However, in the case of our simulation model, we did not have information on spot market. Inclusion of spot market may enrich the model. Shipping requirements and carrier capacities of all the shippers and carriers in the simulation model are independent of each other. In the real world, if there is monopoly on certain shipping lanes, this assumption may be unrealistic. Further, the data used

related only to truckload shipments. This could be expanded to include less-than truckload shipments where other factors such as weight and volume of cargo might become important considerations in selecting collaborating partners. A shipper or a carrier also needs to consider the nature of shipments of its collaborating partners as in the case of hazardous cargo, for instance. That may change the extent of benefits derived by participating on such ELMs. Finally, we assumed certain probability distributions for all the other participants other than the primary shipper. Though this may be suitable for this exploratory research, this limits the generalizability of the results. As the logistics exchanges continue their operations and accumulate data over time, it may be very insightful to conduct empirical study using the actual transaction/archival data from few of these ELMs.

CONCLUSIONS

Shipper benefits are greater when the shipper collaborates with multiple partners rather than with a single partner. Though there is evidence of decreasing marginal returns to collaboration, the incremental benefits from additional partners are still substantial. Interestingly, even though a carriers' ELM is biased against shippers, participating on a carriers' ELM may provide substantial benefits to the shipper in terms of increased order fulfillment. As previously noted, shippers receive indirect benefits on a carriers' ELM as a consequence of their contract carrier's actions to improve performance. There are instances reported in the practitioner press about carriers persuading their contract shippers' to join carrier ELMs and even offering to pay their shippers their participation fees as an incentive to have them join (Cooke, 2001). Vice-versa may also be true. Our results indicate that participation on a carriers' ELM by shippers brings substantial benefits to the shipper, despite the bias of the ELMs in favor of the carriers. Thus, a shipper is likely to benefit directly or indirectly by participating on an ELM, no matter the configuration of the ELM. Further, bigger shippers with high shipment volumes would benefit more than smaller shippers by moving to ELMs. Finally, increases in the contract carrier's variability decreases shipper's order fulfillment, demonstrating that it is important to have a dependable carrier.

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HUMAN RESOURCES RESPONSIBILITIES FOR EMPLOYEE CARE GIVERS: RECONSIDERING POLICY

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ABSTRACT

Discussion on the "sandwich generation", those adults who are providing care to both children and parents, has only begun. Recent data indicate that more than 40,000,000 adults in the United States are providing care to family members. Anecdotal information also indicates that adults in the early years of careers, the 20s and 30s, many fully employed in organizations, are often providing secondary and backup support for those caregivers, and care for grandparents as well as parents and many are often caregivers for their own children. Many of these adults are frequently fully employed as a worker for another organization. The impact is that employees are being paid to work a full time job for an organization while working another job outside of the paid employment, thus working additional hours every week as unpaid volunteers. However, a review of the human resource literature indicates a dearth of data or other information to educate human resource practitioners and their companies about the issues that come with employees who are also involved in care giving. This paper notes the literature gap and examines the coming crisis in an area that requires immediate attention. Demographers estimate that more than 50,000,000 people will be aged 85 or older by 2050, and the preponderance of those aged citizens will require support and care from employed family members. Key topics are discussed relative to the impact on employee performance in organizations, family support and the responsibilities of society, government, business and organizations. Recommendations and conclusions are provided.

Keywords: Human resource management, elder care, benefits, sandwich generation, stress

INTRODUCTION

In the 1990s the American workforce noticeably changed, and what was considered a "traditional model" of the family with a male head of household and a female in homemaker, child care and other such 'caretaker' roles is now replaced with dual-career families, single parents, and workers who may be semi-retired or fully retired who seek to remain employed. Because there are fewer in traditional caretakers available in the home, many workers now require accommodations such as opportunities to work from home and flexible work hours. These accommodations enable them to provide care for children and older adults in the household and still meet expectations and perform responsibilities at work and in the home. In particular, working outside of the home has become common with the growing number of women in the labor force who need incomes to support families or supplement household income (Kohl and McAllister, 1995). In addition, the retirement of the baby boom generation, longer life-spans and falling birth rates are expanding the elderly population and creating a "sandwich generation" of which most are women who have become caregivers (Anonymous, 2001). Although the retirement of the baby boom generation is not a surprise or unexpected, human resource management in organizations has done little to

prepare employees or to provide options to address such needs. "Millions of Americans provide care for loved ones, but employers are not doing enough to support caregivers," said Gail Gibson Hunt, president and chief executive of the National Alliance for Caregiving (Santhanam, 2015). This is not only true in the US. This has also been noted in other countries such as Canada (Rosenthal, 1997) and worldwide (Anonymous, 2001; Hua, 2015). Predictions in the *Futurist* included the elderly population of the world reaching one billion by 2020, life expectancy exceeding expectations, and more people exceeding 100 years of age, the elder care crisis, and how this crisis could put the careers of younger women at risk (Anonymous, 2001).

Not only are organizations essentially unprepared to address the issues of employees, many of whom are women who are also caregivers, but there is an accompanying lack in society and the community. "We're especially concerned that not enough is being done to support family caregivers in the public or private sector as they age," Hunt said in a released statement. "There's a double-edged sword when we fail to support caregivers, because we put both the caregiver and the care recipient at risk" (Santhanam, 2015, www.pbs.org).

On average, Americans are working more. (Saad, 2014). As seen in Figure 1, 39% of Americans work more than 49 hours per week. (Gallup, Inc., 2013) On average, Americans are staying in the workforce longer. (James, McKechnie, & Swanberg, 2011) As seen in Figure 2, 63% of Americans aged 55-64 were still working in 2012. Projections for 2022 indicate that number will increase to 67%. Similarly, the number of people aged 65-74 who continued to work increased from 15% in 1992 to 28% in 2012 with a projected increase to 32% by 2022 (Bureau of Labor Statistics (BLS), 2015). In addition, and on average, Americans are living longer (Center for Disease Control (CDC), 2010) These three sociocultural factors, 1) working more hours, 2) working more years, 3) living longer, have created a human resources dilemma for virtually all organizations. The dilemma manifests as overworked employees who are splitting attention and energy between the competing interests of work and family. While work-family conflict is not a new topic, our interest in it is renewed, because there is little information to indicate that human resources, as a profession, has addressed the issues or interests of those employees who are participating in care giving, particularly for aged parents. One purpose of this paper is to explicate the issues involved with care giving employees. A second purpose of this paper is to invite discussion on policy and process toward creating work places that are friendly not only to employees with children but also to employees who care for parents. Such policies have implications for careers, development, process reengineering, and general health of employees. While the scope of this paper is limited to U.S. employees, evidence indicates this dilemma is global, and, as such, requires broad, albeit culturally specific, treatment. Background information in the literature is reviewed and discussed, followed by recommendations, conclusions, and a strong call for current research and proposals for approaches to address this developing issue.

Figure 1. Average Hours Worked by Full-Time U.S. Workers, Aged 18+

Average Hours Worked by Full-Time U.S. Workers, Aged 18+ In a typical week, how many hours do you work?

	Employed full-time
	%
60+ hours	18
50 to 59 hours	21
41 to 49 hours	11
40 hours	42
Less than 40 hours	8

Based on Gallup data from the 2013 and 2014 Work and Education polls, conducted in August of each year

GALLUP'

http://www.gallup.com/services/176708/state-american-workplace.aspx

Figure 2. Labor force participation rates in 1992, 2002, 2012, and projected 2022, by age.

Percent 100 ■ 2002 ■ 2012 ■ Projected 2022 90 80 70 60 50 40 30 20 10 0 Total, 16 16 to 19 20 to 24 25 to 54 55 to 64 65 to 74 years and years years years years over years

Labor force participation rates in 1992, 2002, 2012, and projected 2022, by age

Source: U.S. Bureau of Labor Statistics.

http://www.bls.gov/data/#employment, http://www.bls.gov/emp/ep table 303.htm

BACKGROUND

Schmidt (1997) provided an early warning that elder care was emerging as an issue for employee benefits. Employees in this "sandwich generation" must balance children of all ages and aging parents. Even though the parents may be currently self-sufficient, this is only a temporary state as longer life expectancies are seeing a rise in home care requirements and even adult day care centers. As early as 1995 these authors found reports indicating 25% of employees were working with elderly parents and another 13% would be added within the next five years. In 1995, employee assistance programs were typically used by large companies rather than small companies. (That remains true today.) Employee Assistance Programs (EAPs) which support employees relative to personal and family related issues typically contract out such work if it is available. Currently, 10,000,000+ Americans over the age of 50 are providing eldercare (Metlife Mature Market Institute, 2011) and many, if not most, are employed.

As agents of organizations, human resources (HR) departments are charged with providing health care administration to employees while protecting the interests of the organizations by controlling health care costs. This challenging position puts HR at the forefront of providing interventions to employees as a means of protecting productivity and efficiency of employees during daily operations. In spite of the systemic impact of caregiving, and, in particular, the graying of the work force, there is little evidence that HR, as a field, has accepted the full responsibility for providing support to caregiving employees. Conversely, the evidence indicates that virtually all caregiving interventions are left to individual organizations to be administered, or not, as they wish. At a time when cutting costs and providing support to valuable employees is a best practice, failure to address caregiving as a social issue that is experienced throughout the labor pool is a gap in practice and research that is largely overlooked.

Active oversight by human resources professionals of employment decisions involving caregiving employees can nip problems in the bud. Events such as pregnancy, use of family care leave, and requests for flexible work are known triggers of caregiver bias... FRD [family responsibility discrimination (inserted)] may be more likely to occur when a caregiving employee has a second child or gets a new supervisor; HR vigilance over personnel decisions made after those events can head off problems. If HR notices suddenly negative evaluations, demotion, placement on a performance improvement plan, rigid application of workplace rules, changes in assignments or schedules, or termination, further investigation may be warranted. (Calvert, 2016, p. 37)

Further, as continuing details of corporate greed proliferate, the call for sharing of corporate benefits is gaining momentum. As the bridge between the organization and the employee, HR provides liaison for organizations to provide meaningful interventions for employees. To build on theory to support the case for the efficacy of systemic interventions from HR, we can use both Equity Theory and Social Exchange Theory.

EQUITY THEORY AND SOCIAL EXCHANGE THEORY

A macro perspective on Equity Theory is applicable when considering the various impacts which contribute to this current situation of caregiving and the sandwich generation. Skiba and Rosenberg (2011) identify an imbalance among business, government and society that has negatively impacted how individuals are able to control their ratio of outcomes to inputs. In the past, when workers perceived over award or under award they were able to take action to restore the perception of equity. However, equity theory focuses primarily on the individual, and in this case, the authors propose that the relationships between business, government and society have negatively impacted the ability of individuals to balance and therefore exert control over their own situations. In the past several decades these three sectors have undergone dramatic changes. Impacts have been noted from special interest groups, community activists, employee shareholders, consumer advocates and others who have applied varying degrees of pressure in response to events in the other sectors. Additionally, the erosion of wages in the US is persistently noted in the underemployed and the unemployed across almost all levels and sectors.

Skiba and Rosenberg (2011) identify three areas of breakdown; these include, but are not limited to, business support for executive compensation which has increased exponentially, layoffs, the demise of the social contract of lifetime employment, and the shift to the temporary workforce, government mishandling of corporate fraud, the lack of job creation, healthcare legislation, ineffective management of regulation and escalated partisanship have demonstrated negative impacts, and societal changes including increased underemployment, unemployment, erosion and equity, the loss of benefits, cost shifting of healthcare, the dumping of pensions and the resulting apathy are forces creating a lack of balance. Because individuals cannot control the macro forces, they are unable to make personal activities and efforts to reestablish the balance in their personal lives.

At a more personal level, social exchange theory (Emerson, 1976) explains the give-and-take, balance and expectations of individuals when considering personal output. As the purpose of the exchange is to minimize cost (negatives) and maximize benefit (positives), positive relationships would be more desirable. When individuals find there are more negatives in the exchange, individuals need to reduce the negatives in an effort to rebalance; this may be applied to explain why caregivers are often forced to abandon their jobs or reduce time and commitment to meet caregiver responsibilities. When this social exchange approach is integrated with a broad approach to equity theory, this suggests that organizations and individuals are both suffering from too many negatives that cannot be remedied by individuals because of the lack of balance between business, society and government.

CAREGIVING

As early as 1993, the U. S. government began tracking the impact of caregiving on the general population. Through the use of the Parent Support Ratio and the Sandwich Generation Ratio, indicators "of the need for family support over time" (Hobbs & Damon, 1996, p. 2-19), the government has kept watchful measures of the growing impact of living longer. By 1996, the government was predicting that frail relatives were going to consume the time of more and more people. In particular, the Department of Health and Human Services (DHHS) was addressing the

impact of the Sandwich Generation, those adults who are providing care for children, grandchildren, and aged adults. Those that are sandwiched are one generation taking care of multiple generations at the same time.

Employees are often primary caregivers, because there is a shortage of trained staff to provide care for the rapidly graying population. These employees are called informal caregivers, family caregivers, or voluntary health care workers to denote their positions as unpaid and untrained health care providers, and they are virtually always family members of the elder. Not surprisingly, the typical caregiver is a woman in her later 40s and employed. Nonetheless, a growing number of men are caregivers (National Alliance of Caregivers (NAC) & American Association of Retired Persons (AARP), 2015) as are an increasing number of Millennials. Approximately 25% of caregivers are Millennials, and in this group, men are as likely as women to participate in care giving (Santhanam, 2015). For the year 2009, there were more than 42,000,000 caregivers in the U. S., and the economic value of family care giving makes a significant contribution to local economy in all 50 states. The total contribution from this voluntary work force for 2009 was \$450 billion. (AARP, 2011) Many of those informal health care providers are gainfully employed with companies outside the home. These employees are subject to increased stress, social isolation, and jeopardy to their own health.

Gillen and Chung (2005) point to the consequences of an aging population and the unprecedented increase of societal change occurring over the next few decades in addition to increased life expectancy. Caregiving itself is stressful for the middle-aged adults who are struggling to balance personal needs, family relationships and careers noting depression levels are higher especially in women. This can negatively impact the ability of the caregiver to function. In addition, fewer people are available to provide care due to declining fertility rates. Their study determined the relationship exists between caregiving and stress and established a potentially negative impact on worker productivity. A holistic wellness model was recommended using EAP counselors to identify and encourage impact employees to seek assistance, possibly including support groups and collaboration with other organizations such as area agencies on aging. It is clear that the "command-and-control" style of management would be highly inappropriate in a workplace, as people management needs to take on a more human centered, compassionate approach.

In the face of the growing need for caregiver support, employers report keeping most forms of child care assistance as well as increasing help with elder care. Although assistance for childcare by subsidies has decreased, employers have increased childcare as part of Dependent Care Assistance Programs (DCAPs). More employers (41%) report providing DCAP coverage as well as resource and referral support for elder care. Employers that provide child and elder care support tend to be large, non-profit, have multiple locations, have few hourly employees, employ more women, and employ more women and minorities who report directly to executives (Matos & Galinsky, 2014).

Health Impact of Stress in Caregiving

The deleterious impact of distress on humans is a well-documented health problem that is found throughout research literature about numerous occupational fields, and caregiving stress is a subset of the larger literature that informs this problem. Notable poor health outcomes have been

documented for "helping" occupations, e.g. police, firefighters, doctors, nurses, social workers, and caregivers. The impact of distress includes physical, psychological, emotional, and, in the case of caregiving, financial strain that often is associated with morbidity and mortality. Monahan and Hopkins (2002) corroborate the general findings of distress among employed caregivers, including loss of productivity, distress, and health concerns, often because caregivers are older employees who are experiencing their own naturally occurring decline. Taking from the work of Doty, Jackson, and Crown (1998), they note that women who spend an average of 17 years as caregivers to their children and 18 years as caregivers to parent(s) are subject to burnout, particularly if they are employed. In their study, care giving respondents reported problems with cost, availability, sick care, dependability, quality, hours of service, and emergency care. This array of reported problems provide an indicator of the variety of issues faced by caregivers that are likely to impact levels of distress both at home and in the workplace.

Employees who are providing care to a close relative have a significant risk for declining health. As burden increases, self-reports of declining health increase to ratings of *fair* or *poor* while moving away from *excellent* or *very good*. Race influences reports of health reports with Caucasians and Asians more likely to report poorer health outcomes relative to African Americans and Hispanics. Financial strain is another source of distress with 58% of caregivers reporting some level of financial strain as a result of caregiving (NAC & AARP, 2015). Similar results are reported by Lee, Walker, and Shoup (2001) when they found that employed care givers are more likely to report poor emotional health relative to employees who are not giving care, and women are more like to report depression than men. Lee et al. (2001) also reported that non-care giving retirees have the highest number of depression symptoms, suggesting that retirement may mitigate caregiving distress/depression.

AARP (2011) reports that elder care providers make become isolated and experience increased distress that creates health problems for the provider. They may not be cautious to take care of themselves, and because of this, they may jeopardize their ability to continue to provide care for the elder. As discussed later in this paper, there are a variety of possible human resource interventions to alleviate feelings of isolation in elder care providers. Milliken, Clements, and Tillman (2007) call for comprehensive stress management for nursing employees to mitigate burnout and attrition, both associated with the stress of caregiving. Their paper posits a biopsychosocial process that results in burnout when nurses cannot manage stress in the face of constant physical and psychological stressors. They call for nurse-centered stress management as well as executive support systems.

Caregiving Impact on Work

NAC and AARP report that 59% of caregivers for people over 50 were employed in the previous twelve months (time spanning 2014-2015). On average, those employees work 34.8 hours each week; however, in caregivers who are over 65 years old, only 34% worked full time. Conversely, younger caregivers were significantly more likely to work full time. The NAC & AARP (2015) report indicates that managers know about the care giver's role for 55% of employees, and that statistic increases as burden increases. The benefits that caregivers are most likely to have are paid sick days and flexible hours. Only 24% of employers offer employee assistance programs or telecommuting, and the preponderance of benefits go to full time employees. Caregivers report the

following impacts on work: "1) Go in late, leave early, take time off, 2) Leave of absence, 3) Reduce work hours/take less demanding job, 4) Give up working entirely, 5) Receive warning about performance/attendance, 6) Turn down promotion, 7) Retired early, 8) Lose job benefits" (NAC & AARP, 2015, p. 40). Schmidt (1997) echoes this list when she reports hidden impacts of caregiving, including

... 1) workday interruptions to handle emergencies and phone calls, 2) absenteeism, 3) increase in employee stress often resulting in health related problems, 4) increased necessity for time off and leaves from work, 5) decreased willingness to relocate and travel for work, 6) decisions to cut back to part-time or leave the work force altogether, 7) decrease in motivation and morale due to pressures outside the workplace, 8) decline in productivity, and 9) replacement costs. (p. 83)

Taken together, these studies identify a number of costly impacts on the organizational bottom line attributed to caregiving employees. They also indicate a notable lack of engagement that is likely caused by competing values, those of trying to split a set quantity of time between work and care giving.

Matos and Galinsky (2014) report that employers are most likely to provide resource and referral services and dependent care assistance programs; however, only 7% of employers offer respite care for employees to allow them time to rest or have time away. Nonetheless, this represents an increase from the year before.

Monahan & Hopkins (2002) found that nurses in their study were more likely to have higher job performance self reports (JPSR) if they were non-elder caregivers. This outcome is associated with increased organizational citizenship and job satisfaction. They go on to suggest that employers need to provide flexible and supportive environments at work that moves those nurses who are providing elder care at home away from similar responsibilities at work. Conversely, Gillespie, Barger, Yugo, Conley, and Ritter (2011) suggest using emotional disclose to mitigate the impact of the stressors. They found that negative suppression, emotional labor that is focused on concealing negative emotions, in elder health care workers is associated with associated with undesirable job attitudes. These attitudes include lower job satisfaction and increased job stress. Their study found that the general mood of the employee was not a factor. This study suggests that generalized happiness is important in the workplace and even care workers who specialize in elder care are subject to poor emotional outcomes.

Timmerman (1999) reports that American business loses \$11.4 billion each year to caregiving costs, including absenteeism, crises, interruptions, supervisor's time, and turnover. This cost does not include indirect costs, e.g. less productivity during work or leaves of absence. She reports that benefits to caregivers include resource and referral services, flexible work schedules, counseling and information, and long-term care insurance. Although not specifically required by the Family and Medical Leave Act, 75% of employers report they provide time off for elder care. Similarly, caregiving is costly for employees. Metlife (2011) indicates that the aggregated cost of providing care for employed caregivers is \$3,000, 000,000 (trillion).

Impact on Engagement

Gallup, Inc. argues that engagement is more important than workplace incentives. Gallup, Inc. (2013) reports that employees close to the end of their careers tend to be more engaged than younger employees, and women are slightly more engaged than men. With only 22% of U. S. employees reporting that they are engaged and thriving, caring for the most engaged employees is paramount to organizational success. Engaged workers are associated with increased productivity, increased profitability, increased customer ratings, less turnover, less absenteeism, and fewer safety problems. "engaged employees are the best colleagues. They cooperate to build an organization, institution, or agency, and they are behind everything good that happens there. These employees are involved in, enthusiastic about, and committed to their work. They know the scope of their jobs and look for new and better ways to achieve outcomes. They are 100% psychologically committed to their work. And, they are the only people in an organization who create new customers" (Gallup, 2013, p. 21). This report indicates that Baby Boomers respond better than other groups when managers make an extra effort to show they care. From this, we can infer that Baby Boomers are more likely to engage and remain highly productive when an organization shows special care for their needs and issues.

INTERVENTIONS – COST AND E XPECTATIONS

While many employers have argued that costs of providing additional employee benefits outweigh organizational benefit, Bartel, Rossin-Slater, Ruhm, and Waldfogel (2016) found that a change in law in Rhode Island which required paid family leave did not have considerable impact on small or medium companies. The Temporary Caregiver Insurance Act (TCI) is funded by payroll contribution from employees and provides up to four weeks of paid leave. Bartel et al. (2016) note that these results are similar to studies completed about California's paid leave law (Milkman & Applebaum, 2013; Bartel, Baum, Rossin-Slater, Ruhm, and Waldfogel, 2014). The lack of evidence for impact on employers argues for employers to be more proactive in building systems to support caregiving employees.

One financial impact that is being felt increasingly by employers is the number of lawsuits that are being filed by caregiving employees who claim discrimination by employers because of caregiving responsibilities. Cases filed over the issue of family responsibilities have increased 650% (Calvert, 2016). The costs of litigation to American employers about family responsibilities discrimination have more than doubled for since 2005 from the prior decade. (Miller, 2016) Miller (2016) also highlights the costs that are associated with discrimination issues, including attrition, replacement costs, and damage to the organization's reputation as well as decreased productivity and morale. Calvert (2016) reports that employees prevailed in 52% of family responsibilities discrimination lawsuits, with men being less likely to prevail than women. While discrimination claims have historically been difficult to prove for employees, Calvert (2016) posits that fewer family responsibility actions are being settled out of court, suggesting that employers and lawyers alike are under estimating the strength of the claim. "Until employers adjust to the realities of families with all adults in the paid workforce and a significant growth in the number of older Americans who need assistance from their adult working children, it's unlikely we'll see a decrease in the number of cases filed," said Calvert (as cited in Miller, 2016). In the case of financial impact, the cost of training employees and changing policy is significantly less costly than losing a discrimination case, where in some states, as many as 70-80 % of employees prevail (Calvert, 2016).

Miller, Stead, and Pereira (1991) investigated corporate responsibility for providing support to employees who were engaged in caregiving. They found that top managers have few perceptions that job responsibilities were greatly changed by caregiving employees. They also believe, on average, that the corporation has little responsibility to provide support to employees involved in caregiving, including those involved in child care, eldercare, and substance abuse care. Conversely, employees believed that the corporation has a responsibility to provide support to employees involved in caregiving. This study corroborates Calvert's (2016) findings that employers have a responsibility to provide support. Similarly, Shoptugh, Phelps, and Visio (2004) found that employees supported employer-sponsored eldercare, even among younger employees. Further, they cite potential legal problems as a reason for organizations to consider presenting such programs. However, Wagner, Lindemer, Yokum, and Defreest (2012) indicate that providing benefits does not have to a costly benefit for employers. They noted that the first generation of employer provided programs were grounded in the reference/referral system that was used earlier for child care programs for employees and that early on-site services were typically not cost effective and were underutilized, because they did not meet the specific needs of employees. This study indicates that best practices, defined as "equitable for employees, accessible to all employees, respects the privacy of employees, is mission-driven for the employer and, in the case of specific interventions, is provided by competent, qualified and trained professionals" (p. 10), that are cost effective include flexible scheduling, paid time off, help with paperwork for Medicare and other insurance programs, resource/referral services, and subsidized back up homecare.

Taken together, these studies indicate that the cost of providing benefits for caregivers can be mitigated for the employer, but the failure to act on providing appropriate protection and sanctions for family responsibility discrimination can be extremely costly. In this case, the remedy will be the cost effective choice if the choice is to enforce substantive policy and retrain supervisors as well as HR professionals to recognize family responsibility discrimination. Nonetheless, this action remains at the discretion of the individual organization when a comprehensive and systemic resolution is required to meet societal needs.

RECOMMENDATIONS

By relying on social exchange as a framework for understanding the importance of organizational action, we posit that remedies provided through human resources functions by organization for their employees are likely to improve job satisfaction and organizational commitment. This perspective suggests the economic value is created for both sides when organizations and employees work together to provide support for mature employees who are providing productive labor for the organization while also providing health care for elders. (Emerson, 1976) Such an approach drives the use of equity theory to help us understand why providing support to caregiving employees is in the best interest of the organization (Grillo, 2014). Such an approach sends a message to employees that they are valued and are important to the organization.

A systematic approach is necessary to address the issues currently faced by caregivers to include business and organizations, society and government. Such an approach would need to include legal

support, e.g. laws enacted or amended by Congress, support from society including but not limited to nonprofit agencies and communities, and programs offered by business and organizations as part of an employee wellness approach which includes employee benefits.

For business and organizations, Miller et al. (1991) give a number of ways for organizations to provide support and care for caregiving employees, including on- or near-site facilities, vouchers for child care, job sharing, elder counseling, respite care such as support groups, and other dependent care resolutions such as hotlines. They report improved outcomes including productivity, morale, absenteeism, turnover, and community image from corporate support programs. Schmidt (1997) provides a similar list of preferred services from corporate employees, including arrange for outside help, companionship, financial support, gathering information, giving advice, help with decision making, household chores, manage finances, assist with medications, assist with mobility, and assist with personal hygiene.

Miller (2016) indicates that legal costs can be mitigated when employers take several actions. He calls for supervisors to be trained about family responsibilities discrimination, explicit written policies, institutionalizing complaint procedures, creating plans to cover work that might be interrupted when an employee is required to be away from work.

Seaward (1999) notes the three areas that seem most important to caregivers would be supervisor support, lies (about taking time off) being more acceptable than the truth, and the need for 100% commitment from employees, which means they don't need distractions at home as presented by eldercare issues or any family issues. This means first-line supervision is a critical component of recognizing the needs of caregivers who are also full-time employees. These managers and supervisors must be informed and knowledgeable about how to identify stress in the workplace, particularly for those employees who don't share personal information. Often, simply verbalizing the obvious provides a sense of support and validation, and subsequently, a foundation for proactive communication and suggestions for problem solving. Milliken et al. (2007) offer a number of suggestions organizations can implement such as providing positive reminders that although the events surrounding employees may often be out of their control, their personal responses to those stressors are under their control. Organizations can offer stress-management continuing education programming and provide incentives to attend these events. This promotes employees to consider the serious nature of developing such techniques, and also provides an opportunity to explore methods and approaches without being distracted by unit activities.

In teams or workgroups, Milliken, et al. (2007) also suggest encouraging "on the spot" and "immediate" measures for stress reduction. For example, cover the unit for 3 to 5 minutes while encouraging a seemingly stressed employee to simply take a "stretch break." If there is not a private place to stretch, the employee can go into a unit bathroom, lock the door, roll the head from side to side to release neck tension, and/or stretch the arms up over the head to obtain an instant sense of reduction in tension and stress. Such mini-techniques can provide lasting effects, and there is a notable message of care from the nurse executive to the employee that may also have long-lasting benefits.

During staff meetings or other in-services, add a 3 to 5 minute segment to the agenda where employees are taken through a stretching exercise, deep-breathing technique, or, in an approach

that has been successful and brings many smiles and laughs, have everyone do a 2-minute shoulder massage on the person to the left, then turn and do a 2-minute shoulder massage on the person to the right. This simple activity not only provides stress reduction, but promotes fun and casual "chat" between employees, subsequently enhancing communication and a sense of team building (Milliken, et al., 2007). Lee et al. (2001) suggest that employers find interventions to support caregiving employees.

In society, additional support can include a time allowance for family care givers to attend courses that are provided in the community as part of ACA healthcare reform legislation to help employees get training and support to provide elder (Feinberg, & Reamy, 2011. Another remedy is for HR to provide support and training that supports compensation of employees for caregiving, or provide time for employees to attend such training which is supported by the community in nonprofit organizations or other sources (Feinberg, & Reamy, 2011).

Government must also play a role. Consistent and systematic implementation that is guided by healthcare reform measures is recommended and this includes provisions of the Patient Protection and Affordable Care Act (ACA). Organizations can emulate the measures and standards that are required for quality improvement by the Department of Health and Human Services. This legislation requires that "measures assess the experience, quality, and use of information provided to and used by consumers, caregivers, and authorized representatives" (Feinberg, & Reamy, 2011, p. 2) Another organization solution includes time allowance for family care givers to attend courses that are provided in the community as part of this healthcare reform legislation to help employees get training and support to provide elder. Another remedy is for HR to provide support and training that supports compensation of employees for caregiving.

Canty and Sherwood (2007) acknowledge that most parents work outside the home and the increasing need to examine caregiving due to the retirements of the baby boom generation. These retirements must include more than childcare and authors developed a proposal to expand the Family Medical Leave Act (FMLA) to cover additional categories such as illness and elder care with minimal financial impact. The suggestions include three policy initiatives; providing up to eight weeks of paid leave funded through a new trust fund to which American workers can pay to support withdrawals while on leave; extending the length to 18 weeks, and reducing the threshold for eligibility from 50 employees to 20. Employers would incur no cost; changes would need to be introduced in Congress.

Family sensitive policies that support the well-being of the employee can also include but should not be limited to workplace policies that accommodate caregivers; EAP support that recognizes caregiving as a specific problem rather than burying it in other programs; the creation of wellbeing programs that meet the needs of caregiving adults and an extended leave the bank for employees who are caring for sick family members. Above all, organizations must remember to carefully track, document and retain all information on well-being and engagement programs for employees.

DISCUSSION

Being "proactive" may be the key for family members who are thrust into the role of caring for an older relative or friend often have little or no training or preparation in handling their coordination

responsibilities with health care professionals, providing direct personal care, or carrying out medical or health tasks in the home. Few have any idea of what to do. Because caregiving for an older relative or friends will affect nearly every family in America, the public and private sectors need to be proactive in providing the following as suggested by Reinhard et al, 2011. Grillo (2014) posits that being proactive is also in the best interest of the organization. By being proactive the organizations mitigates the likelihood of legal responses from employees as well as reduces the cost of healthcare.

Proactive public policies and programs to help people know where to find the right kind of care and help even before they need it, at and affordable cost Health care professionals who ask if you are helping to care for another family member or friend, and provide proactive, anticipatory guidance and support. Communities that anticipate and offer both practical and emotional support Family and friends who are proactive "help seekers" for themselves and for those for whom they care. "How can it be that so many people like me are so completely unprepared for what is, after all, one of life's near certainties? What I needed was for the experts to find me and tell me what I needed" (Rauch, as quoted in Reinhard et al, 2011, p. 7). "We are rarely provided the solid training we need [as family caregivers] to feel comfortable and competent in the role of health care provider" Mintz, as quoted in Reinhard et al, 2011, p. 9). Public policy solutions play an important role in supporting the private sorrows of family caregivers to lessen the strain in the daily lives of caregiving families in the United States. Lee et al. (2001) also suggest that even those who are retired and not involved in caregiving can benefit from interaction with the community as an approach to address depression, perhaps reducing the isolation that comes with retirement while encouraging engagement with the community.

Policy solutions can include the following (Reinhard et al, 2011) - family-sensitive policies that protect the well-being and vital interests of families; workplace policies that recognize and accommodate employed family caregivers; system change to improve the quality of life for family caregivers and a payment system that provides resources for a comprehensive and culturally sensitive assessment of needs, including caregiver assessment and the need to identify the person's and the family's goals for care. Practical and affordable resources are needed to support care delivery and coordination, and reimburse consultations with family members "The problem is not that public policy looks first to families but that it generally looks only to families and fails to support those who accept responsibility. The availability of family caregivers does not absolve policy makers of their own responsibility to make sure that their actions assist rather than destroy families" (Levine, as cited in Reinhard et al. 2011, p. 7). Finally, Rauch believes "We should all be given time off work at age 40 to take a class on elder care" (as cited in Reinhard et al, 2011, p. 7).

A culture change is needed in government, business and society. As more people experience the "new normal" of being a family caregiver, a social movement that demands recognition of family caregivers may be looming. Caregiving is now a normal part of life, yet family caregivers remain invisible, isolated, coping stoically, and getting random advice rather than using a cohesive system that is easily accessible and filled with systematic and practical advice and support. Caregiving and the need to address the aging population must be addressed on a much larger scale not only in terms of what family caregivers need in addition to support from their own organizations, but also in terms of what is available, affordable options, and immediate attention. "It is clear that American

health care is out of sync with the reality of life in America today, in which chronic illnesses and family caregiving have the starring roles" (Mintz, as cited in Reinhard et al, 2011, p. 9). Families and support groups need public acknowledgement, supportive workplace environments, and antidiscrimination laws. "It was not a matter of paying for her care; the challenge was finding the right kind of care we wanted to pay for" (Kane, as cited in Rinehard et al., 2011, p. 9). "Home care requires more than just health aides. It also requires a place to live. And for many, that is a huge—and often ignored—challenge" (Gleckman, as cited in Rinehard et al, 2011, p. 9). "What we need...is for our nameless problem to be plucked out of the realm of the personal and brought into full public view, where help can find us" (Rauch, as cited in Reinhard et al., 2011, p. 9).

CONCLUSION

The implications of the aging population have largely been ignored to date as evidenced by the lack of action in policy and legislation from the government and governmental agencies as well as in businesses and organizations. Providing options for flexible hours and EAP counseling only represents the beginning steps needed to identify and effectively support those engaged in caregiving outside of the workplace. Although communities do provide some assistance and support, these efforts are few and in some cases nonexistent, as those who need such services struggle to locate and identify options necessary for their families. The notable lack of research, articles, and general discussion in recent years provides a clear indication of not only the need to address this immediately at all levels, but in particular for HR management in an effort to reduce the stress and toll on employees who are caught in the middle of this "sandwich". If the development of human capital, retention of employees, and employee performance matters to organizations, HR departments need to develop plans for immediate implementation. This crisis was predicted years ago and the lack of action at all levels has now created a crisis.

Without a coherent approach as represented by the inclusion and cooperation in business and organizations, communities, and government, we will continue on a haphazard approach to addressing the needs of the elderly as well as the needs of the caregivers who are working full time, and will still be lacking the necessary support and resources. Employee performance will suffer, families will deal with more stress, and we can still remain hopeful that we are not addressing the same concerns in another decade.

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