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From the Editor

October 2019

Welcome to the 34th issue of the *International Leadership Journal,* an online, peer-reviewed journal. With our move to a new publisher last issue, I'd like to remind you that *ILJ* is listed in Cabell's Whitelist. *ILJ* is also included on EBSCO and on ResearchGate (with an impact factor), where I encourage you to publicize your articles. The journal is also awaiting inclusion in Scopus. I hope you've all had a chance to explore our beautiful new website at http://internationalleadershipjournal.com.

In 2020, you can look forward to several new features, including awards for best paper and best reviewer. *ILJ* will also launch an annual special issue; feel free to propose a topic and be a special editor of the issue by contacting me at the e-mail below.

This issue contains four articles and one practice piece. In the first article, Swart, O'Dor, Siguaw, and Karriker address the dual challenges faced by many students in mastering quantitative subject matter and effectively collaborating on group projects. Their approach blends transformative leadership development with interactive group learning in an iterative model called contextualized leadership development (CLD). Their results indicate that CLD increases learning outcomes and perceptions of having become a better leader and can enhance leadership qualities in current and future courses.

Abujaber, Buford, Wood, and Winston explore the influence of followers' expectations on leaders' behavior. Through a qualitative bounded case study design of six Evangelical church leaders in Amman, Jordan, they found that leaders' behavior and adaptation under pressure depend on two factors: mature character and motivation. The study also found several pressure sources and confirmed that parents and other contextual variables influence the leaders' implicit leadership theory structures.

In the third article, Sayyadi explores transformational leaders' core competencies for improving knowledge management effectiveness by affecting organizational structure. His research indicates that to improve knowledge management, transformational leaders must be change agents who deploy effective organizational structure that mediates the relationship between transformational leadership and knowledge management.

Ballaro and Moriarty's qualitative case study develops an understanding of how leaders of the fourth industrial revolution are impacting farming technology and explains how technology is affecting young farmers and their decision to pursue farming careers. Four themes emerged from their semi-structured interviews with 13 Minnesota farmers: work perception, emotions surrounding career choice, leadership role and influence of others, and thoughts about career choice.

In the practice piece, Levitt, Lindner, and Huh investigated the résumé factors that predict candidate selection for job interviews. Their findings indicate that candidates with relevant, current, and continual work experience; a college degree or enrollment in college; and achievements listed on their résumés were more likely to be selected by hiring managers for employment interviews.

Please spread the word about *ILJ* to interested academics and practitioners, who can write directly to me at jcsantora1@gmail.com.

Joseph C. Santora, EdD
Editor

ARTICLES

Contextualized Leadership Development: The Concurrent Enhancement of Leadership Qualities and Subject Matter Expertise*

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We address the dual challenges faced by many students in mastering quantitative subject matter and effectively collaborating on group projects. Our approach seamlessly interweaves transformative leadership development with interactive group learning in an iterative model we refer to as contextualized leadership development (CLD). The CLD model integrates a preliminary leadership concepts module, subject matter knowledge, a team member drafting process, a team charter, and optional communication coaching. A total of 136 MBA students participated in a study of the model's effectiveness in a business analytics course. Results indicate that CLD increases a student's learning outcomes and perception of having become a better leader and can enhance leadership qualities demonstrably in current and future courses.

Key words: collaborative learning, communication coaching, leadership development, shared leadership, teamwork

Two of the most important skill sets for business graduates are business analytics and leadership/teamwork abilities. Business analytics has become part of how business is conducted (Murray, 2016). As highlighted by Anand (2018), Manyika et al. (2011) estimate that the world will soon need an estimated 1.5 million MBA graduates with business analytics skills. In other words, employers will be looking for professionals who understand analytical tools and have familiarity with concepts of data science—namely statistics and math. The use of teams is now almost universal in business and is essential to an organization's success (Ryder, 2016). Indeed, Deloitte (2016) identifies the top challenge in organizations around the globe as redesigning the organizational structure to optimize a network of teams that can better respond to customer needs, enhance innovation, and meet the demands of the changing workplace.

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The knowledge required for competency in the above two skill sets—analytics and leadership/teamwork—is among the most difficult for business students to learn and to apply. Hamza, Tanta, and Hagstrom (2011) found that math and statistics anxiety was persistent in college students regardless of major. Moreover, several studies note that college students are deficient in math skills (Jones, Price, & Randall 2011; Pang, 2010). Bolton (1999); Morgeson, DeRue, and Karam (2010); Swart (2017); and Wengrowicz et al. (2018) report that students in project-oriented business courses do not know how to work effectively in teams. In this article, we develop a model designed to simultaneously improve student teamwork abilities and the learning of business analytics. Our instructional model considers the findings of Prince (2004), which show that active learning "works" and the recommendations of Bolton; Morgeson et al.; Swart; and Wengrowicz et al. that courses requiring teamwork should include a review module of teaming principles at the beginning. In contrast to previous suggestions and approaches, this module is followed by iterative applications of these teamwork principles to the solution of class-related group interactive problems and cases. Each time a team solves a problem, team members learn the subject matter while practicing their collaboration skills. This cumulative effect is reinforced by the continuous application in a required semester-long team project.

In a typical group structure, teams are assigned a leader or vote one of their own as a leader. This model represents positional, or hierarchical, leadership, which results in members acting primarily to share information and make decisions to help each member perform within his or her area of responsibility. Such a model yields an output that is equal to or less than the sum of the individual inputs. In contrast, implicit in our pedagogical model is the understanding that student teams are formed so that their individual efforts result in an outcome that is greater than the sum of the individual inputs.

To be greater than the sum of its inputs, a group must be cognitively diverse, independent, and decentralized (Surowiecki, 2005). In a cognitively diverse group, errors related to private information (knowledge that a member has that is

not shared by others as public information) are less influential in undermining a collective decision. While private information has errors, diversity counteracts the impact of these errors on the group's decisions. Independence is crucial since this characteristic means that each member has new information and that they will not be influenced by the mistakes of others. Having power decentralized maximizes each group member's special and local knowledge as inputs. Consequently, in this article we adopt Burns's (1978) definition of *leadership,* which occurs when group members engage with each other in such a way that leaders and followers raise each other to higher levels of motivation. As a result, we equate effective teamwork with effective shared leadership (Carson, Tesluk, & Marrone, 2007).

The results of this investigation offer several contributions: assisting instructors with the dual challenges of helping students to master the subject matter and to collaborate effectively; developing an approach we label *contextualized leadership development* (CLD) to seamlessly interweave teamwork development with the learning of analytics; improving student course performance; and demonstrating that the enhanced teamwork qualities persist, leading to better outcomes in future courses with implications for longer term job performance. Our overarching research objective is to determine if CLD is effective. We start by providing the study background and explaining the theoretical support. We follow by describing how our course was redesigned to test CLD. We then present our research hypotheses, describe the framework for our research, explain our methods, and discuss our results.

Background and Theoretical Support

Employers require employees to work effectively in teams. For students, learning to do so is crucial. Bolton (1999) found that 72% of business faculty at her institution assigned students to project teams. However, 81% of the faculty gave little, if any, support to the teams. In turn, while 94% of the faculty were at least somewhat satisfied with their teams, only 64% of the students were.

In keeping with current business needs for employees with teamwork abilities, the inclination in higher education has been to continue to increase such instruction throughout the curricula (Rafferty, 2013; Sashittal, Jassawalla, & Markulis, 2011). However, according to Hobson, Strupeck, Griffin, Szostek, and Rominger (2014), these efforts have been widely criticized as misguided and ineffective because, in part, the primary emphasis is to provide students with teamwork knowledge as opposed to the development of teamwork skills. Consequently, Hobson et al. developed an approach that incorporates the practice of teamwork skills in their leadership courses. They reported that the approach yielded statistically significant increases in overall teamwork and team leadership. While these results were positive, they occurred in courses in which teaming and leadership were the subject matter.

Recent studies (Swart, Wengrowicz, & Wuensch, 2015; Wengrowicz et al., 2018) have reinforced previous findings by Bolton (1999) that students who have been taught teamwork skills in management courses do not know how to apply them to project teams in other subject matter courses. Bolton's finding that this lack of satisfaction was due to students not knowing how to work together effectively as teams is supported by Spicer's (2007) findings that a common source of dissatisfaction is the power relationship between the members of a group. When one team member attempts to dominate the group's interaction without appropriate consideration to communication and process, dissatisfaction is likely to occur. Plus, dominance actually interferes with, rather than enhances, influence for men and women (Carli, Loeber, & LaFluer, 1995). Moreover, power cannot be possessed; it can only be understood through an examination of relationships (Bachrach & Baratz 1963). According to Groysberg and Slind (2012), a conversational-powered view of leadership can have more influence than the traditional top-down, command-control leadership strategy. Therefore, dissatisfaction with the power relationship between members of a group can be offset by adopting, reinforcing, and interweaving teamwork development with the learning of business content such as analytics.

Our review of the shared leadership literature indicates that fostering students' contributions and sharing of leadership functions is an appropriate pedagogical objective. Along with their development of a taxonomy of leadership functions, Morgeson et al. (2010) note the lack of research on the ways in which leadership is manifest in teams and call for inquiry regarding the sources of team leadership functions. We seek to address this crucial instructional need by examining the development of leadership functionality at the individual level.

Shared Leadership

Bersin (2016) notes that "leadership is now a 'team sport'" (1). This notion is consistent with the theoretical construct of shared leadership, wherein leadership functions are distributed or shared among the members of a team (Carson et al., 2007; Denis, Langley, & Sergi, 2012; Hernandez, Eberly, Avolio, & Johnson, 2011; Small & Rentsch, 2010). Thus, and in keeping with practice, scholars have "untethered leadership from the notion wherein a single leader influences others to the notion of shared or distributed leadership wherein mutual influence is paramount" (Bubenzer, 2016, 1). Hence, we reject the notion that seems to permeate higher education that those who are not formal leaders are unimportant. Leadership is inherently about power relationships. Instead of defining the individual as a "traditional" leader, we focus on re-imagining the potential of the collective with the understanding that following wisely and well is as important as leading wisely and well (Kellerman, 2012). Thus, we assert that the ability of a student to participate in the interchange of leader and follower functions is essential to the student's effective leadership development.

In our study, we adopt Astin and Astin's (2000) *transformative shared leadership* notion, which posits that leadership is a process that transforms a group from its current situation to some different future condition. Since any member of a group has the potential to foster change, each member is a potential leader as well as a follower. Thus, leadership is a collective or group process. To have effective, transformative, shared leadership, it is essential that the group functions according to certain principles and values and individual group members demonstrate qualities and values that contribute to the

functioning of the group. The group and individual qualities that are the ingredients for effective transformative shared leadership are summarized in Table 1 (Astin & Astin, 2000). These 10 qualities do not work independently; they interact with each other and thus are mutually reinforcing. It is the morphing of these qualities that allows group members to engage with each other and create group dynamics that yield synergistic results.

Table 1: Group and Individual Qualities of Effective Transformative Shared Leadership (Astin & Astin, 2000)

Group Qualities	Individual Qualities
Collaboration empowers each individual, engenders trust, and capitalizes on the diverse talents of group members.	**Self-knowledge** is an awareness of the particular talents and strengths, together with the personal limitations that one brings to the leadership effort.
Shared purpose addresses the fundamental goal of the group effort. It reflects the shared aims and values of the group members. Reaching agreement on a goal can be the most difficult change for any group.	**Authenticity/integrity** requires that one's actions be consistent with one's most deeply felt values and beliefs. It is the most critical factor in building trust with the leadership group.
Disagreement with respect means that differences in viewpoints among individual group members are both inevitable and desirable, but such differences must be engaged civilly and in an atmosphere of trust.	**Commitment** implies passion, intensity, and persistence. It supplies the psychic and physical energy that motivates the individual to serve, drives the collective effort, and sustains that effort during difficult times.
Division of labor requires that each team member make a significant contribution to the overall effort, and that all team members be clear not only about their individual responsibilities, but also about the responsibilities and contributions of other team members.	**Empathy/understanding of othe**rs**,** or the capacity to "put yourself in the other person's place," is critical to effective collaboration, building trust, and resolving differences in viewpoint. It also requires the cultivation of listening skills.
Learning environment is how members come to see the group—as a place where they can not only learn about each other, themselves, and the leadership effort, but also acquire the shared knowledge, interpersonal competencies, and technical skill that the group will require to function effectively.	**Competency** is the knowledge, skills, and technical expertise required for successful completion of the task.

Redesign of the Course

To test the efficacy of CLD, we selected a required business analytics course in our MBA program. This course has long been considered by students to be among the most challenging in the MBA program because of its quantitative content, as well as the required semester-long collaborative project. The ubiquitous role that the topic of business analytics plays in today's business environment and the demand for MBA graduates with such skills made a strong case for modifying the course so that it would be welcomed instead of dreaded by our students.

The course consists of four major topics: decision theory, Monte Carlo simulation, optimization, and forecasting. Each topic is covered in a three-week module using Excel with the Data Analysis and Solver add-ins as the computational platforms. We revised the course so that each of the major topics was organized into three weeklong subtopics that built on each other.

Our university has approximately 800 online and 100 on-campus MBA students. For the on-campus classes, we abandoned the traditional lecture format and flipped the course as described by Swart et al. (2015). Students are provided with video lectures and appropriate support materials so that they can come to class as if they already had attended a lecture on the material. Students are formed into teams and assigned to collaborate on a significant problem or mini-case covering the subtopic they covered outside of class. Each group session is designed to allow students to develop their leadership qualities, and the session culminates in an individual online quiz. Students may collaborate with their team members in preparing for quizzes and exams. However, the weekly quizzes, as well as the four exams, are individual. In total, there are 16 opportunities for students to develop their leadership skills while collaborating on solving their group problems. We mimicked the above course format in our online classes. All materials are the same; the only difference between online and on-campus classes is that all collaboration and communication in the online classes occurs virtually.

A major part of the course is the semester-long group project. The objective is to familiarize students with the application of the course topics to their areas of interest and prepare them to "sell" business analytics to top management. Teams form and then select an industry of common interest to all members. They are charged with conducting an in-depth literature search of business analytics applications in that industry. They are then asked to assume the role of employees in a hypothetical firm in that industry and deliver a business presentation to convince top management to invest in establishing a business analytics function in their company. Not unlike most presentations to top management, each team has a maximum of 30 minutes to deliver its pitch. Similarly, the stakes are also high; the presentation counts as 40% of their final grade.

The project provides another opportunity for CLD. The project teams must learn the subject matter and research how it is used in the real world. Once that information has been collected, they must decide on a strategy for the presentation, organize the presentation (including who on the team will do what and when), and then engage the audience so that they will be driven to action (e.g., voting their project as the best). Accomplishing all of this requires effective teamwork.

The transition from learning about leadership skills to being able to effectively exercise them is not transparent. It can be thought of as the transition from having read about riding a bicycle to actually riding one; having someone to support you can help prevent mishaps. To that end, we enlisted the help of the college's Business Communication Center (BCC). Such centers are a rapidly growing phenomenon, as judged by the 64 million results found when searching the term on Google. BCC services include coaching of teams in developing their strategy, their arguments, and the organizational logistics of telling their story. Coaching also focuses on building leadership and teamwork skills, including assisting team members in developing insights about the team's power relations and how those dynamics influence the team's decisions. Additionally, communication consulting is available. Consulting consists of assisting individual team members in overcoming severe anxiety, poor breathing, and distracting

speech sounds, among other challenges. These services are available on a voluntary basis to teams and students throughout the semester.

Hypotheses

To determine the effectiveness of the CLD model, we built a progressive sequence of research hypotheses:

Hypothesis 1: CLD significantly increases individual and group leadership qualities (Astin & Astin (2000); see Table 1).

Hypothesis 2: BCC coaching and consulting further increases leadership qualities (Astin & Astin, 2000).

Hypothesis 3: Increased leadership qualities lead to better course performance.

Hypothesis 4: CLD benefits have a long-term impact (i.e., beyond this course).

If Hypothesis 1 is not accepted, the rest of the work has reduced significance. Acceptance of Hypothesis 2 would suggest that we emphasize the use of the BCC by our students. Hypothesis 3 evaluates the impact of CLD in this particular course, while Hypothesis 4, understanding the pitfalls and critiques of using self-reporting questionnaires (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), tests whether students who experience CLD in this course exhibit better leadership in future courses.

Preparing for Team Collaboration

Before testing the above hypotheses by designing questionnaires and collecting and analyzing data, we had to define how we were going to prepare students to engage in effective team collaboration. Effective teamwork involves understanding basic leadership principles, mutual knowledge (who am I, who are you?), group knowledge (who are we together?), collaboration (how are we going to work together?), and evaluation (how are we going to know how we are doing?) (Berens, Ernst, & Smith, 2004). Underlying these facets is the absolute need to know how to communicate effectively (Flauto, 1999). We distilled the above knowledge and organized it into a preliminary leadership module to be completed during the first two

weeks of the course. The module consists of four components: review of leadership concepts, presenting to top management, team formation, and team charter.

Review of Leadership Concepts. This component provides students with a review of the individual and group leadership abilities that underlie transformative leadership qualities (Astin & Astin, 2000). Students are also reminded that high-performing teams do not just happen but are a result of a cyclical, recurring process that includes forming, storming, norming, and, eventually, performing (Karriker, 2005; Tuckman, 1965). This review is presented in a 45-minute, narrated PowerPoint that is posted on the course's site on the university's learning management system (Blackboard). An online quiz is required to encourage viewing.

Presenting to Top Management. As noted, communication basically trumps all other leadership abilities, including those exhibited in Table 1. If you cannot communicate effectively, you cannot lead effectively (Flauto, 1999). Even worse, if you cannot communicate effectively, you might never get a chance to lead. Presenting to top management is a rare opportunity to make an impact, but such presentations must be short, focus on results, and bear little resemblance to class-related project presentations. Unfortunately, this kind of presentation training is notoriously absent from most MBA curricula (Samaddar & Nagundkar, 2019). In this portion of the preliminary leadership module, all students receive a lecture by the BCC that summarizes the key elements of an effective presentation to top management. Such presentations, must focus on outcomes, not processes, to be successful and have four goals (Kosslyn, 2007; O'Dor, 2017): Connect to the target audience, direct and hold attention, create understanding and memory, and drive the target to action. Students are taught to develop a strategy, organize their presentation, and engage their audience to achieve each of these goals.

Team Formation. Team formation requires that members address "who are you, who am I?" and "who are we together?" Team composition has been identified as an important factor that affects team success (Narain, 2014). Wong and Burton (2000) provide evidence that virtual teams with no history together

that are located apart from one another demonstrate greater flexibility, fewer errors, and higher production, but coordination and timely completion is very challenging. Wong and Burton also found that virtual teams made of diverse cultures and organizations make more errors due to communication misunderstandings and culturally based assumptions. Similarly, Staples and Zhao (2006) found that heterogeneous virtual teams have better performance and less conflict than heterogeneous face-to-face teams, but homogeneous teams have more positive attitudes and less conflict than any heterogeneous teams. Given these findings, the recurrent dilemma facing instructors, particularly in online courses, is how to structure virtual teams that may be diverse, physically distant, and lacking history.

Our approach to team formation loosely mimics the drafting process used in fantasy sports leagues. Students are asked to post information about themselves on the discussion board. This information includes the results from a personality type indicator (PTI) test (students are asked to use https://www.16personalities.com/free-personality-test, which is based on Meyers-Briggs Trait Indicators) and the results from a locus of control (LOC) test (http://www.psych.uncc.edu/pagoolka/LC.html). Students are directed to Berens et al. (2004) to review their understanding of how to use the PTI information for team building and to Norwicki (2016) for reviewing their understanding of how to use the LOC for team-building purposes.

Students are asked to post additional information on the discussion board about themselves that will help in determining whether they are a "good fit" for a team and vice versa. This material may include their degree(s), employer/position, and physical location. In addition, they are also asked to list what they consider to be their strengths, their weaknesses, the qualities they apply when working in a team, the qualities they value in people with whom they work, and their individual top three values.

It takes at least two students to create a team, which is formed by seizing an open group (e.g., a group set up by the professor with no current members) on Blackboard's group tool. Once a team has been formed, the team members can

contact students not yet part of a team (free agents) who appear to be a suitable match. Similarly, free agents can contact a team that appears to be a good fit for them and ask to be "drafted" by that team. Depending on class size, teams should have between four and six members, and the number of teams should be limited to accommodate such group sizes (roughly the number of students in the class divided by the desired team size). The entire drafting process is accomplished within one week. Free agents who have not been drafted in that time are assigned to groups that are not at capacity or vacant groups at the discretion of the instructor.

Team Charter. The purpose of developing a team charter is to jumpstart teamwork, help avoid or quickly resolve common problems, and facilitate improvement of the team's performance. This task must be developed jointly because it will serve as a contractual document, signed by every team member, specifying how the team will work together. Like any contractual document, noncompliance has consequences. In our case, these are determined through a peer evaluation process that can result in a grade reduction for any noncompliant member of the group. Many templates for a team charter can be found via an online search (e.g., Stoner, 2016).

Contextualizing Leadership Development

Armed with the knowledge for engaging in effective team collaboration, students are provided with opportunities to practice what they have learned. Figure 1 (on the next page) illustrates the process. After completing the preliminary leadership module, student teams are assigned a problem or mini-case that requires the collaborative development of a spreadsheet to answer the questions that demonstrate mastery of the topic's learning objectives. After the instructor verifies that the spreadsheet appears to be correct, students are given an individual quiz to demonstrate that they have mastered the learning objectives. The team then repeats the process for the next topic. Knowing that they will be tested individually is an incentive for them to be serious about collaboration. Being serious about collaboration will help them learn the material better, so they

have a better chance of doing well on the quiz. At any time, they can elect to avail themselves of the services provided by the BCC.

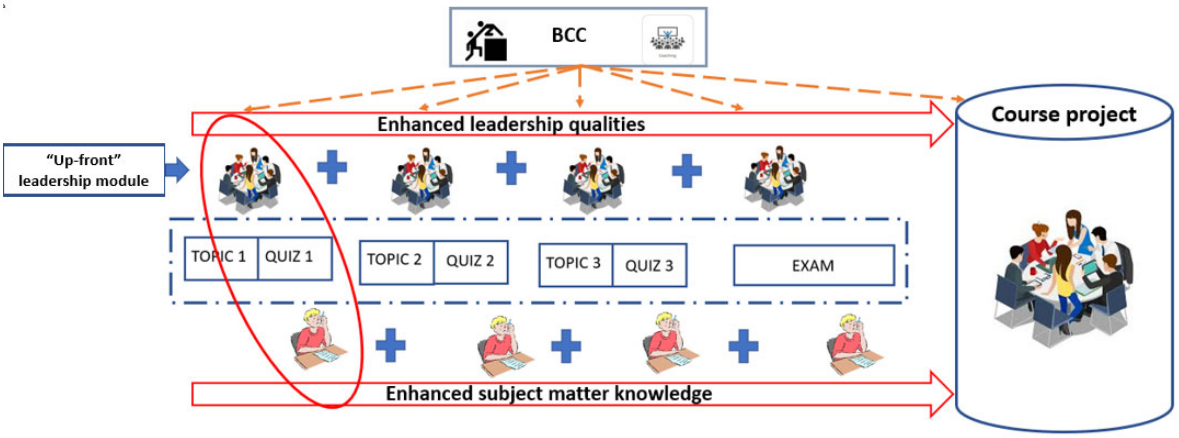

Figure 1. The contextualized leadership development model (CLD)

The preceding process yields dividends on the project as well. Better learning will allow them to better understand the applications they find in the literature. Better teamwork will help them develop a better presentation, and working with the BCC while preparing their presentation will help them effectively communicate complex topics such as analytics to top management.

Method

A total of 136 online MBA students from a large university in the southeastern region of the United States completed CLD during the spring and fall semesters of 2016. These students were then asked to respond to a questionnaire regarding the CLD model's effectiveness. We selected the online version of the course for our data collection and analysis because virtual teams provide an additional layer of instructional complexity and are common in global corporations (Minton-Eversole, 2012). As Gera (2013) relates, the trend for virtual teaming will become the permanent work structure of an organization. Thus, utilizing virtual teams in this study offers a more realistic test of the CLD model.

Data Collection

A questionnaire based on Table 2 was used to collect data. Part A of the questionnaire shows the indicator Fall 2016 to reflect which semester the data was collected, and the indicator BCC to reflect which students availed themselves of the assistance provided by the BCC. Part B reflects student perception of the impact of CLD on their individual and group leadership qualities, as well as their effectiveness as a leader. Responses were measured on a seven-point Likert scale where 1 = strongly disagree and 7 = strongly agree, and the Cronbach's alpha for this scale was .942.

Table 2: The CLD Questionnaire

A. Categorical Values	
Fall 2016 semester (Fall 2016 = 1; Spring 2016 = 0)	
BCC communications coaching or consulting (BCC = 1 [yes]; BCC = 0 [no])	
B. The Up-front Teaming/Leadership Component of This Course Helped Me to	
Q3	More effectively collaborate with my team members
Q4	More effectively identify and pursue common goals
Q5	Recognize and appreciate individual differences and employ civility in interaction
Q6	Divide labor, accept responsibility, and be productive
Q7	Embrace my group as a supportive learning community
Q8	Become more self-aware of my own beliefs as well as strengths and weaknesses
Q9	Be more authentic and able to build trust
Q10	Become more passionate, persistent, and intense in achieving course goals
Q11	Be more empathetic and understanding of my teammates
Q12	Acquire the knowledge, skills, and technical expertise required to complete the course
Q13	Become a better leader

Analysis and Results

The data derived from the questionnaire were analyzed, and the descriptive statistics obtained are shown in Table 3 (on the next page).

Table 3: Descriptive Statistics of Responses to CLD Questionnaire

	N	Minimum	Maximum	*M*	*SD*
Q3	136	1.0	7.0	5.684	1.2864
Q4	136	1.0	7.0	5.757	1.2442
Q5	136	2.0	7.0	5.831	1.1710
Q6	136	1.0	7.0	5.838	1.1432
Q7	135	2.0	7.0	5.881	1.0793
Q8	135	2.0	7.0	5.726	1.1226
Q9	135	1.0	7.0	5.526	1.2389
Q10	134	1.0	7.0	5.567	1.2472
Q11	135	1.0	7.0	5.504	1.3208
Q12	136	2.0	7.0	5.581	1.3141
Q13	136	2.0	7.0	5.816	1.0485
Valid *N* (listwise)	131				

Hypotheses 1

To test whether CLD significantly increases Astin and Astin's (2000) group and individual leadership qualities (Q3–Q12), as well as overall leadership (Q13), we performed a one-sample t-test. The results are exhibited in Table 4 (on the next page). We tested the null hypothesis H_0: $\mu = 5$ to the alternate hypothesis H_a: $\mu > 5$ for the mean response to each of the questions, Q3 to Q13, at a significance level of $\alpha = 0.001$. The test statistic is the mean responses of all 136 students to each of the questions. We selected the value of 5 because it corresponds to "somewhat agree" on the seven-point Likert scale. Rejecting the null hypotheses indicates that the average response is statistically better than somewhat agree with the question and, thus, students perceived that the corresponding leadership quality is enhanced because of CLD. The analysis indicated that the null hypothesis was rejected for each of the questions and, therefore, supports Hypothesis 1.

Table 4: T-test Results for Improvement in Transformative Leadership Abilities

	One-Sample Test Test Value = 5						
			Sig. (2-tailed)	***M difference***	***Interval of the***		***Responses ≥ 5 (at least somewhat true; percentage)***
	t	***df***			***Lower***	***Upper***	
Q3	6.199	135	.000	.6838	.396	.972	88
Q4	7.099	135	.000	.7574	.479	1.036	88
Q5	8.275	135	.000	.8309	.569	1.093	87
Q6	8.551	135	.000	.8382	.582	1.094	90
Q7	9.489	134	.000	.8815	.639	1.124	87
Q8	7.514	134	.000	.7259	.473	.978	87
Q9	4.933	134	.000	.5259	.247	.805	81
Q10	5.264	133	.000	.5672	.286	.849	80
Q11	4.431	134	.000	.5037	.207	.801	80
Q12	5.155	135	.000	.5809	.286	.875	79
Q13	9.078	135	.000	.8162	.581	1.051	90

While the t-test indicated that the means of the responses to Q3 through Q13 are significantly higher than the threshold value of 5, the last column of Table 4 indicates the pervasiveness of the results. Q6 and Q13 received 90% positive responses (5 or above), while Q10 and Q11 received 80% positive responses—and these were the smallest number of positive responses for any of the abilities. We note that the perceived increases in leadership abilities (Q3–Q12) are accompanied by a statistically significant increase in the perception of having become better leaders (Q13).

Hypothesis 2

To determine whether BCC services enhanced leadership qualities, the responses to Q3 through Q13 from students having used those services (BCC = 1) and students who did not (BCC = 0) were compared. Table 5 (on the next page) exhibits the descriptive statistics for both populations.

Table 5: Descriptive Statistics of Responses of Non-BCC and BCC Users

	BCC = 0			BCC = 1		
	N	***M***	***SD***	***N***	***M***	***SD***
Q3	46	5.174	1.4952	90	5.944	1.0847
Q4	46	5.261	1.4210	90	6.011	1.0652
Q5	46	5.370	1.2886	90	6.067	1.0364
Q6	46	5.500	1.3622	90	6.011	0.9772
Q7	45	5.578	1.1178	90	6.033	1.0326
Q8	45	5.378	1.2301	90	5.900	1.0283
Q9	45	5.067	1.4045	90	5.756	1.0842
Q10	46	5.087	1.3956	88	5.818	1.0886
Q11	46	5.196	1.5437	89	5.663	1.1672
Q12	46	5.022	1.5127	90	5.867	1.1036
Q13	46	5.478	1.2951	90	5.989	0.8545
Valid *N* (listwise)	43			88		

Figure 2 provides a graphical comparison of the means. Students who availed themselves of the services provided by the BCC (BCC = 1) reported a greater increase in each leadership quality than those who did not use these services. To determine whether this difference was statistically significant, independent sample t-tests for the comparison of means from populations with unequal variances were used.

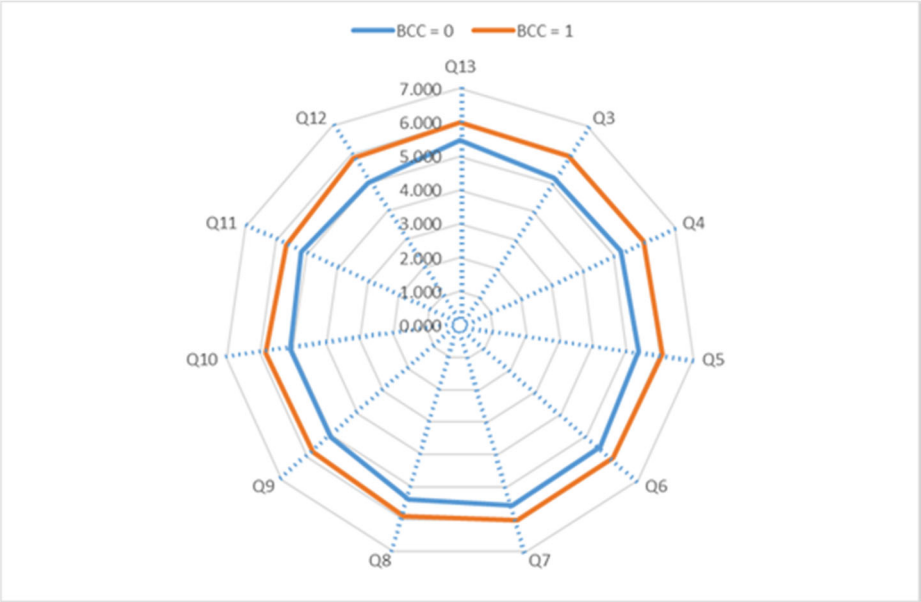

Figure 2: Graphical comparison of differences between mean responses of non-BCC and BCC users

This test requires that the samples be drawn from normal distributions. While we had no reason to believe that they were (or were not) different, the non-parametric Mann-Whitney *U* test was also used to identify differences between the two groups. The results exhibited in Table 6 indicate that all but three *p* values are above the 0.05 significance level. The non-parametric test indicates that there were no statistical differences in the impact of communication coaching and consulting on Q8 (CLD helped me to become more aware of my own beliefs as well as strengths and weaknesses), while the independent sample T-test does. Both tests agree that communication coaching and consulting have no statistically significant effect on Q11 (CLD helped me to become more empathetic and understanding of my teammates). Given that all differences are directionally supportive, and only one does not indicate that the difference is statistically significant, we conclude that Hypothesis 2 is partially supported.

Table 6: Test of Significance Results for Difference in Mean Responses for BCC Users and Non-BCC Users

	M		***p* Values**	
	BCC = 0	**BBC = 1**	***t*-test**	***u*-test**
Q3	5.174	5.944	0.003	0.001
Q4	5.261	6.011	0.002	0.000
Q5	5.370	6.067	0.002	0.000
Q6	5.500	6.011	0.027	0.028
Q7	5.578	6.033	0.027	0.012
Q8	5.378	5.900	0.017	0.112
Q9	5.067	5.756	0.005	0.004
Q10	5.087	5.818	0.003	0.002
Q11	5.196	5.663	0.075	0.112
Q12	5.022	5.867	0.001	0.001
Q13	5.478	5.989	0.018	0.032
N	46	90		

Hypothesis 3

Figure 3 (on the next page) shows the impact of CLD on the final grade distributions in the course. Prior to instituting the CLD model, the distribution of grades in the class had approximately the same number of As and Bs (note that this is a graduate-level class). The sum of the percentages of As and Bs in any

given term does not necessarily add up to 100%, since there is a small percentage of lower grades that are not shown. The immediate effect of CLD was to increase the percentage of As in the class. We attribute that to the impact of effective teamwork in which individuals assume partial responsibility for the performance of the entire team. Individuals with lesser ability are encouraged to seek help from their teammates, while individuals with greater abilities are encouraged to help their teammates. Thus, we conclude that Hypothesis 3 is supported.

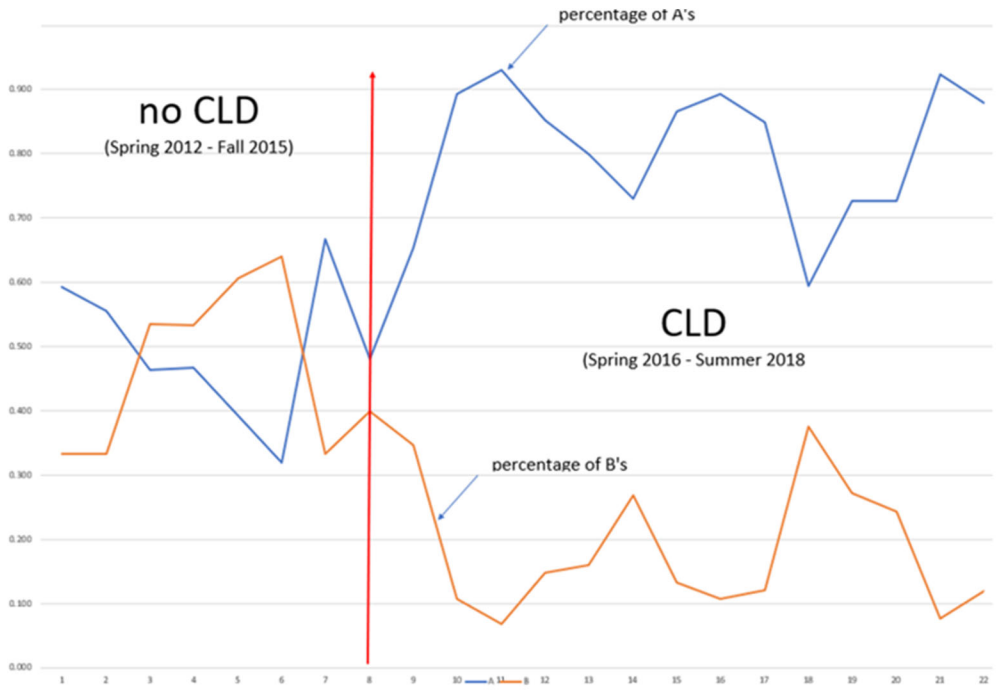

Figure 3. Impact of CLD on final grade distribution

Hypothesis 4

When respondents provide both the data for the dependent and independent variables, as was done in parts of this study, common method variance may ensue. Podsakoff et al. (2003) list more than 20 potential causes of common method variance, making it an insidious issue, the existence of which is difficult to prove. To eliminate such concerns, we examined the performance of 995 former and current MBA students in the MBA capstone course normally taken in the last semester of the program. All students had the same instructor for the capstone course. A total of 343 students had the same instructor for their

business analytics course; 217 students took the business analytics course with CLD, and 126 students took it without CLD. Another 652 students had a different instructor for the business analytics course and no CLD. All students took the business analytics course prior to or concurrently with the capstone course.

A portion of the capstone course is taught via a business simulation in which student teams compete against each other. The teams typically have three to five members. At the end of the semester, each student grades each member of their team based on several criteria. These grades are averaged to determine the overall peer evaluation grade in the course. It should be noted that the students and teams in the capstone course are independent of which students are in which teams in the business analytics course. As such, the peer evaluation score is an independent assessment of a student's leadership qualities.

To determine whether students who experienced the business analytics course with CLD were perceived as better leaders in the subsequent capstone course, the 995 students were categorized as follows:

X1—students who took business analytics with a different instructor (no CLD);
X2—students who took business analytics concurrent with the capstone course;
X3—students who took the capstone course before business analytics;
Y1—students who took business analytics with CLD; and
Y3—students who took business analytics before CLD was incorporated, but with the same instructor who developed CLD.

These categorical variables were used as the independent variables in a stepwise multiple regression with the overall grade as the dependent variable. The SPSS results are shown in Table 7 (on the next page). While the R^2 indicates that the model explains little of the variance in overall grades, there is a strong significant relationship between the overall grade and Y1, students who took business analytics with CLD. We can interpret this result as stating that we cannot forecast a student's grade with any degree of precision by only knowing whether the student has taken CLD. However, we can say that the model

indicates that there is a significant impact on the overall grade because of CLD (Minitab, 2014). Hence, Hypothesis 4 is supported.

Table 7: Stepwise Multiple Linear Regression Results to Determine Factors That Significantly Influenced Student Grade in the Capstone Course

Model Summary				
Model	***R***	***R²***	**Adjusted *R²***	***SE* of the Estimate**
1	0.88[a]	0.008	**0.007**	5.037
a. Predictors: (Constant), Y1				

ANOVA[a]						
Model		**Sum of Squares**	***df***	***M²***	***F***	**Sig.**
1	Regression	194.935	1	194.935	7.682	0.006[b]
	Residual	25,196.274	993	25.374		
	Total	25,391.208	994			
a. Dependent variable: Overall average b. Predictors: (Constant), Y1						

Coefficients[a]						
		Unstandardized Coefficients		**Standardized Coefficient**		
Model		**B**	***SE***	**Beta**	***t***	**Sig.**
1	(Constant)	89.612	0.181		496.206	0.000
	Y1	1.072	0.387	0.088	2.772	0.006

Figure 4 (on the next page) provides further insights. It plots the actual versus predicted scores, as well as the upper and lower 95% confidence intervals about the predicted values. The data are a subset of the data used for the regression and include all instances of students taking business analytics before and after the instructor developed and implemented CLD. The low R^2 is due to the high variability in the peer evaluation grades. There are a relatively large number of outliers (e.g., actual grades that fall outside of the 95% confidence limits for predicted grades). The normal procedure for such occurrences is to investigate the outliers for assignable causes. In this case, the data correspond to past students, most of whom have graduated and moved on to parts unknown. Thus, we can only speculate about the reasons for the lower out-of-control grades;

most likely, they correspond to students who did not participate in the team activities and were evaluated accordingly by the rest of their teammates.

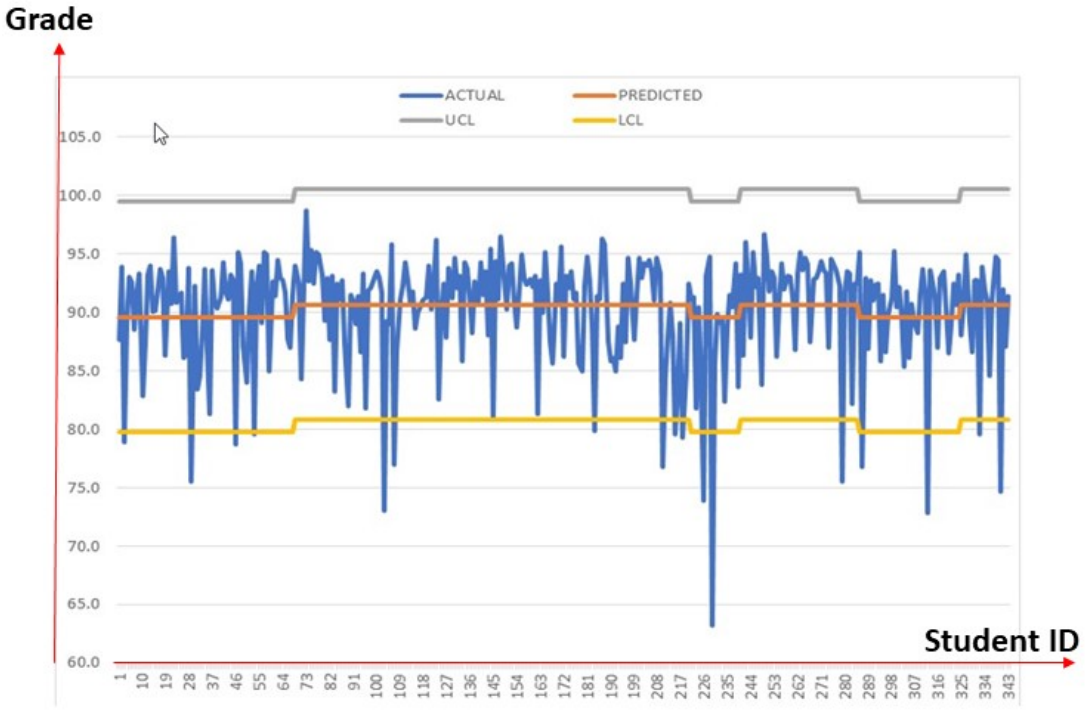

Figure 4. Plot of actual vs. predicted grades from regression results of Table 7 with confidence intervals

Discussion

This research was motivated by the body of evidence indicating that, while many instructors assign team projects in their classes, few include instruction on how effective teamwork may be achieved. This practice leads to a host of behaviors that includes free-riding (students not doing their share of the work) and the resulting uneven (and unfair) distribution of work to those students who step in to do the work because they want a good grade.

The failure of faculty to provide leadership/teaming instructions to their classes can often be explained by prerequisite courses intended to cover leadership principles. However, such courses tend to deliver leadership knowledge, disregarding the notion that leadership can only be developed by repeated exposure to situations that require the application of this knowledge. Reading about leadership does not make a leader.

In this article, we present the results of seamlessly integrating leadership knowledge acquisition, leadership development, and subject matter learning into a cohesive whole through a concurrent, repetitive instructional model that we have dubbed *contextualized leadership development* (CLD). The overarching goal of CLD is to improve team project results by improving the shared leadership/teaming skills of students throughout the course.

We find that using the preliminary leadership module, requiring students to enact team and leadership skills throughout a 16-week semester, and offering the services of the BCC fosters effective leadership, while students concurrently absorb discipline-specific content. As anticipated, CLD increases student perceptions of leadership abilities, which in turn, leads students to perceive themselves as better leaders in general.

The services of the BCC in terms of communication and team coaching and consulting—at both team and individual levels—improve shared leadership. The importance of coaching is not surprising; Thach (2002), for example, reported that coaching and feedback improved leadership effectiveness as much as 60%. Finally, leadership has been previously linked to team performance (Bass, Avolio, Jung, and Berson, 2003; Rao and Kareem Abdul, 2015).

Most other individual components of the CLD model are supported in the literature. For example, the process of having students develop a team charter essentially creates an action plan for students. Holten, Bøllingtoft, and Wilms (2015) and Kelloway, Barling, and Helleur (2000), among others, report that such action plans are proven methods for enhancing transformative leadership behavior. While these components have been supported individually in the literature, we do not find evidence of any attempts to integrate all of these components concurrently in a course with separate and non-related subject matter content, and there appears to be no evidence of better outcome achievements.

While the quantitative results presented in this article speak for themselves, the reaction from students is overwhelmingly positive as reflected in the small sample of unsolicited comments below:

In one word, the thing that surprised me the most about collaboration in the course is RESULTS. I think we had a team average in the mid-80s in Exam 1 where we did not collaborate at all and now we are up to over 97% in Exam 2. That is a lot of improvement in just 4 weeks and really all it took was collaboration and actual teamwork. It's really not that surprising when you think about it since this class is unique in the way that it encourages collaboration and it is a refreshing change. For four people who don't really know each other to come together in pursuit of a common goal, it really says something special about who you are. Maybe you should go and teach this class to Congress!

Collaboration is a buzzword we use at work. Everyone just throws it around. This class was really the first time I've had to truly jump in and really collaborate with a team of peers. We are all aiming for the same goal. We all want to make an A in this extremely difficult class. What was a little surprising was that not everyone measures success in the same way. I saw this clearly when doing our charter document. Success is an A in the class of course, but some said it meant working ahead or attending meetings on time or even meeting delivery deadlines. So, we really had to come together and collaborate in order to truly unify as a team and determine our measurable goals. And speaking of measurable goals—that was another learning point relative to collaboration. Truly measurable goals are not that easy to craft! As a team, you really have to unite on that so you are all working toward the same end goals.

The success that we've had so far in the course has reinforced my own confidence in working in a team setting, as well as my leadership abilities. I have always had a propensity to dislike working in a team, as it always seems like I am stuck carrying a bulk of the weight in order to achieve high levels of success. However, with this high-performing team, I feel much more open and willing to work collectively with another team in the future. [From] what I have learned so far from our own highly engaged and effective team, I see that by spreading the work around evenly and holding each other accountable (through means such as the team charter), we can ultimately lighten the workload for each individual team member, making it much easier for everyone on the team in the long run. I feel that working together in this high-performing team has helped me to fine-tune my leadership abilities. I have been fortunate enough to keep pace with and even stayed ahead [of] the course's aggressive schedule. This has allowed me to routinely be the first to complete a section, topic, or quiz. As such, I have grown marginally more comfortable in tapping the uncharted waters of being the first in the group to do or share something with everyone else.

This class has been a huge challenge and immensely interesting at the same time. Never in my 20+ years of professional work experience have I seen some of the tools or theories or methodologies you have taught us this semester. I've learned a great deal—not just about the subject matter, but also on how to better work and collaborate with a team.

Conclusion

In this study, we took a project-based, graduate online course and improved student outcomes by reviewing and then developing student shared leadership/teamwork skills concurrently with their learning of the subject matter throughout the course. By doing so, we overcame the traditional schism between instilling leadership knowledge and developing leadership abilities. Our exploration of the development of leadership functionality in teams contributes to the shared leadership literature and enhances our understanding of the interchange of leader and follower functions in predicting team and individual performance.

We incorporated a leadership concepts review, communication instruction, a team member drafting process, and team charter development during the first two weeks of the course. The deliberately structured student teams were then allowed to proceed with their semester-long group project and strongly encouraged to seek communication coaching and consulting from the BCC. Simultaneously, students studied the subject matter of the course. Their learning of the subject matter was assessed by 12 quizzes and four exams spread throughout the semester. Collaboration was allowed for the preparation for each quiz and exam, but each was taken individually. Thus, students had 16 opportunities to collaborate in addition to the team project and, by doing so, concurrently developed their subject matter knowledge and leadership qualities. The results of the CLD model indicated a significant improvement in course results and enduring improvement in leadership effectiveness.

While some of these factors have previously been examined individually in the leadership literature in varying contexts, we believe that this study is the first to investigate all of these elements simultaneously. Furthermore, unsolicited student comments indicate an acquisition and application of team and leadership skills in the classroom that can be readily transferred to the workplace.

The CLD model advocated in this study promotes leadership qualities and enhances perceptions of leadership, especially when self-awareness, knowledge and skill acquisition, and a learning community are present. With businesses now requiring successful teamwork as the way forward, the CLD components—

leadership concepts review, communication instruction, team member drafting process, team agreement, and team coaching—can be adopted and adapted by corporations to enhance team, and therefore corporate, performance. Doing so would ensure that teams function in an optimal manner.

We hope the improved teamwork and performance reported herein will encourage other instructors to adopt the model outlined in this study. We expect that doing so will lead to improved team experiences, heightened team skills, and ultimately, graduates whose improved leadership skills are an asset to their employers and communities alike.

Limitations and Future Research

As with all research, this study does have some limitations. The course selected for this investigation is a highly quantitative course that most students approach with some degree of trepidation. The recognition of this fear and the challenging nature of the course may engender a level of reliance on collaboration with teammates that less challenging courses may not. Future researchers should test CLD with a course that is perceived as less challenging to determine whether similar findings result.

All research is conducted with fully online courses and, thus, the results are particularly germane to virtual teams. The findings may not be generalizable to seated courses. Virtual teams have certain advantages over face-to-face teams that include, among others, providing a risk-free environment that encourages a frank exchange, minimizing the potential for confrontation, and neutralizing status indicators and social distractions (Arend, 2009). Additional research to determine if similar results to those we obtained for online classes are found for seated classes would be valuable for those contemplating using CLD in such classes.

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The Impact of Followers' Expectations on Leaders' Behavior: A Case Study of Evangelical Church Leadership in Jordan*

Emil Abujaber, Maurice A. Buford, James A. Wood Jr., and Bruce E. Winston
Regent University

This study explored the influence of followers' expectations on leaders' behavior. Through a qualitative bounded case study design of six Evangelical church leaders in Amman, Jordan, the study sought to answer two questions: How would leaders act and behave if their implicit leadership theories (ILTs) were in direct conflict with those of their followers? Would pastors conform to followers' expectations if they clash with the leaders' expectations, specifically if they conflict with the biblical core values? The study found that leaders' behavior and adaptation under pressure depend on two factors: mature character and motivation. The study also found several pressure sources and confirmed that parents and other contextual variables influence the leaders' ILT structures. The study contributes to the scholarly and practitioner literature in filling a research gap of leaders' ILTs in a specific culture and provides several recommendations for future studies and applications.

Key words: bounded case study, categorization theory, Evangelical church leaders, implicit leadership theory, social cognition theory

The study conducted in 2018 was part of a larger project with three research questions, of which two of them, along with eight of the original 14 interview questions, are used in this presentation. The research was based on implicit leadership theory (ILT) and concentrated on the knowledge structure, patterns, scripts, expectations, and personal schemata of leaders and how they affect their behavior. The foundation of the study came from two key references.

First, the literature review shows little attention to leaders' process of knowledge and ILT construction building and no attention to the bearing of those variables on leadership behavior. This is specifically demonstrated in the case of incongruence with followers' ILT, seen in the studies of Keller (1999, 2003) and Offermann, Kennedy, and Wirtz (1994), which focused primarily on followers' ILTs. It is also shown in Wofford, Goodwin, and Whittington's (1998) study, which examined how leaders' cognitive scripts guide their actions but did not explore

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the implication of any clash between leaders' and followers' ILTs. Second, Lord (2005) expresses the significance of considering the ILTs of leaders and how they might guide the representation of leadership cognitively and affectively, mainly that leaders and followers create the process of leadership together in a context. The research questions that emerged from the theories follow:

> Research Question 1: How would leaders act and behave (or change behaviors) if their self-schema, ILTs, and scripts were in direct conflict with those of their followers? Would they change and adapt to fit the prototypes or would they persist and risk losing influence?
>
> Research Question 2: Would pastors conform to followers' ILT expectations if they clash with the leaders' own expectations and behaviors?

Additionally, the research questions answer Lord's (2005) call for research.

> Much could be gained if future leadership research systematically investigated how implicit theories guide the enactment of leadership, particularly if implicit theories were broadly construed to include both cognitive and emotional components. Because both leaders and followers are guided by their implicit theories, one may view them as jointly constructing meaningful leadership processes. Such a joint construction should be facilitated when the dimensions underlying a leader and follower's implicit theories converge. (30)

The research questions also address Schyns and Meindl's (2005) comment that

> not only followers' behavior and wellbeing are influenced by implicit leadership theories (through fulfillment or non-fulfillment of their expectations), but also—subsequently—leaders' reactions. It seems easier for leaders to lead a group that has expectations in line with his/her behavior than to lead a group that has expectation [*sic*] he or she cannot fulfill. (78)

Specifically, how would leaders behave or change behaviors if their self-schema, ILTs, and scripts conflicted with those of their followers? Would they turn and adjust to fit the preexisting prototypes, or would they stay and risk losing influence? The proper technique for such investigation fits the in-depth interview method. Data were collected from Evangelical pastors in Amman, Jordan, because the lead author is located there. Evangelicals were chosen because the denomination is the smallest in the Jordanian Christian community, approximately 10,000 of the 3% (about 297,000) of the country's population that are Christians. Furthermore,

the small number is appropriate for a bounded cases study using face-to-face, recorded in-depth interviews until the point of saturation.

Sociology, social psychology, categorization theory, social identity theory, and social cognition theory include many ideas about ILT that focus on followers and their role in the leadership experience as social actors and influencers who construct experiences and meaning in social settings (Meindl, 1995). The focus on followers' experiences, role, and influence in leadership literature was virtually nonexistent until the introduction of ILT. The theory emphasizes followers' perceptions and their influence on leaders and the leadership process (Lord & Maher, 2003).

This view on followers' perceptions endeavors to address many unanswered questions regarding leaders' traits and characteristics, their substantial role in influencing subordinates, and whether they are neutral or included in the sense-making process of leadership. The theory provides explanation of how followers perceive leaders, process information to make decisions and judgments, accept or reject influence attempts from leaders, build scripts and patterns of behavior that are contingent upon context, reciprocate influence, and attribute certain events to leaders depending on inferential processes (Epitropaki & Martin, 2004; Keller, 1999, 2003; Lord, Brown, Harvey, & Hall, 2001; Lord & Emrich, 2000; Lord & Maher, 2003; Meindl, 1995; Offermann et al., 1994). Meindl (1995) argues that leadership is socially constructed in the minds of both leaders and followers and that observers romanticize the phenomenon and use it as a distorted and simplified filter to understand a complex world (Schyns, Meindl, & Croon, 2007).

Method

The research design defines the direction and activities the researcher follows, guided by research questions (Yin, 2009); likewise, it also marks the launching point of the action plan (Merriam, 2009). The research questions in this study sought to explore leaders' cognitive and behavioral processes under a specific context; therefore, a qualitative research strategy was followed. This strategy is appropriate because we sought to understand the meaning of people's

experiences under real-world conditions, observing without interfering in their activities, behaviors, perspectives, and views, and portraying their living state to describe or develop a new theory (Yin, 2011).

The current study determined the unit of analysis in Jordan Evangelical churches as a geographic boundary, focusing on pastors as leaders under investigation. The study followed Yin's (2009) multiple-case research design recommendations and sampling rationale. According to Yin, for literal replication within a multiple-case design, the most effective samples will have six to ten cases. We attained saturation after six interviews.

For sample choice, we used a purposeful sampling strategy. As Patton (2015) argues, "studying information-rich cases yields insights and in-depth understanding rather than empirical generalizations" (264). Moreover, purposeful sampling helps the researcher investigate and determine the cases that best fit the research investigation and design (Merriam, 2009), and the samples must be information-rich and deep in substance by nature (Patton, 2015).

For that reason, we established a selection criterion to determine the participants who were chosen, as Merriam (2009) recommends. The purpose of the criterion is to help choose who gets included in the study and the logic behind those decisions. For this study, the leaders qualified according to their seniority in church leadership. This was important to assure credibility and responsibility and ensure full exposure to relational interactions with followers as well as personal development during time serving in their position. The sampled leaders each had more than 10 years of experience. To guarantee experiences with multiple group dynamics and exposure to social pressures, each of the pastors worked in the leadership of a church with at least 100 members.

The lead author contacted the leaders directly by telephone and asked for permission to schedule an appointment in their office to gather the data in person. He explained the nature of the study, but not the full details of the theory or research inquiry to decrease any effect of public shaming or saving face, if any, until the end of the interviews. The lead author made sure that the participants understood that their confidentiality was a high priority and no names

would be shared in any report. We asked for permission to record the entire interview and take notes during the meetings. Finally, to control for any personal bias or prejudice, the lead author did not choose leaders with whom the lead author has served in local churches, has any kin relationship, or was a member of any of the participants' churches.

Participants

The list below describes the six participants, using pseudonyms for each.

- Nasim is 53 years old, finishing his PhD, and pastoring a local church in Jordan. He has been in ministry for 26 years, is married with two children, and serves as a full-time senior pastor of a church with a diverse population of young people.
- Sanad is 63 years old, married with two children, and pastoring a local church. He has a PhD in theology. He is also founder and president of Jordan's most prominent Evangelical seminary and author of many books in Arabic and English as well as published papers. He has more than 40 years of experience in ministry and leadership.
- Maher is 46 years old, a full-time senior pastor, and married with two children. He has a master's degree in theology and more than 20 years of experience in ministry and 11 years in church leadership.
- Nezar is a full-time senior pastor who is married with three children. He has a doctoral degree in ministry and more than 24 years of experience in church leadership in Jordan.
- Majdi is a full-time senior pastor who is married with two children. He has a master's degree in theology and more than 40 years of experience in ministry and church leadership in Jordan.
- Shareef is a 55-year-old co-pastor of a local church in Amman, Jordan. Previously, he was a senior pastor in a village in the north of Jordan. He has 35 years of experience in ministry and is currently leading a Christian nonprofit organization. He is married with three children and has a doctoral degree in ministry.

Results

In this section, we present the codes, or summative words that capture the essence of collected data (the frequency of each code is shown in parentheses), which were grouped into categories/themes for each of the interview questions. An example from one of the participants is also provided for each interview question. Interview questions were numbered in relation to the appropriate research question they were intended to answer.

Interview Question 1-1: What would you do if there were conflicts between cultural norms/values and church values?

The first category—biblical convictions (24)—grouped the following codes: high biblical values (12), position (8), and behavior (4). The category reflected a theme of the importance of biblical values to leaders and their strong convictions and unwillingness to compromise in thought, stance, or conduct, especially when the question asked them to choose between holding firm to biblical principles and cultural pressure. All leaders answered with a firm passion for biblical principles.

The second category—leaders' ideology (23)—included the following codes: beliefs (9), attitudes (5), perspectives (4), ideology (2), worldview (2), and paradigm (1). These combined codes specify all the factors that make up leaders' ideology and guiding perspectives when leaders address cultural pressures upon their leadership and biblical convictions.

The third category—cultural pressure (11)—grouped the following codes: conflict of values (9), cultural influence (1), and pressure (1). The category represents the weight and pressure that culture wields on leaders in their daily interactions with followers; specifically, the pressure leaders feel when they need to uphold biblical values as a result of extreme disagreement between the external culture and the cultural norms and traditions within the church. It was clear that all leaders have felt and still feel the pressure of cultural norms and tradition within the church and from society in general.

The fourth category—leadership traits and characteristics (10)—assembled the following codes: insight (3), experience (2), realistic (2), sensitivity (2), and

patience (1). Those are all the traits and characteristics of leadership that emerged regarding the way leaders think and act when faced with decisions that require them to push back on the cultural pressure to conform.

The fifth category—leadership values (6)—grouped the following codes: communication value (5) and conflict resolution value (1). The category synthesized the guiding values leaders refer to when approaching their followers and maintaining their relationship. All leaders expressed the importance of communicating and resolving conflicts when dealing with followers and instances of conflict or misunderstanding before making any decisions.

The sixth category—self-image (4)—includes the following codes: protective (2), self-schema (1), and self-integrity perception (1). This category represents the image of leaders according to the leaders' view of themselves and their activities, perceptions, and words.

The following are excerpts from Nasim's response to Interview Question 1-1; the specific codes are reflected in italics and brackets.

> I refer to the kingdom values, kingdom culture, the Kingdom of God before I take care of church values and the local cultural values or norms *[beliefs, worldview]*. . . . But my heart is to neglect and ignore the church culture and obey God's culture (the Kingdom of God) and allow myself and allow others the freedom that the Lord gave them in order to become free participants and members of the Kingdom of God *[high biblical values]*. . . . You cannot preach freedom to your congregation if you force them with the church culture that conflicts with the kingdom culture, with the biblical culture. I can't be preaching freedom to them, to my people, and tell them you can't do this, can't do that because the culture does not permit that. Then I'll have a conflict with my preaching, against the principles I'm following *[beliefs, self-integrity perception]*. . . . There should be norms explained to the members, traditions, and values that govern the relationship between members and leaders with each other *[beliefs, paradigm]* . . . then if there is a conflict, we bring it up against the biblical culture; it is how do we understand the Bible *[position, behavior]*. . . . So many agencies and para-church organizations and ministries need leaders and help and [are] in need of volunteers to help them out in their ministries. . . . Now the challenge is between these members who want to volunteer and willingly, freely, go and help such NGOs [nongovernmental organizations] and other ministries. This creates conflicts with the churches and with their leaders *[conflict of values]*. . . . Well, I need to look back, the people are not mine, the Kingdom of God is not under my rule, under my control *[beliefs, attitudes, ideology]* . . . so I need to communicate with my people so "Just inform me," "at least put me through," "at least allow me to know that you

are going here and there," in order to be aware of my members, my people *[communication value]*.

Interview Question 1-2: Can you tell me about an event where you found unusual behavior or performance from subordinates as a direct response to unmet expectations? If so, how did you know about it?

The first category—leadership struggle (33)—synthesized the following categories: unmet expectations pressure (11), leadership struggle (9), misunderstanding (5), miscommunication (5), pressure (2), and expectations pressure (1). The category indicates any situation in which leaders find themselves under pressure to make a wise decision and act rightfully or when they feel an internal conflict from external pressure. All leaders expressed the pressure of conflict that results from relational interactions with followers due to a clash of values or communication styles.

The second category—leadership traits and characteristics (25)—synthesized the following codes: humility (7), insight (4), sensitivity (3), realistic (3), initiation (3), flexibility (1), wisdom (1), caring (1), empathy (1), and patience (1). The category represents leadership traits and characteristics that emerged during the interaction with followers or when under pressure. Leaders expressed the importance of being aware of others' changes in behavior and the wisdom needed to handle such situations.

The third category—leaders' ideology (6)—synthesized the following codes: beliefs (3), ideology (1), attitudes (1), and worldview (1). The category represents the factors that make up leaders' ideology and guiding perspectives.

The fourth category—character (6)—synthesized the following codes: discernment (3), responsibility (1), self-discipline (1), and experience (1). The category represents the maturity of leaders demonstrated in tough situations as a result of years of experience and trials.

The fifth category—leaders' values (5)—synthesized the following codes: communication value (3) and inner circle importance (2). The category represents the guiding values leaders refer to when making decisions or behaving in social contexts.

The sixth category—control attempts (4)—synthesized the following codes: board pressure (2) and behavior motivated by pressure (2). The category represents any attempts to control leaders' behavior or influence their decision making.

The seventh category—cultural pressure (3)—synthesized the following codes: conflict of values (2) and cultural influence (1). The category represents the weight and pressure that culture wields on leaders.

The eighth category—biblical convictions (3)—synthesized the following codes: high biblical values (2) and biblical reference (1). The category shows the importance of biblical values to leaders and their strong convictions and unwillingness to compromise in thought, stance, or conduct.

The following are excerpts from Sanad's response to Interview Question 1-2; the specific codes are reflected in italics and brackets.

> Well you know . . . one of the most difficult things in this ministry is having a multicultural staff *[realistic, leadership struggle]*—we have Eastern and Western—and because I lived many years in the West, you know I can wear both hats. I can be a Jordanian to Jordanians, and I can be an American [or] European to Americans and Europeans. The problem is, when I'm with Jordanians and I act Jordanian, the Americans watching me are not comfortable, and vice versa. So, when I enter a room, everybody is trying to answer the question: which hat is he wearing? Who walked into the door *[leadership struggle]*? . . . The next thing I knew, they write a letter to the board saying that Sanad has bad relations with the authorities, he doesn't know how to handle authority, he should be careful *[misunderstanding, unmet expectations pressure].*

When asked how he dealt with the pressure, Sanad responded:

> Well, again patience *[patience]*; try to understand where they're coming from *[communication value, empathy],* don't react right away, be kind of a father figure *[caring],* don't get upset, don't get excited; just calm down *[self-discipline]* [and] try to see the problem behind the problem *[insight].*

When asked how he knew about the change in behavior or productivity, Sanad answered:

> I hear it most of the time from [a] third party, not me directly, that's unbelievable *[miscommunication, leadership struggle].* . . . How can I learn? If you are Mister Wise Guy [who] knows all the answers, come and tell me! Help us! We're struggling over here *[leadership struggle],* but you're talking against us without knowing us *[pressure]*, without talking to us. . . . If you did come to talk to us, you'd find that we're struggling to do our best, and you may have wisdom that we

> need. . . . Maybe you're right, but tell us and help us, but you say we're in the mud and you make sure we stay in the mud *[leadership struggle].* . . . the other problem in the relationships is not only [that] people do not come talk to you, they talk *about* you; there are no mediators *[cultural influence, conflict of values].* For example, you [ask] somebody: "Could you help me with this person here, we have tension, we have a conflict, can you help us?" They respond, "It's not my business, I don't want to interfere *[conflict of values].*" How is that spiritual? I mean, the Lord himself is our mediator. He took the initiative to come in between God and us, to take our sins, He did that on his own *[biblical reference].*

Interview Question 1-3: Do you care about your image as a leader in the eye of your followers? Where does this image come from? What would you do if this image were compromised?

The first category—leaders' values (26)—synthesized the following codes: personal image value (12), sense of higher calling (8), credibility value (4), conflict resolution value (1), and inner circle importance (1). The category synthesized the guiding values leaders refer to when approaching their followers and maintaining their relationship with the followers. Here, leaders also expressed the importance of their image to them with regard to credibility and calling as they expressed it.

The second category—character (23)—synthesized the following codes: maturity (9), experience (4), security (3), identity (3), sense of responsibility (1), self-awareness (1), self-discipline (1), and discernment (1). The category represents how mature leaders demonstrate character in tough situations as a result of years of experience and trials. Furthermore, the majority of the leaders expressed that they cared more about their image when they were younger and immature, but as they gained more experience, they saw that their value came from God and their calling.

The third category—leaders' ideology (17)—synthesized the following codes: perspectives (5), beliefs (4), ideology (3), position (2), worldview (2), and attitudes (1). The category represents leaders' ideology and guiding perspectives.

The fourth category—leadership traits and characteristics (15)—synthesized the following codes: realistic (6), humility (3), assertive (2), sensitivity (2), insight (1), and patience (1). The category represents the traits and

characteristics of leadership that emerged regarding the way leaders think and act when faced with decisions, activities, or behaviors.

The fifth category—self-image (7)—synthesized the following codes: servant leadership (4), self-image (2), and protective (1). This category represents the image of leaders according to their own view of themselves and their activities, perceptions, and words. Once more, servant leadership and how leaders see their leadership styles emerged as a significant theme and was primarily rooted in the image of a shepherd servant.

The sixth category—biblical convictions (7)—synthesized the following codes: biblical reference (5) and high biblical values (2). The category represents the importance of biblical values to leaders and their strong convictions.

The seventh category—cultural pressure (6)—synthesized the following codes: cultural influence (2), conflict of values (2), cultural pressure (1), and pressure (1). The category represents the weight and pressure that culture wields on leaders.

The eighth category—external influence on leader's ILT structure (6)—synthesized the following codes: mentors' influence (3), the influence of education (1), role model influence (1), and parental influence (1). The category represents the factors that influence the building of the leaders' self-image and other ILTs and cognitive structure.

The ninth category—leadership struggle (3)—had only one code: leadership struggle (3). The category indicates any situation in which leaders find themselves under pressure to make a wise decision, act rightfully, or consolidate feelings.

The following are excerpts from Maher's response to Interview Question 1-3; the specific codes are reflected in italics and brackets.

> If I told you no, it would be a lie. Of course, I care *[personal image value].* . . . I tell them always—to my disciples and to my church—I'm not perfect; I'm trying my best. I told them many times [that] when I'm in the pulpit preaching, I feel very powerful. I feel I'm preaching from authority, but deep inside, I'm depressed or sad because it's not very easy. Sometimes I feel fear to go to the pulpit and preach because it's [a] very risky responsibility *[humility, sense of responsibility].* . . . My image first is to Him, to the Lord, not to me, because he's the only one who can see my image, and he's the only one who [has] the final decision *[sense of higher calling].* Of course, I care about my image for other

> people, but I will not use it to please them *[personal image value].* Maybe in the beginning, I was like that, but now after 20 years in ministry or more, it's not my heart—my heart is to please Him *[maturity].*

When asked what would he do if his image as a servant were compromised, Maher answered:

> It is not an image, it's a spirit *[beliefs].* . . . It comes from the master, from the Lord *[sense of higher calling]*; you know, all the leadership school[s], they speak of the Lord as a leader; I don't think so. He's a servant, of course. He's a master of teaching, but He's a servant. He lived his life as a servant *[worldview].* . . . but this is not Christianity, so this is the difference between culture and the Bible *[conflict of values].*

Interview Question 1-4: If you were in a situation in which your subordinates demanded specific changes that are in extreme conflict with biblical principles and values, what would you do? What if you refused to conform at the expense of losing influence or followership? How would you make the decision?

The first category—mature reaction (20)—synthesized the following codes: loss of influence (11), resist pressure (4), consensus (3), and unwilling to compromise (2). The category represents what mature leaders would do under pressure from followers to control them and their willingness to lose influence at the expense of standing firm to their biblical convictions and principles.

The second category—leadership values (15)—synthesized the following codes: communication value (7), inner circle importance (3), unity value (2), sense of higher calling (1), relationship value (1), and people value (1). These are the decision-making and behavioral guiding values. The importance of a close inner group has been shown to be very significant and influential to leaders' conduct and behavior.

The third value—biblical convictions (12)—synthesized the following codes: high biblical values (8), biblical reference (2), faith (1), and prayer (1). The category represents the importance of biblical values to leaders and their unwillingness to compromise the truth, no matter the cost.

The fourth value—leadership traits and characteristics (11)—synthesized the following codes: wisdom (3), assertive (2), patience (2), realistic (1), humility (1), persuasion (1), and limits (1). The category shows the leadership traits and characteristics that emerged during their daily interaction with followers or when under pressure.

The fifth value—character (10)—synthesized the following codes: maturity (4), flexible (2), self-awareness (1), accountability (1), sense of responsibility (1), and experience (1). The category represents characteristics that mature leaders demonstrate in tough situations as a result of years of experience and trials.

The sixth category—leader's ideology (6)—synthesized the following codes: beliefs (3), paradigm (1), attitudes (1), and ideology (1). The category represents all guiding perspectives and cognitive structure.

The seventh category—leadership struggle (6)—synthesized the following codes: leadership struggle (4), defensive (1), and expectations pressure (1). The category indicates any situation in which leaders find themselves under pressure to make a wise decision, act rightfully, or consolidate feelings. Expectations pressure was added because it represented another added factor of one of the leaders' usual struggles.

The following are excerpts from Nezar's response to Interview Question 1-4; the specific codes are reflected in italics and brackets.

> Yes. For example, I saw in the previous case I told you [about] that there was a kind of demand to separate the entire youth meeting from the church. This is, for example, against biblical principles. But you cannot come and force them to attend the main service *[loss of influence].* . . . The first thing [I did], I've gathered leaders from their youth meeting to teach about the church and the meaning of the church *[communication value].* Secondly, I started asking the young men at the main service Thursday nights to come and share with us their own personal testimony with everyone. And that made them come closer together and connect.
>
> Thirdly, we started doing some activities together as a church. For example, one time we gathered the youth and . . . all the generations . . . watched a movie together, and we enjoyed it all together. So, we try to break that barrier *[unity value].* I did another thing; I canceled the last Saturday of the month meeting right before the next communion Sunday service and called everybody to come and share communion collectively *[flexible].* . . . So I believe God gave us wisdom glory to his name, and these things succeeded with prayers

> *[wisdom, prayer].* So yes, I believe this was against the biblical principles to separate service from the main church services, and I believe there was a big threat in this situation because they will be no supervision *[beliefs].* Also, I am against dictatorship and control; I don't believe there should be one leader in the youth meeting. There is a committee of seven people, and I am one of them; the same thing with our Sunday school—each one of them has seven members in a committee, and I am one of those members—and I don't believe in the one-leader model *[attitudes, ideology].* . . .

Interview Question 1-5: Can you share an incident when you felt a pressure from followers to conform to a set of expectations and decided to adapt? Can you explain how you made the decision? What was the justification?

The first category—character (27)—synthesized the following codes: maturity (10), flexible (4), discernment (3), identity (2), experience (2), self-awareness (2), self-discipline (1), forgiveness (1), security (1), and sense of responsibility (1). The category represents the maturity leaders demonstrated as a result of trials and experience in their leadership tenure, especially under the pressure of control and influence. This question revealed more of the character of leaders and their maturity, highlighting the difference between their reaction to the pressure in the early years of their leadership and in the latter years.

The second category—leadership traits and characteristics (20)—synthesized the following codes: reflection (4), humility (3), sensitivity (2), insight (2), assertive (2), persuasion (2), patience (2), realistic (2), and wisdom (1). The category represents the traits and characteristics of leadership that emerged regarding the way leaders think and act when faced with decisions that require them to push back on the pressure to conform.

The third category—leadership values (10)—synthesized the following codes: faith value (3), sense of higher calling (3), communication value (2), relationship value (1), and unity value (1). The category indicates what is valuable to leadership and the guiding approach to behavior and decision making.

The fourth category—control attempts (8)—synthesized the following codes: pressure (3), generational gap pressure (2), power struggle (2), and cultural pressure (1). The category represents all the attempts to control leaders'

behavior or influence their decision making with expectation pressure from different groups.

The fifth category—behavioral change (7)—has only one code: adapt (7). The category represents behavioral adjustment as a result of followers' pressure and expectations despite the leader's disagreement with individuals or groups of followers. This was apparent in leaders' answers about cases that occurred when they were young and immature and felt compelled to change their behavior against their free will.

The sixth category—biblical convictions (6)—synthesized the following codes: high biblical values (3), biblical reference (2), and prayer (1). The category represents the importance of biblical values to leaders and their strong convictions and unwillingness to compromise in thought, stance, or conduct.

The seventh category—leadership struggle (5)—synthesized the following codes: leadership struggle (2), pain (1), betrayal (1), and frustration (1). The category indicates any situation in which leaders find themselves under pressure to make a wise decision and act rightfully or when they feel an internal conflict from external pressure. Sanad shared a case in which he felt extreme pain from betrayal; he also shared his appreciation of the pain since he learned many valuable lessons that added to his character and leadership development.

The eighth category—self-image (4)—synthesized the following codes: protective (2) and self-image (2). This category represents the image of leaders according to their view of themselves and their activities, perceptions, and words.

The ninth category—leaders' ideology (2)—synthesized two codes: attitudes (1) and position (1). The category represents the factors that make up leaders' ideology and guiding perspectives when dealing with cultural pressure attempts on their leadership and biblical convictions.

The following are excerpts from Majdi's response to Interview Question 1-5; the specific codes are reflected in italics and brackets.

> Let me go back to a very simple illustration. In the beginning, we did not have drums, for example, but people around us did and so on. It took us some adventure and getting out of ourselves to bring something like this and now it's very easy, and it's very simple *[pressure, flexible, adapt].* I remember even in

> Madaba, in one of our churches, members did not even clap hands, but things are changing. You know the community around us is sometimes pressuring us in a different way, so we have to filter things, so if it's according to the Bible, we accept *[discernment, high biblical values].* We are always are banged with things around us; we have to filter things and see what things are good for the kingdom *[pressure].*

Interview Question 2-1: Collectivist culture is known for its power distance, masculinity, collectivism, and face-saving characteristics. Do you see any of those come in direct conflict with biblical principles? If so, what would you do to deal with it?

The first category—leader's ideology (27)—synthesized the following codes: beliefs (13), attitudes (6), perspectives (4), position (2), insight (1), and behavior (1). The category emerged again and represented all the cognitive structures that guide a leader's behavior when dealing with external pressure. All leaders expressed their stances as driven by their ideology consistently throughout the interviews with confidence and no reservation, especially when speaking about how they perceive reality and respond to it.

The second category—leadership traits and characteristics (22)—synthesized the following codes: wisdom (9), humility (6), assertive (2), caring (2), empathy (1), sensitivity (1), and protective (1). The codes indicate leadership characteristics and traits that emerged when leaders expressed how they behave under cultural pressure and when they interact with subordinates. This is the noticeable conduct leaders show when they interact with followers under different circumstances, according to their responses.

The third category—cultural pressure (14)—synthesized the following codes: pressure (7), conflict of values (5), and cultural influence (2). The category represents the pressure leaders face from culture, as well as the conflict of values with biblical principles.

The fourth category—biblical conviction (12)—synthesized the following codes: biblical reference (10) and high biblical values (2). The category represents the value leaders attribute to their understanding of biblical principles of leadership. It

was most prominently apparent whenever leaders wanted to argue, justify, or prove a certain view or behavior.

The fifth category—self-image (10)—synthesized the following codes: realistic (3), self-image (2), servant leadership (2), caring (2), and self-schema (1). This category represents the way leaders view themselves and the image they have in their minds about leadership.

The sixth category—leadership values (6)—synthesized the following codes: communication value (5) and inner circle importance (1). The category indicates what leaders consider valuable to their leadership and their guiding approach to behavior and decision making. All leaders expressed the value of communicating with followers when trying to clarify a misunderstanding or solve a conflict.

The seventh category—leaders' needs (6)—synthesized the following codes: boundaries (4), need for appreciation (1), and need for respect (1). The category emerged from leaders' expression of the things they need when engaging with followers in any social context.

The eighth category—leadership struggle (6)—had only one code: leadership struggle (6). The category indicates any situation in which leaders find themselves under pressure to make a wise decision and act rightfully or when they feel an internal conflict.

The ninth category—character (5)—synthesized the following codes: security (2), discernment (2), and experience (1). The category represents the characteristics leaders demonstrated as a result of trials and experience during their leadership tenure.

The question confirmed some of the previous responses' emerging categories. The following are excerpts from Shareef's response to Interview Question 2-1; the specific codes are reflected in italics and brackets.

> Yes, big time. Because one of the major issues of being a collective culture is in decision making and the process of decision making. You know that the relationship with the Lord should be a personal decision *[high biblical values, beliefs],* while we face a culture that takes religion as a cultural value in the collectivity, so if you are a Christian or you are a Muslim, and you are part of the community, your decision making is not based on yourself only, you and your family may pay the price for it *[pressure].* So if a Muslim chose to be a

> Christian or Christian chose to be a Muslim, there are consequences that will result in the family being upset or rejection, for those decisions he has made. So I would say this would be the main challenge, as the process of decision making *[conflict of values].* There's no freedom; I see it as a very simple right, choosing my eternal life and my style of worship and my relationship with my God is controlled so much by challenges *[pressure],* . . . and the ego of the male, we know that there's equality between male and female—Christ said that there's no difference. It's a biblical value, all of us equally receive the blessings of the kingdom, the spiritual blessings *[biblical reference, beliefs].* Christ gave a model that I am head [of] *[biblical reference].* Now there are different jobs or responsibilities; for example, the male does not get pregnant; this is a physical distinction that God has gifted to a woman *[beliefs].* Like for example, the pastor position should be kept for a male; that's nothing to do with power or masculinity, it's just a structure that the Lord has presented to us *[beliefs].* But our culture gives more value and respect for males than females, and that becomes a power struggle, and people sometimes, males, they want to distinguish themselves or raise themselves above ladies; this should not be accepted—we are all equals *[beliefs].* We should all be respected and allow everybody to be in the same level, but there's a distinction [in] some jobs *[pressure, conflict of values].* . . . meaning we always look high to the king, or whoever in position, while the biblical perspective shouldn't be the same *[conflict of values]*; we should be servants *[servant leadership].*

Interview Question 2-2: Did you as a leader ever genuinely communicate and ask about how followers perceive you? Did followers' prototypes match yours? Can you tell me about an event in which you found yourself in an ambiguous situation with no prior experience regarding followers' behavior? Did you seek or receive any help? Did it challenge your values?

The first category—passive communication (15)—synthesized the following codes: passive feedback (9) and indirect communication (6). The category represents the methods leaders use to solicit feedback about their image and performance from followers. A significant dynamic of communication emerged from all responses that indicates that these leaders seldom communicate directly and solicit information about the perception of their image in the eyes of their followers. Furthermore, they depend on indirect and other channels, such as spouses and close friends, to receive what they consider to be sensitive information.

The second category—leaders' values (13)—synthesized the following codes: communication value (4), inner circle importance (4), feedback (3), conflict resolution

value (1), and sense of higher calling (1). The category represents the guiding values leaders refer to when making a decision or behaving in social contexts.

The third category—leaders' ideology (12)—synthesized the following codes: perspectives (5), beliefs (5), and position (2). The category represents the factors that make up the leaders' ideology and guiding perspectives.

The fourth category—leadership traits and characteristics (9)—synthesized the following codes: humility (4), sensitivity (1), empathy (1), caring (1), initiating (1), and flexibility (1). The category represents leadership traits and characteristics.

The fifth category—cultural pressure (7)—synthesized the following codes: cultural influence (4), insecurity (2), and pressure (1). The category represents the weight and pressure that culture wields on leaders in their daily interactions with followers. One of the emerged codes (insecurity) appeared when one leader expressed feelings of shame and refusal to ask how he would look in the eyes of the followers. This sentiment appeared with all leaders because they felt it is not appropriate to ask such a question as it may seem prideful and self-centered, or it could be misunderstood and cause harm.

The sixth category—self-image (6)—synthesized the following codes: servant leadership (4) and self-image (2). The category represents the image of leaders according to their own view of themselves and their activities, perceptions, and words. The self-image was an occurring theme in the interviews, as all leaders referred to Christian leadership and themselves as shepherds or servants.

The seventh category—character (5)—synthesized the following codes: security (2), maturity (1), discernment (1), and experience (1). The category represents the characteristics that mature leaders demonstrated in tough situations as a result of years of experience and trials.

The eighth category—biblical convictions (4)—had one code: biblical reference (4). The category represents the importance of biblical values to leaders and their unwillingness to compromise their truth, no matter the cost as well as using biblical principles to argue and justify ideas and behaviors.

The following are excerpts from Nasim's response to Interview Question 2-2; the specific codes are reflected in italics and brackets.

> At the beginning of my ministry, yes, I did more than I do now *[maturity].* When I want to ask, I pick and choose whom I ask *[discernment],* and I don't ask people how they perceive me directly *[indirect communication]* . . . and usually—I'm talking about our culture. If you go to a restaurant and you do not like the food, you don't go again *[cultural influence].* . . . Even nowadays, it's becoming a norm that people change their churches. If they have a problem with the church or the pastor of the church or the teaching or . . . people, nowadays they talk, generally speaking, and in some churches, you can see certain challenges or certain problems that draw that attention of leadership—not only the pastor, but also the leadership committee or a board that handles certain things *[pressure].* . . . So we talk about it, we talk as leaders, and we bring it to the leadership team and talk about it with that person.

Interview Question 2-3: Have you ever encountered resistance and pressure to conform to subordinates' expectations of your values, behaviors, or ideology?

The first category—control attempts (14)—synthesized the following codes: expectations pressure (5), board pressure (4), generational gap pressure (4), and power struggle (1). The category assembled all the attempts to control leaders' behavior or influence their decision making with pressure from different groups. This category is significant, as it revealed pressure to change or control leaders not only from followers but also from other pressure groups, such as boards and committees, as well as generational expectations and demands.

The second category—leadership values (11)—synthesized the following codes: communication value (5), sense of higher calling (3), conflict resolution value (2), and credibility value (1). The category indicates what is valuable to leadership and the guiding approach to behavior and decision making.

The third category—character (11)—synthesized the following codes: maturity (3), self-awareness (2), flexible (2), self-discipline (1), accountability (1), differentiate (1), and problem-solving approach (1). The category represents the characteristics mature leaders demonstrated as a result of trials and experience in their leadership tenure, especially under the pressure of control and influence. Leadership character emerged as a core factor in determining their capacity to stand firm and resist pressure or to give in and accept other's preferences or agendas.

The fourth category—mature reaction to pressure (8)—synthesized the following codes: resist pressure (5), consensus (2), and collective responsibility (1). The category synthesized all the codes that represent how leaders behaved under pressure when they were mature, especially after years of trials, experience, hard-learned lessons, and failures. Five of the six leaders expressed the clear difference between their leadership at the beginning of their ministry and present day.

The fifth category—immature reaction to pressure (7)—synthesized the following codes: immaturity (3), manipulation (1), conform to pressure (1), submission (1), and fear of losing relationship (1). The category represents how leaders reacted to pressure when immature and inexperienced. All of the leaders had stories of experiences at the beginning of their ministry.

The sixth category—biblical convictions (5)—synthesized the following codes: high biblical values (3), faith value (1), and biblical reference (1). The category represents the importance of biblical values to leaders and their strong convictions and unwillingness to compromise in thought, stance, or conduct.

The seventh category—leadership traits and characteristics (4)—synthesized the following codes: persuasion (2), assertive (1), and sensitivity (1). The category represents the traits and characteristics of leadership that emerged regarding the way leaders think and act when faced with decisions that require them to push back on the pressure to conform.

The eighth category—leaders' ideology (2)—synthesized two codes: attitudes (1) and beliefs (1). The category represents the factors that make up leaders' ideology and guiding perspectives when dealing with cultural pressure attempts on their leadership and biblical convictions.

The following are excerpts from Sanad's response to Interview Question 2-3; the specific codes are reflected in italics and brackets.

> Usually when we make decisions, we try to do it as a team, so that everybody owns the decision. Whether it is the executive committee or the board, we take the issue and discuss it back and forth, and usually or most of the times, we all kind of come to a consensus, and we all move forward together *[consensus].* . . . They need to own it; they need to present it so that when we move forward, it's everybody moving together. So, if a problem happens, we all

> own the problem, not one person; that's very important. Should something fall apart, we all live it. If it succeeds, we all rejoice. So that's very important *[collective responsibility].* There are a couple of examples where I had resistance; I tend to move fast, in other words, by faith *[self-awareness].* You got the businessmen, and the lawyers and accountants, they pull me back, [saying] we shouldn't go that route *[board pressure].* One example is for years, we were unable to finish this building and we thought this whole thing would finish. The government will not let us grow, so we offered the evangelical community to come rent space; nobody stepped forward. There was only one ministry, that is the Whitman Academy, whom we helped start to begin with, but they are limited on funds and they are unable, so year after year they make us an offer and the board says no *[board pressure],* so I came [up] with this idea. I went to the board and said, we can't let go another year without this being used, and we got all this by faith. God gave to us; it's not time to ask for money. let's give [the] Whitman Academy this building 10 years free of *rent [sense of higher calling].*

Discussion

Emerged Themes

The following list is a summation of the major themes that emerged from the data and its relation to each of the research questions. All of the recurring categories were clustered into one major theme. The first research question asked how leaders would act and behave (or change behaviors) if their self-schema, ILTs, and scripts were in direct conflict with those of their followers. Would they change and adapt to fit the prototypes, or would they persist and risk losing influence? Interview Questions 1-1, 1-2, 1-3, 1-4, and 1-5 answered this inquiry. Twelve themes emerged as a response to the question (frequencies shown in parentheses):

1. leadership values (86),
2. leadership traits and characteristics (81),
3. character (62),
4. leaders' ideology (54),
5. leadership struggle (44),
6. biblical convictions (28),
7. mature reaction to pressure (20),
8. cultural pressure (17),

9. self-image (15),
10. control attempts (11),
11. behavioral change (7), and
12. external influence on ILT structure (6).

The second research question asked if pastors would conform to followers' ILT expectations if they clash with their expectations and behavior. Additionally, if church leaders' ILTs are congruent with followers' ILTs but conflict with the biblical view of leadership and core values, would pastors stay the course or would they adapt and reconsider their actions and personal core beliefs? Interview Questions 2-1, 2-2, and 2-3 answered this inquiry. Thirteen themes emerged as a response to this question (frequencies shown in parentheses):

1. leaders' ideology (41),
2. leadership values (29),
3. leadership traits and characteristics (22),
4. cultural pressure (21),
5. character (21),
6. biblical convictions (20),
7. passive communication (15),
8. self-image (16),
9. control attempts (14),
10. mature reaction (8),
11. immature reaction to pressure (7),
12. leaders' need (6), and
13. leadership struggle (5).

The first research question asked how leaders would act and behave (or change behaviors) if their self-schema, ILTs, and scripts were in direct conflict with those of their followers? Would they change and adapt to fit the prototypes, or would they persist and risk losing influence? The answer is that if the required changes were not aligned with the leader's ideology, values, character, biblical convictions, or the leader's need, they would not change.

If the conflict is one of cultural differences between church members, then the leader would seek to explain his actions so that the church members understood his behaviors. If the conflict could be resolved with changes that did not compromise the leader's values, biblical convictions, or character, then the leader would seek to more fully understand what changes might be made and then make the changes.

The second research question asked: Would pastors conform to followers' ILT expectations if they clash with the leaders' own expectations and behaviors? The answer is yes, in many cases, particularly in the beginning of the church ministry, but less so as the leader matures in the leadership role. The cultural community to which church members and church employees belong is a powerful force in shaping ILTs. Leaders who were interviewed spoke about making decisions collectively to involve everyone. As noted in the answer to Research Question 1, any change by the leader must align with the leader's ideology, values, characteristics, and biblical convictions. Also, like the answer to Research Question 1, if the requested changes are culturally based, then leaders use communication and collective discussion to find appropriate changes.

Conclusion

Implications to Scholarly and Practitioner Literature

This study contributes to the scholarly and practitioner literature in several ways. First, for scholarly literature, it provides a new case study in a unique context that employed qualitative methods to explore and probe the rare and much-needed leadership ILT content and construction. Second, the study's narrow focus confirmed several universal concepts in the ILT literature, such as the universal prototype classification. Moreover, it found well-established concepts from theories such as emotional intelligence, authentic leadership, and servant leadership, as well as confirmed the influence of context and culture on the leader–member dyadic relationship. For example, Dorfman, Javidan, Hanges, Dastmalchian, and House (2012) reviewed the GLOBE study and found that the "national culture indirectly influences leadership behaviors through the leadership

expectations of societies. In other words, executives tend to lead in a manner more or less consistent with the leadership prototypes endorsed within their particular culture" (504).

Furthermore, the findings revealed some unexpected themes and patterns that could prove significant to the literature. For example, it revealed the effect of personality and communication style of leaders on ILTs and prototype matching, specifically when managing interactions with different committees, donors, or boards from diverse cultures, in addition to leading the new millennial generation that operates under new and different social rules, norms, and expectations.

As for practitioners, the study suggests some insights into leadership development, counseling, and consulting on multiple levels. For example, leadership development programs can benefit from the findings of prototypes that these leaders demonstrated and can explore if they match followers' expectations. This will advance leader–member quality exchanges and increase the effectiveness of organizations as confirmed in previous studies. Specifically, practitioners can consider the universal as well as the culturally contingent prototypes and different ILT structures to design and develop a better curriculum that fits the context or give better advice when consulting.

Recommendations for Future Research

The findings propose several recommendations for future studies. First, a replication of the study in another context to test for the influence of culture would be helpful. Second, a study that aims to build prototype and ILT observable and measurable content in Jordan and the Middle East is recommended, particularly to church leaders and generally to all others. This recommendation is based on the analysis and the emerged pattern of prototypes that leaders exposed. Third, a similar study that focuses on leaders in other for-profit and NGOs can reveal some similarities or differences in the behavior of leaders under pressure and as well as different kinds of pressure sources and contingencies, which will contribute to the literature. Fourth, a larger scope study that includes the input of followers and family members can fill in some missed gaps and paint a better, more detailed

picture of much of the explored variables, such as feedback, expectation gaps, conflict, pressure, communication, and prototype match and clash.

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The Transformational Leader's Role in Organizational Design and Knowledge Management Performance*

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This article explores transformational leaders' core competencies for improving knowledge management effectiveness by affecting organizational structure. The design is structured to offer propositions that affect the links between knowledge management, transformational leadership, and organizational structure. This research indicates that to improve knowledge management, transformational leaders must be change agents who deploy effective organizational structure that mediates the relationship between transformational leadership and knowledge management. This exploration has implications for managers and contributes to the current literature by proposing transformational leaders as effective change agents who improve knowledge management effectiveness by managing organizational structure. This research is one of the first to explore the relationships between transformational leadership, knowledge management, and organizational structure.

Key words: knowledge-based view, knowledge management, organizational change, organizational structure, social capital, transformational leadership

Management scholars have shown that transformational leadership is an important engine for knowledge management effectiveness (Birasnav, 2014; Crawford, 2005; Donate & Guadamillas, 2011; Mohammadi & Boroumand, 2016; Seba, Rowley, & Lambert, 2012). In this way, researchers have pointed to the vital importance of organizational structure as an enabler of knowledge management (Clavér-Cortes, Zaragoza-Sáez, & Pertusa-Ortega, 2007; Gold, Malhotra, & Segars, 2001; Lee & Choi, 2003; Mahmoudsalehi, Moradkhannejad, & Safari, 2012; Serrat, 2017; Zheng, Yang, & McLean, 2010). However, researchers have failed to portray how transformational leaders can act as change agents who affect organizational structure to facilitate knowledge management within organizations. Indeed, the literature lacks a coherent view of these interrelated topics. This exploration expands the leadership literature by integrating the social capital view and the knowledge-based view of the firm and analyzes the theoretical relationships between transformational leadership,

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knowledge management, and organizational structure. This article will provide additional insights for current theories and research in these areas. First, this research applies transformational leadership within the knowledge management paradigm, and then it investigates whether or not transformational leadership can affect organizational structure to facilitate knowledge management. In addition, the current exploration develops an integrated model, including a factor that mediates the relationship between transformational leadership and knowledge management. Hence, this article has implications for top executives to enhance knowledge management effectiveness with transformational leadership.

Historical Background of Knowledge Management

Senge (1997) highlights the importance of knowledge for organizations, noting that successful organizations enhance their competitiveness by focusing on learning. Drucker (1998) comments that "the productivity of knowledge and knowledge workers will not be the only competitive factor in the world economy. It is, however, likely to become the decisive factor, at least for most industries in the developed countries" (17). Knowledge management is a multidisciplinary area drawing on disciplines such as information systems, organizational behavior, strategic management, and psychology (Award & Ghaziri, 2004; Handzic, 2015; Park, 2007; Truch, 2001) that aims to create and sustain competitive performance.

To evaluate the success of knowledge management, the first step is to have a clear understanding of the concept of knowledge management. Knowledge management has been defined from various perspectives. This may be because knowledge management is understood in many ways; therefore, researchers focus on different aspects of it. These perspectives are discussed below.

Technological Perspective

From a technological perspective, *knowledge management* is facilitating organizational processes and activities using information technology to organize existing information (Anand & Singh, 2011; Churchman, 1971; Meredith & Burstein, 2000). An alternate perspective can be found in Alavi and Leidner's (2001) review, in which information technology plays a crucial role in creating,

retrieving, storing, and applying organizational knowledge. Based on this view, *knowledge management* embraces "intelligent searching, categorization and accessing of data from disparate databases, E-mail and files" (Anand & Singh 2011, 933). This perspective focuses on individuals as the major sources of knowledge and shows how an individual's and subunit's ties (or lack thereof) with other individuals and subunits can affect the sharing, storage, transfer, and application of knowledge within organizations. This perspective, therefore, sees these connections and the related shared knowledge/memory as central to the effectiveness of knowledge management.

Economic Perspective

McCarthy (1996) sees society as a product of knowledge. She defines *culture* as various forms of knowledge and symbols and then argues that knowledge is a product of culture and that knowledge's role is in guiding and facilitating people's actions. Knowledge also creates values, thereby fulfilling the strategic functions of "producing and guiding social action, of integrating social organizations, of protecting the identity of individuals and groups, of legitimating both actions and authorities, and of serving as an ideology for individuals, groups, classes, and entire nations" (Strasser & Kleiner, 1998, 315). Beckman (1999) also explains that *knowledge management* is "the formalization of and access to experience, knowledge, and expertise that create new capabilities, enable superior performance, encourage innovation, and enhance customer value" (1-6). Marr, Gupta, Roos, and Pike (2003) define *knowledge management* as a set of activities and processes aimed at creating value by generating and applying intellectual capital. Along the same line of thought, *knowledge management* has also been regarded as a "conscious strategy of getting the right knowledge to the right people at the right time and helping people share and put information into action in ways that strive to improve organizational performance" (O'Dell & Grayson, 1998, 6), as well as the practices directed at creating value from intangible organizational resources (Sveiby, 2001; Wojciechowska, 2016). As this perspective is clear that the objective of managing knowledge is to add value to organizations, this perspective's definitions significantly reinforce Argote and

Ingram's (2000) argument that there is commercial importance in knowledge, as a firm's knowledge is positively associated with its outcomes.

Process Perspective

The process perspective focuses on knowledge flows by embracing the processes of knowledge management. Past empirical works have considered various processes involved in managing knowledge (see Table 1 on the next page). For example, Nonaka and Takeuchi (1995) suggest knowledge management processes that include socialization (from tacit knowledge to tacit knowledge), externalization (from tacit knowledge to explicit knowledge), combination (from explicit knowledge to explicit knowledge), and internalization (from explicit knowledge to tacit knowledge). Lee and Kim (2001) also propose three processes of knowledge accumulation, integration, and reconfiguration. Knowledge is acquired from external environments and created by an organization's human capital. Knowledge is then integrated into organizational processes and procedures by sharing it around the organization. Finally, the knowledge is reconfigured by sharing it with other organizations operating in the business environment to meet new changes and challenges.

While Demarest (1997) proposes a model of knowledge management that encompasses knowledge constructing, embodying, disseminating, and using, Soliman and Spooner (2000) modify this model and suggest five processes for knowledge management: creating, capturing, organizing, accessing, and using. Rowley (2001) expands Demarest's model and presents a cycle model of knowledge management with six stages: articulation, repository updating, access, use, revision, and creation and construction. Yang, Zheng, and Viere (2009) go further and suggest a knowledge management model that incorporates three major kinds of knowledge: perceptual (i.e., implicit), conceptual (i.e., explicit), and affectual (i.e., sentiment and emotion). *Affectual knowledge* refers to "individuals' sentiment attached to certain objects" (Yang et al., 2009, 275). Yang et al., like Nonaka and Takeuchi (1995), believe that knowledge interacts in both epistemological and ontological dimensions. However, contrary to Nonaka and Takeuchi's model, these authors clearly differentiate between activities

related to managing knowledge at the individual level and the practices associated with knowledge management at the organizational level. Yang et al.'s model focuses on the interactions among the three facets of knowledge (i.e., implicit, explicit, and affectual) to minimize the major limitation of Rowley's learning with knowledge cycle that failed to define these interactions. A fuller discussion of these knowledge management models is presented in Table 1.

Table 1: Knowledge Management Processes (Adapted from Choi, 2002)

Researchers	Knowledge Management Processes
Walsh & Ungson (1991)	acquiring, retaining, retrieving
Nonaka & Takeuchi (1995)	socialization, externalization, combination, internalization
Wiig (1995)	creating, manifesting, using, transferring
Bassi (1997)	creating, capturing, using
Beckman (1997)	identifying, capturing, selecting, storing, sharing, applying, creating, selling
Demarest (1997)	constructing, embodying, disseminating, and using
Newman (1997)	creating, disseminating, utilizing
Ruggles (1997)	generating, codifying, transferring
Albert (1998)	collecting, classifying, organizing, disseminating
Wijnhoven (1998)	acquiring, retaining, searching, maintaining, disseminating
Probst (2000)	identifying, acquiring, developing, distributing, utilizing, preserving
Soliman & Spooner (2000)	creating, capturing, organizing, accessing, using
Bhatt (2001)	creating, presenting, validating, distributing, applying
Lee & Kim (2001)	accumulating, integrating, reconfiguring
Parikh (2001)	acquiring, organizing, disseminating, applying
Rowley (2001)	articulating, repository, updating, accessing, using
Gottschalk (2002)	implementing, sharing, distributing, creating, comprehending
Albers & Brewer (2003)	creating, acquiring, incorporating, allocating, applying
Chin-Loy (2003)	creating, capturing, organizing, storing, disseminating, applying
Heisig, Mertins, & Vorbeck (2003)	creating, storing, distributing, applying
Yang et al. (2009)	socialization, systematization, transformation, formalization, routinization, evaluation, orientation, deliberation, realization, institutionalization, indoctrination, externalization, internalization, inspiration, integration
Zheng et al. (2010)	generating, sharing, utilizing

The process perspective takes a task-based approach by translating the management of knowledge into various organizational processes. Accordingly, the process perspective develops a firm-specific approach in which organizational knowledge provides a significant contribution to business objectives through the context-dependent way it is managed. The process perspective can also help organizations identify their inefficiencies in each process, and subsequently recover them. Alavi and Leidner (2001) argue that the process perspective focuses on applying knowledge management. Therefore, this perspective is very appropriate for the current research, which uses the knowledge-based view that focuses on utilizing and creating knowledge (Marzec, 2013; Zheng et al., 2010). This exploration also uses Lee and Kim's (2001) model because of its appropriateness for transformational leadership; it defines *knowledge management* as three processes of knowledge—accumulation, integration, and reconfiguration—to explore the impacts of transformational leadership on knowledge management.

Theory Background

Social Capital View

Transformational leadership instills major changes at the organizational level by changing attitudes and assumptions at the individual level, and it features effective organizational change as a byproduct of developing interactions with subordinates. Transformational leaders aggregate human capital into social capital to implement changes at the organizational level, which provides valuable resources for organizations. Evidently, an alignment can be found between social capital theory and transformational leadership. Adler (2002) sees *social capital* as social networks supplemented by trust and shared values. Transformational leadership facilitates knowledge sharing through intellectual stimulation and contributes to communities of practice as a major ingredient of social networks that requires "the freedom to explore new ideas and set its own agenda" (Pemberton, Mavin, & Stalker, 2007, 67). Transformational leadership also enhances trust-based relationships by creating positive role models for

employees who are trusted and admired by them (Alexander & Hardy, 2014; Braga, 2002; Henker, Stonnentag, & Unger, 2015; Webb, 2007). Therefore, it could be established that transformational leadership theory is highly engaged with the social capital view. In examining the relationship between social capital and knowledge management, it can be argued that trust-based relationships, as a construct of social capital, can inspire employees to share their knowledge with others. Moreover, social networks consist of communities of practice in which people share their knowledge, which leads to a shared understanding and trust-based relationships among them (Mabery, Gibbs-Scharf, & Bara, 2013). Therefore, managers will need to consider social networks and trust-based relationships to improve knowledge management effectiveness.

The Knowledge-Based View of the Firm

The knowledge-based view focuses on embedding knowledge in organizational members, and accordingly, it uncovers knowledge embedded among employees as a more important factor of competitive advantage. In this view, various organizational factors affecting competitive advantage by enabling knowledge within companies are internal resources that can be controlled by firms. Grant (1996) argues that knowledge is created by people and that the application and integration of knowledge is dependent on a firm's capability to integrate individuals' specialized knowledge into products and services that generate competitive advantage. Organizational structure is considered below as one of those internal resources improving the search for knowledge.

Organizational Structure

Bowditch and Buono (2000) define *structure* as a pattern by which organizations can divide their activities and tasks as well as control them to achieve higher degrees of coordination. Scott (2003) says that organizational structure is the bureaucratic division of labor accompanied by control and coordination mechanisms between different tasks that promote communication. Similarly, Mintzberg (1979) sees *organizational structure* as "the sum total of the ways in which organizational leaders divide the labor of organizational participants into

distinct tasks, and then achieve coordination among these tasks" (as cited in Pounder, 1998, 11). Bradish's (2003) study delineates three functions for a firm's structure. First, organizational structure enables employees to undertake a set of tasks determined by the existing division of labor. Second, structure also enables employees to coordinate their tasks and activities with other organizational members. Third, a firm's structure itself specifies organizational boundaries and subsequently determines the interfaces between tasks within these boundaries. Organizational structure, therefore, is designed to enhance coordination.

It is important to note Grant's (1996) argument that knowledge is created by people and that the application and integration of knowledge are dependent on a firm's capability for integrating individuals' specialized knowledge into products and services that generate competitive advantage. Grant (1999) proposes that structure is an "efficient mechanism for coordinating a complex system comprising multiple specialized units" and argues that organizational capabilities should be "structured hierarchically according to the scope of knowledge that they integrate" (as cited in Eisenhardt & Santos, 2006, 144). Hence, organizational structure reflects an ability to integrate intellectual capital to create competitive advantage.

Hypotheses Development

Transformational Leadership and Knowledge Management

Transformational leaders serve as social architects who provide further opportunities for employees to explore new ideas and knowledge (East, 2018; Pemberton et al., 2007). These leaders develop organizational communications and enhance knowledge sharing among people to stipulate their knowledge around the organization. These actions fall under transformational leadership dimensions such as inspirational motivation and intellectual stimulation, which inspire followers to take risk-related efforts and generate more innovative solutions (Birasnav, 2014; Nemanich & Keller, 2007). Transformational leaders can, in turn, facilitate knowledge acquisition by employing an idealized influence aspect that is considered to be an essential source for developing relationships.

Research (García-Morales, Lloréns-Montes & Verdú-Jover, 2008, Jung, Chow, & Wu, 2003; Politis, 2002; Sosik, 1997; Yaghoubi, Mahallati, Moghadam, & Fallah, 2014) affirms this point and shows that the transformational leadership is a necessary precursor to create new knowledge within organizations. Politis's (2001) and Birasnav's (2014) studies also highlight the crucial role of transformational leadership in facilitating knowledge acquisition. In this view, it can be argued that transformational leadership positively affects knowledge accumulation by promoting its fundamental ingredients, including knowledge creation and acquisition (Lee & Kim, 2001). In addition, transformational leaders improve knowledge integration by applying intellectual stimulation that improves knowledge sharing. Transformational leaders also provide a significant contribution to knowledge integration through implementing idealized influence to enhance relationships within organizations. Liu and Phillips (2011) explored this relationship and found that transformational leadership could build a climate inspiring followers to share their knowledge. Therefore, a synthesis of literature provides evidence regarding the vital importance of transformational leadership for integrating knowledge by enabling companies in exerting knowledge sharing. Moreover, transformational leaders are clearly ones who develop networking with environmental components, thereby adopting the idealized influence in developing relationships and interactions. It can also be argued that these leaders inspire their organizations to develop networking with more effective enterprises through employing inspirational motivation directed at setting highly desired expectations for followers. Based on this, it is apparent that transformational leaders provide a significant contribution to knowledge reconfiguration by facilitating the activities associated with networking. The synthesis of previous research therefore proposes that transformational leadership positively affects knowledge management (accumulating, integrating, and reconfiguring knowledge).

Hypothesis 1: Transformational leadership has a positive association with knowledge management.

Mediating Role of Organizational Structure

Formalization and centralization are the most important aspects of organizational structure (Lee & Choi, 2003). Chen and Huang (2007) define *formalization* as the degree to which employees are guided by rules and regulations and *centralization* as the degree to which executives are involved in the process of decision making. Transformational leaders can affect these two aspects of organizational structure. Transformational leadership assists in building communities of practice to provide a better environment in which subordinates can explore new ideas and create more knowledge. Jarvenpaa and Staples (2000) argue that less emphasis on formalization could contribute the creation of new knowledge, and Graham and Pizzo (1996) state that formalized structures restrict the generation of new ideas. In contrast, transformational leaders inspire their followers to ignore written procedures and rules to reach informal agreements for effectively handling situations. Transformational leaders are good at developing informal structures to stimulate new solutions for solving organizational problems in an innovative manner. Jung, Wu, and Chow (2008) argue that formalized structures negatively contribute to creating a better environment. Therefore, transformational leadership is negatively related to formalization. A transformational leader also builds decentralized structures that support intellectual stimulation for enhancing knowledge sharing and creating a more innovative climate. This idea can be also supported by accounting for the crucial role of decentralized structures in facilitating the exchange of ideas and the implementation of innovative solutions based on sharing the power of decision making around the organization. Tafvelin (2013) also suggests that a negative relationship exists between transformational leadership and centralization. Tafvelin demonstrates that transformational leaders achieve a higher degree of effectiveness in a decentralized structure. Hence, transformational leadership is negatively related to organizational structure (high formalization and high centralization).

Hypothesis 2: Transformational leadership has a negative association with organizational structure.

The current literature supports the decentralized and informal structure that facilitates knowledge management processes in organizations (Bennett & Gabriel, 1999; Claver-Cortes et al., 2007; Gold et al., 2001; Hellstrom, Kemlin, & Malmquist, 2000; Mahmoudsalehi & Moradkhannejad, 2012; Serrat, 2017; Zheng et al., 2010). Therefore, it can be argued that less emphasis on centralization and formalization can improve interactions, and subsequently, generate more knowledge. This argument is based on the fact that the delegation of decision-making power creates a climate that develops interdepartmental communication within organizations (Cardinal, 2001; Damanpour, 1991; Kaser, Mundy, Stiles, & Loucks-Horsley, 2006; Kheirandish, Avilagh, & Nazemi, 2017; Sivadas & Dwyer, 2000; Woodman, Sawyer, & Griffin, 1993). Decentralization encourages organizational communications, and consequently develops a climate of openness in which employees can exchange their new ideas. Subsequently, employees can implement ideas because the authority of decision making has been delegated to their departments. Therefore, centralization has a negative relationship with knowledge management effectiveness.

Informal structures also improve communication by developing interactions among members in order to achieve informal agreements on how to handle daily issues and activities. Hence, informal structures can also provide the freedom for employees to generate new ideas and better solutions to problems. Bennett and Gabriel (1999) posit that an informal structure enhances organizational communication. Therefore, formalization negatively contributes to knowledge management processes in organizations.

Lee and Choi (2003) and Zheng et al. (2010) conducted studies that show the impacts of formalization and centralization on various knowledge management processes, such as knowledge acquisition, creation, sharing, and application. The results of these studies illustrate that less formalized and less centralized structures positively contribute to knowledge management processes. Therefore, this research assumes that structure (high formalization and high centralization) negatively affects knowledge management.

Hypothesis 3: Organizational structure has a negative association with knowledge management.

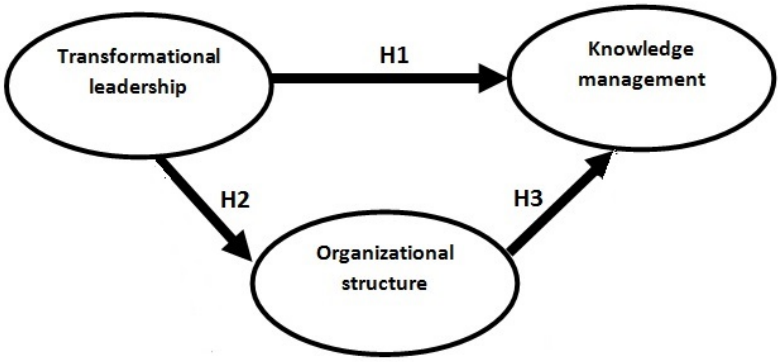

Figure 1. Model and hypotheses

Conclusion

The first purpose of this article was to explore how transformational leadership affects knowledge management. Based on Hypothesis 1, transformational leadership positively contributes to knowledge management. This exploration also aimed to identify the effects of transformational leadership on organizational structure and understand how organizational structure mediates the relationship between transformational leadership and knowledge management. I theorized that transformational leaders have an impact on organizational structure and showed how organizational structure plays a mediating role on knowledge management. More specifically, Hypothesis 2 suggests that a positive relationship exists between transformational leadership and knowledge management. Hypothesis 3 suggests that a negative relationship exists between organizational structure and knowledge management. Transformational leaders, in fact, tend to manifest themselves as change agents who affect organizational structure. However, the negative impact of structure was also seen on knowledge management.

A key contribution of this research was integrating the social capital and knowledge-based views to justify the role that transformational leaders could play as change agents within organizations. In so doing, this investigation has opened

a new avenue of inquiry for investigating the interactions between transformational leadership and knowledge management within organizations.

Scope for Further Research

Since the theory in this research has only focused on organizational structure, future studies should identify other organizational factors that might be affected by transformational leadership or can mediate the relationship between transformational leadership and knowledge management. For example, future research should explore how human resources (HR) practices mediate the relationship between transformational leadership and knowledge management. Given that HR practices are important factors for knowledge management effectiveness (Donate & Guadamillas, 2011) and might be affected by transformational leadership, future research may assess this factor.

In terms of methodology, one important avenue for further exploration is to explore the theoretical relationships of this research with empirical studies that could be carried out using the triangulation method of quantitative (i.e., survey) and qualitative (i.e., in-depth interview) approaches. In this approach, researchers are encouraged to design mixed-methods research and conduct in-depth interviews or observational studies with leaders at various organizational levels. This will improve the generalizability of these findings.

Additionally, this research employed the social capital view and the knowledge-based view to examine the influence of transformational leadership on organizational structure, which can mediate the relationship between transformational leadership and knowledge management. In so doing, this exploration has opened a new avenue of inquiry for investigating interactions between transformational leadership and organizational structure in supporting knowledge management. To explore the potential interactions between transformational leadership and organizational performance, future research could explore the impact of organizational structure on organizational performance, as well as measure the mediating roles that may be at play in the relationship between transformational leadership and organizational performance.

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Agricultural Leaders Preparing for the Fourth Industrial Revolution*

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The purpose of this qualitative case study was to develop an understanding of how leaders of the fourth industrial revolution are affecting farming technology and to explain how technology is affecting young farmers and their decision to pursue farming careers. Four themes emerged from the data analysis of the semi-structured interviews with 13 Minnesota farmers: (a) work perception, (b) emotions surrounding career choice, (c) leadership role and influence of others, and (d) thoughts about career choice. The findings from this study provide a greater understanding of the leadership direction and career choice among those in the new farmer movement who are more open to technology for increasing profits and reducing expenses. With many challenges facing U.S. farming leaders, strategic planning using creative, forward thinking in the form of technology may be the answer for energizing and transforming the future of farming.

Key words: agricultural leaders, digital farming, farm industry leaders, farming technology, fourth industrial revolution, young farmers

Over the years, we have experienced a rapid growth in United States cities, and more of our rural lands are being used to accommodate this growth (Harper, 2016). As rural lands diminish, the future of our agricultural farmers will be less promising (Baird, 2016). The U.S. population in our cities is predicted to double by 2050, and there is fear that future food shortages may result (Harper, 2016; U.S. Census Bureau, 2018). Most farmland is already used for production, which means there are only a few ways to meet the increasing food demand in the United States, which is through higher yields, introduction of new growing locations like underground and indoors, and through technology (Daniels, 2016; "The Future of Agriculture," 2016). Strategically planning through the use of new technology increases profits, reduces costs, and allows consumers to gain access to food at lower prices ("The Future of Agriculture," 2016, USDA, 2018a).

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The purpose of this qualitative case study was to develop an understanding of how leaders of the fourth industrial revolution are affecting farming technology and to explain how technology is affecting young farmers and their decision to pursue farming careers. This information is relevant to understanding how to attract future farmers to the industry in an effort to feed the expanding population. Even though the advancement of technology allows farmers to do more with less, recruiting and supporting farmers is a persistent problem (Cubbage, 2019). New farming technology will provide a solution to the growing food challenges. For example, Goldman Sachs analysts suggest that the farming technology sector will reach $240 billion by 2050; the driverless tractors market alone will reach $45 billion (Daniels, 2016). Farming technology is an expanding sector that allows farmers to control labor costs through automation, while helping farmers increase profits by 10% or more (Daniels, 2016; Negrete, 2016).

Innovative strategies in farming are essential for producing food to meet the demands as the population swells with more individuals becoming middle-income earners with interest in healthier food options ("The Future of Agriculture," 2016; McKinley, 2018). Additional forms of automation will enhance sowing, watering, fertilizing, and soil monitoring through technology to make farming more like manufacturing (Ampatzidis, De Bellis, & Luvisi, 2017; "Feeding the Ten Billion," 2016). Precision technologies will help farmers understand which practices within the field can be used to optimize nutrients and other inputs for sustainable crop production. Close monitoring through technology permits customization of plants to local conditions, higher yields, and more accurate predictions. Further advances are a result of understanding the implications of DNA in both plants and animals, making genetic modifications possible (Ampatzidis et al., 2017; Daniels, 2016). This case study provides a history of the decline in U.S. farming, shares the leadership knowledge and experiences from a group of today's farmers in Minnesota, and emphasizes the need to implement strategic methods, such as new farming and agricultural technology, to protect future farms and ensure adequate food supplies are available to support our nation's growing needs. Luhmann's (1995) theory of neofunctionalism helps explain how

technology is affecting young farmers and their decision to pursue farming careers. The neofunctionalist framework allowed for the understanding of the why and how farmers choose farming as a career and to support the research question framing this study.

Research Question: What role does the new farmer movement in technology play in the decision-making experience of career choice among young farming leaders?

Literature Review

The world's population is expected to be close to 10 billion by 2050, an increase from 7 billion in 1999, and between 2018 and 2060, the U.S. population is projected to increase from 319 million to 417 million (U.S. Census Bureau, 2018). Based upon this population growth, the supply of nutrition will need to increase by 75% to prevent mass malnutrition when most land for farming is undergoing cultivation ("Feeding the Ten Billion," 2016). The USDA's agriculture projections through 2027 will bring an improved external environment, including the rebound in trade, for supporting a growing global demand for food and agricultural products, and the United States will remain among the most competitive agricultural exporters (USDA, 2018c). We can expect a slower long-run economic growth rate and a relatively strong dollar to support growth in U.S. agricultural exports over the projection period ("Feeding the Ten Billion," 2016). The USDA (2018c) suggests that developing countries, particularly in Asia, will continue to account for most of the growth in U.S. agricultural exports due to their economic and population growth, which boosts global demand as incomes rise.

According to the USDA (2019), net farm income, a broad measure of profits, is forecast to increase $4.0 billion (4.8%) to $88.0 billion in 2019, after increasing in both 2017 and 2018. In inflation-adjusted 2019 dollars, net farm income is forecast to increase $2.5 billion (2.9%) from 2018. If realized, in inflation-adjusted terms, net farm income in 2019 will be 35.5% below its peak of $136.5 billion in 2013 and below its 2000–2018 average ($90.1 billion).

With the commodity prices still low as of 2018, farm debt is predicted to reach record highs. The nonprofit organization Farm Aid warns that if the market does

not recover soon, the country could see its highest rate of farm closures since the 1980s (Good, 2018; Harvie, 2017; Prager, Tulman, & Durst, 2018).

Many U.S. farmers have been astonished by the decision made by the Trump administration to retreat from the proposed Transpacific Trade Agreement between the United States, Mexico, Canada, Japan, and eight other countries (Blake, 2017). In addition, the United States' second- and third-largest agriculture export markets, Canada and Mexico, are in jeopardy as President Trump revamps the North American Free Trade Agreement (NAFTA). Farmers consider this a threat to U.S. agriculture since one in three farmed acres is exported, and 23% of raw U.S. farm products are exported annually (American Farm Bureau Federation, 2018). Concurrent with this need for innovation, the agricultural industry is going through a fundamental transformation inclusive of a general shift in the decline of the number of farmers, a push toward digital farming and organic products, and pressures to do more with less (College Board, n.d.; Harvie, 2017; Prager et al., 2018). With many challenges facing U.S. farmers, strategic planning using creative and forward thinking technology may be the answer for energizing the future of farming for global survival.

Technology Leaders

As noted by the USDA's (2018a) report on technology, farmers will reduce their application of water, fertilizers, and pesticides across entire fields. The benefits are increased crop productivity, reduced impact on natural ecosystems, less runoff of chemicals into our waterways and groundwater, and increased safety. Robotic technologies ensure reliable monitoring, and management of natural resources gives producers greater control over plant and animal production, processing, distribution, and storage, which results in greater efficiencies, lower prices, safer growing conditions and foods, and reduced environmental and ecological impact (USDA, 2018a).

A critical success factor for progress will be the use of mobile information that allows farmers to gain a deeper understanding of the land in coordination with communication for selling their products in the marketplace (Struebi, 2016). Consideration of the input of farmers into the features and functionalities of

developing technology is the most important factor for the technology to be accepted and implemented (Gustafson, 2016). The future direction for farming leaders will involve greater levels of specialization by the implementation of technology. Technology access and device utilization are embedded in the Internet of Things, which can increase production and transparency while responding to consumer needs faster. The *Internet of Things (IoT)* is essentially the art of connecting and integrating objects, people, information, and systems for intelligent production of services and is set to push the future of farming to the next level (Gasiorowski-Denis, 2017).

With the implementation of these systems, the perspective of social and environmental sustainability is growing in importance (Gabriel & Pessl, 2016). For farmers, there is an intertemporal tradeoff between the costs and benefits of technology that enhances productivity (Bowman & Zilberman, 2013). Changes to farming systems occur because of investments in affordable technology, alignment of market information with farming products and services, and the removal of programs that subsidize farming (Allen, 2017). Technology helps farmers improve efficiencies for sustainment and make better decisions about input allocation, thus creating an opportunity to reduce expenses (Bowman & Zilberman, 2013).

United States. At a symposium in Arizona, on a panel of 12 PhDs sponsored by the University of Arizona College of Agriculture and Life Sciences, Siemens outlined the future of fieldwork, including autonomous multitasking tractors working around the clock to eliminate human operator fatigue, and 24-hour-a-day mobile agriculture robots planting an entire field with off-site monitoring, then returning to the main unit for recharging and seed refill (Allen, 2017). In addition, Siemens emphasized that a see and spray unit using cameras, computers, and artificial intelligence will be used to spray herbicides only on weeds and fertilize individual plants using algorithms similar to those for facial recognition (Allen, 2017).

Canada. The Canadian government's 2017 Advisory Council on Economic Growth Report, otherwise known as the Barton Report, flagged agricultural innovation as having high potential for driving economic growth and societal well-

being (Government of Canada, 2017b). The government is investing significant money in the development of innovations in data and machine intelligence applied to agriculture in the hope that these innovations will help meet the sustainability challenges through emission reductions and demand for jobs among Canadians (Bronson, 2018).

Mexico. The very high use of water in Mexican agriculture has prompted improvements in water conservation, but environmental issues, such as surface and groundwater pollution and groundwater overdraft, are threatening the resource base mainly in the central and northern regions of the country (de Anda & Shear, 2017). Drainage problems and resultant salinization are important considerations in irrigated areas, while flood control is a concern in the southern regions of Mexico. As de Anda and Shear (2017) note, because of the arid conditions in most of Mexico and the increasing need of water for agriculture, most of the aquifers located in central and northern Mexico are classified as overexploited. Therefore, horticultural production in Mexico has begun to focus on greenhouse/shade hours technology throughout the northern and central parts of the country as a remedy for the water shortage (Arreguín-Cortés, López-Pérez, & Marengo-Mogollón, 2011; CONAGUA, 2015). Agricultural mechanization seems to be the only long-term solution; automation and robotics are being considered at the highest level (Negrete, 2016).

Future Careers in Farming

The number of farms and “primary producers” decreased from 2,109,303 in 2012 to 2,042,220 in 2017 (Piotti, 2019). This news has serious implications for food production, our environment, and the next generation of farmers (Piotti, 2019). A review of the agricultural sector indicates that only 8% of millennials have an interest in an agricultural career, highlighting apprehension of the talent pool and future pipeline of those people who receive preparation to address food demands (Cubbage, 2019). Farmers, agricultural professionals, and government policymakers must work together in a knowledge network with the drive to raise food production, while controlling costs or doing more with less (SPARC, 2016). The goal is to increase the nutrition, availability, and convenience of food in a

sustainable manner by preserving and promoting the cultural heritage of farming (Graves, 2016). There are currently 669,989 student members of Future Farmers of America (now known as FFA) with members in all 50 states and in Puerto Rico and the U.S. Virgin Islands (FFA, 2018a).

FFA has introduced the New Century Farmer Conference, at which FFA members learn how farmers can profit from value-added products, new farm business opportunities using technology, and business alliances with other producers (FFA, 2018b). In addition, conference attendees learn to overcome challenges faced by young farmers, network with a group of young men and women who are excited about pursuing farming as a career, and most importantly, grow both personally and professionally (FFA, 2018b). To attract new students with an interest in farming, such as students enrolled in FFA, colleges need to update their recruitment materials to make it more relatable. Since the majority of millennials and Generation Z grew up with technology, developing courses that emphasize the use of farming technology, such as robotics, may increase college students' interests in agriculture (Bogue, 2016; Shamshiri et al., 2018; "Young Farmers: Millennials," 2017). With the expansion of technology in farming combined with efforts from FFA, colleges, and current farmers, an increase in interest in farming careers can be realized for millennials and Gen Z.

Theoretical Framework

How does one decide upon a career in farming? The theoretical framework of Luhmann's (1995) neofunctionalism helps explain how technology is affecting young farmers and their decision to pursue farming careers. Luhmann's neofunctionalism synthesizes traditional functionalism or systems theory with structuralism to address shortcomings, especially the incapacity to address change. According to Luhmann (1995, 1997, 2012), the system subdivides with each subsystem relating to other subsystems. The system and environment evolve as the result of *autopoiesis,* or the system making itself (Luhmann, 2012). The neofunctionalism framework allowed for the understanding of the why and how farmers choose farming as a career, and that risk taking may not resolve

many of the dilemmas they are facing. For instance, Segre (2014) posits that using technology to prevent risk may not be effective and may result in unanticipated and undesirable effects such as ecological disasters. Another example is production risks, or the possibility that a farmer's yield or output levels will be lower than projected due to adverse weather conditions such as drought, freezes, or excessive rainfall at harvest or planting (Sciabarrasi, n.d.).

According to Segre's (2014) study of neofunctionalism, risk analysis involves temporal, legal, and social distinction between what occurs before and after a change has been implemented. It also involves tolerating or absorbing the risks taken. For some of our older farmers, turning to technology as a means to increase profits and maintain their family farms may not provide a solution to the farming shortage. The younger farmer who has a better understanding of technology is more apt to be open to new technology and can envision how farming technology can improve and sustain their farms, which helps explain how technology is affecting young farmers and their decision to pursue farming careers. With this in mind, neofunctionalism helps one understand the immediate or pre-reflected consciousness of older farmers regarding events related to the contributions of today's farming. For instance, the farmer and the farm are a microcosm of society and one that is vital to the sustainability of life (Feldman, 2016; Luhmann, 2012).

Individualism in Farming. The division of labor is the result of societal changes to demands leading to individualism (Feldman, 2016). The relationship between the individual and the social system in farming occurs at an early age due to the experiences of those raised on the farm and participating in agricultural programs, leading to the development of place attachment (Quinn, Quinn, & Halfacre, 2015). As noted by Quinn et al. (2015), *place attachment* is the experience that takes place in a safe environment, thus providing meaning as well as an emotional connection. The farmers in our study understand the importance of place attachment and emphasized their positive farming experience and the emotional connection they have with farming. According to Durkheim (2001), there is a difference between *individuation,* or individual moral

choice, and *individualism,* or the cause of only conscious thought. When one views the self and society as both having the ability to create existence, communities like farming are fertile grounds for understanding identity making due to the solitary nature of the work and the personal meaning gained from that effort while having the capability to belong to a greater world (Feldman, 2016). Understanding the meanings farmers attribute to identity making and career choice may lead to increased understanding why someone would choose farming as a career, even though the risks are extremely high (Segre, 2014).

Literature Review Summary

From the current literature review, several trends emerged about the future of farming and how agricultural leaders will need to work together to embrace technology as a solution for transforming and sustaining farming. The number of farms declined; for those farms that remain, increasing in size through strategic planning is necessary for generating more profit (Lopes & Ross, 2013; USDA, 2018a). Technology has changed the way of farming not only in the United States, but worldwide (Allen, 2017; Bowman & Zilberman, 2013; Bronson, 2018; CONAGUA, 2015; Government of Canada, 2017a; Piddock, 2014; USDA, 2018c). Those individuals who pursue a degree in agriculture do so because of their love of farming and job satisfaction (Chaudhary, 2015; Hegerfeld-Baker, Droke, Pallapu, & Anand, 2016).

The theoretical framework supporting this study was Luhmann's neofunctionalism, which helps explain how technology is affecting young farmers and their decision to pursue farming careers and to support the research question framing this study: What role does the new farmer movement in technology play in the decision-making experience of career choice among young farming leaders? Luhmann's (1995) neofunctionalism synthesizes traditional functionalism or systems theory with structuralism to address shortcomings, especially the incapacity to address change. Functionalists stress societal pressure to conform to a set of norms, with an understanding that rules and regulations guide the role of a person (Hammersley, 2011).

The cultural and leadership heritage in the agricultural sector is important, as those who receive family support have a greater likelihood of becoming future farmers (Chaudhary, 2015). A positive correlation exists between farm family, quality of life, income, and community strength (Arbuckle & Kast, 2012). In his study, Baker (2009) stresses the direct and indirect influences organizational culture and leadership had on the organization's productivity. The farming family embodies the *clan culture,* in which a family-like type of environment emphasizes consensus and commonality of goals and values (Allame, Nouri, Tavakoli, & Shokrani, 2011). The clan culture plays an important role in perceived leadership support when implementing technological change (Ballaro & Washington, 2016). In this study, the new farmer movement resonates within a clan culture in which family is the most important reason for pursuing a career in farming and the young agricultural leader understands the importance of transforming the farming industry through the implementation of farming technology. Despite the significance of the cultural and leadership heritage in farming, many individuals who are earning degrees in agriculture lack the necessary experience and skills, which places the agricultural sector in peril (Swan & De Lay, 2014; Yueh, Chen, & Cheng, 2014). There will be a greater need for experienced farming leaders to mentor young agricultural college graduates to bridge the gap between the experienced and non-experienced farming groups. As Smits and Bowden (2013) note, modeling is a potent strategy for learning leadership skills that may enhance the cultural and leadership heritage bond between younger and older farmers.

Identity and social competence are at the heart of natural preservation (Hogan, Scarr, Lockie, Chant, Alston, 2012). To preserve the heritage that accompanies farming, leaders in academia must be able to introduce materials that provide a deeper understanding of what career choice means to farmers (Beyl, Adams, & Smith, 2016). There is not enough recognition that farming is on the cusp of significant technological change occurring at a fast rate (Liu, 2013). To enhance productivity in agriculture, technology must be embraced that incorporates the heritage of farmer identity (Bowman & Zilberman, 2013). Colleges, technological corporations, FFA leaders, current farmers, and government must work together

to strategically pave a pathway for college-bound students to learn the cultural values of farming and the technological advances needed today and tomorrow to revitalize and sustain farming, as well as to promote the farming career as profitable and prestigious.

The goal for the United States should be to find a way to bring together a new generation of farmers and agri-science, technology, and farm industry leaders who are challenged with preserving and promoting the cultural heritage, which sustains career interest in farming while inspiring the next generation of techno-oriented college graduates to enter the profession (BLS, 2015; USDA, n.d.). The goal for this study was to fill the gap noted in the literature, which is to better understand how technology may influence career choice among young farmers to promote a new generation of farmers by bringing together leaders representing agricultural college graduates, agri-science, technology, and farm industry to enhance and preserve farming.

The lack of interest among millennials and recent college graduates in careers in farming and farming production support, threatens the talent pipeline needed to drive innovation to meet the demands for feeding a future global population (AFA, 2015; Beyl et al., 2016; Bronson, 2018; Clarke, 2018; “Farmer,” n.d.; USDA, 2018a). Building a new future of innovation in agriculture, in addition to the rich cultural traditions of the farming industry, will be critical for developing a dedicated next-generation workforce of farmers and agricultural professionals and leaders (Pyrkosz, 2011). Having a greater understanding of how investing in farming technology may bridge the gap between urban farmers, agricultural college graduates, agri-science, technology, and farm industry, leaders will be able to provide valuable information to industry professionals responsible for the recruitment and retention of the agricultural workforce. Attracting more leaders to the farming industry may produce a larger talent pool for developing and implementing innovative solutions to address growing food concerns of availability, nutrition, and convenience through the use of technology.

Method

The objective of using a qualitative method and case design was to understand social realities and derive meaning from knowledge, emotions, and opinions from individual farmer's experiences, while exploring the literature that has been written on technological advances in farming (Byrne, 2016; Smith & Bowers-Brown, 2010). Qualitative research focuses attention on social and cultural phenomena, allowing researchers to comprehend how people interpret, understand, and attach meaning to their personal experiences and situations (Creswell, 2018; Leedy & Ormrod, 2018). Rigorous qualitative research is demanding and requires disciplined involvement with the subject matter (Fischer, 2009). A case study explores a real-world phenomenon and the environment in which the occurrence manifests (Yin, 2017). A qualitative case analysis is essential for supporting social science and phenomena specific to its environment (Ragin & Becker, 1992; Yin, 2017).

Bell, Shaw, and Boaz (2011) emphasize that a *case study* is an array of corresponding analysis sustained within a database with a chain of evidence, which adds to the reliability of case study strategies. A qualitative method and case study provided the best platform for research design to support the premise of this study, that technology is affecting young farmers and their decision to pursue a farming career. Case studies allow researchers to gain information from interviews and document analysis (DeWalt & DeWalt, 2011; Yin, 2017). Several leadership researchers used qualitative case studies to support their research to emphasize the implementation of change successfully with effective initiatives (Ballaro & Polk, 2017; Becker, Hartmann, & Miller, 2014; Donnelly & Graham, 2018; Halley, 2015; Jones & Rivas, 2011; Ogidan & Lao, 2015).

The qualitative method and case study design were most appropriate to research how technology is affecting young farmers and their decision to pursue a farming career and to support the research question framing this study. The focus of this study was to understand how technology may have been part of the decision-making experience among Minnesota farming leaders by capturing the purposeful intent of describing the inner workings of each farmer's perspective

and opinions and comparing the interview data with studies on advances in farming technology, with the strategic emphasis on how to preserve agricultural farming for future generations.

Through triangulation, data were gathered, and an analysis was conducted using agricultural statistics, studies on farming technology world-wide, in-depth interviews, and observations with farmers on their rural farms. We interviewed farmers in southwest Minnesota and compared their experiences, knowledge, and opinions of farming technology, to better understand how technology may influence career choices among young farmers. There is a need for more agriculture college graduates to pursue a career in farming, assist current farmers, and enable the farming business in the United States to flourish, rather than diminish, in an effort to continue to feed the global population.

At the time of the interviews, the population of farms in Lyon County, Minnesota, was 904. Lyon County is the largest county in southwest Minnesota (USDA, 2018d). The data for Lyon County, Minnesota, suggested a gross return of $685.65 per acre, total direct and overhead expenses of $774.06, and a net return of $-84.19 for 2017 (FINBIN, 2018). In 2012, the average farm sold $445,815 worth of goods (USDA, 2015). The reason for selecting farmers in this region was due to the proximity to the researcher and farm financials, which yielded a negative net return that indicated the financial concerns for choosing to farm as a career. The Minnesota farmers in this study provided an excellent example of the population of U.S. farmers and the financial concerns facing many farmers throughout the country. During the literature review, data collected from the USDA (2018b) indicated the median on-farm household income across the United States ranged from a low of -$3,040 in 2008 to -$1,569 in 2014. Median farm income in 2018 was -$1,840 per household and is forecast to increase slightly to -$1,644 in 2019, an increase of 2.2% (USDA, 2019). Negative returns throughout the United States reflect a concern for those choosing farming as a career. The findings from this study may help explain how technology is affecting young farmers and their decision to pursue farming careers.

Purposeful sampling was used to select farmers who began their farming businesses within the last 10 years and reside in Lyon County, Minnesota. Experimentation suggests that saturation from interviews is reached at around 12 participants, but it depends on the subject matter (Charmaz & Belgrave, 2012). After conducting the first five interviews, the data were assessed to locate patterns and determine whether or not saturation was reached. The researcher contacted an additional eight farmers totaling 13, reviewing data after each interview. At the 13th interview, no new information emerged, and the interviewing ceased.

Case studies allow researchers to gain information from interviews and document analysis (DeWalt & DeWalt, 2011; Yin, 2017). This case study allowed for gathering information through semi-structured interviews. Observations on the participants' farms, along with a review of the literature on statistics for present and future farming and technological advances in farming, played a role in supporting triangulation. The study's research question drove the design, data collection, and data analysis protocols for the study: What role does the new farmer movement in technology play in the decision-making experience of career choice among young farming leaders? The awareness for this topic occurred through bracketing and reflective journaling. Bracketing provided a way to reduce researcher bias and set aside any assumptions and unacknowledged preconceptions (Fischer, 2009; Tufford & Newman, 2010).

The interviews took place in each farmer's own environment. The uniqueness of each farmer's experience, knowledge, and opinions were the reasons for interviewing 13 farmers. Qualitative data was collected through 10 open-ended questions. The interviews were recorded and transcribed. Each farmer was provided with a copy of the transcribed interview with an opportunity to validate and make any corrections to the transcript. Member checking is a respondent validation method that enforces internal validity and credibility by removing ambiguity and contradictions, expanding on the respondents' intent, and making strong data connections (Carlson, 2010).

Horizonalization effectively grouped relevant experiences and opinions across interview questions from each farmer (Leech & Onwuegbuzie, 2008).

Horizonalization encouraged dialogue between researcher and farmer, leading to an increase in sharing (Deutsch, 2012; Leech & Onwuegbuzie, 2008). Coding and thematic analysis occurred during the data analysis stage. The data analysis stage highlights the significance of clear transparency, illustrating the what and the why of interviewees' responses (Rallis, 2015). The transcript was manually analyzed, coded, and sorted through multiple systematic reviews. The next step consisted of textual accounts of events that were formed based on each participant's interview. These thick descriptions involved explanations of intent and recognizable patterns (Rallis, 2015). Repetitive review of qualitative data is necessary because each review uncovers more information (Song, 2013; Williams, 2013). Coding and thematic analysis involved multiple reviews to flesh out the findings and present thick descriptions (Rallis, 2015). The remaining data were reorganized to form themes and sub-themes of similar topics. These themes consisted of textual descriptions of clustering responses, which contributed to answering the research question (Bold, 2012; Cunningham, Menter, & Young, 2017).

Results

Themes

The words and phrases appearing within themes provided a greater understanding of why these participants chose a career in farming. Four dominant themes emerged from the interview responses: (a) work perception, (b) emotions surrounding career choice, (c) leadership role and influence of others, and (d) thoughts about career choice. These four themes were based on ideas that were repeated often during the responses to the interview questions. Sub-themes emerged from each major theme, providing depth and clarity to each participant's interview. Each of the four tables that follow represents a theme and its subtheme(s) and the percentage of the farmers' responses that supported each subtheme.

Work Perception. Taking a closer look at the theme of work perception brings the first sub-themes to light, noted in Table 1. The farmers in this study

emphasized that farming is a business that requires working the land for long and laborious hours, and that their farming is offset by an off-the-farm job that generates additional revenue to subsidize farming. Being able to generate additional income outside of farming helped offset losses in farming and enabled the young farmers to continue farming.

Table 1: Work Perception

Subthemes	Number of Participants	Percentage
Business	10	77
Land	10	100
Long and Laborious	13	77
Off-the-Farm Job	11	85

Emotions Surrounding Career Choice. Emotions surrounding the choice to pursue a career in farming led to the data in Table 2. Each farmer emphasized their strong desire to become a farmer and their deep love for farming throughout the interviews. Having intense emotions of love and desire for farming motivates these farmers to work even harder.

Table 2: Emotions Surrounding Career Choice

Subthemes	Number of Participants	Percentage
Desire	9	69
Love	10	77

Leadership Role and Influence of Others. Table 3 includes data contributing to the leadership role of each farmer and the influence of others in choosing to farm as a career. Family was an important influence for two reasons. First, participants expressed the importance to work in close cooperation with family. Second, these farmers wanted to be in a leadership role to pass the farm along to the next generation of family. The career choice allowed farmers to identify a real connection with other family members. The ability to keep the farm running and controlled by family is highly significant for these farmers, since several generations had been working the land.

Table 3: Leadership Role and Influence of Others

Subtheme	Number of Participants	Percentage
Family	13	100

Thoughts About Career Choice. One sub-theme emerged, variability with technology, from the various thoughts on choosing a farming career as shown in Table 4. The variability in day-to-day operations included new technology as an enticing factor for becoming a farmer. Farmers in this study emphasized the importance of the variety of work occurring each day, as well as the ability for ongoing learning, in propelling their choice of farming. The participants noted their interest in the potential of technology to bring improvements and sustainment to farming. For these farmers, the improvements would appear in cost-saving approaches and efficiency enhancements that would increase their profit margins. Productivity enhancement is a technological area that excites these farmers, especially when it relates to the bottom line.

Table 4: ***Thoughts About Career Choice***

Subtheme	Number of Participants	Percentage
Variability with technology	8	62

Discussion

Four dominant themes and eight sub-themes emerged from the data analysis that embodied and supported a career choice in farming for these 13 farmers. The dominant themes were: (a) work perception, (b) love and desire, (c) leadership role and influence of others, and (d) thoughts about career choice. The farmers' perception of work included four subthemes, summed up as (a) farming is a business that requires working the (b) land for (c) long and laborious hours, offset by the need for (d) an off-the-farm job to generate additional revenue to subsidize farming losses. The emotions surrounding career choice were the desire to become a farmer and the love of farming. The leadership role and influence of others was due to the importance of family, the most influential factor for these young farmers. The subtheme for thoughts about

career choice was variability with technology. The farmers noted that variability in what needs to be accomplished each day and technology played key roles in offering varied options, cost-saving approaches, and efficiency enhancements that allow these farmers to increase their profit margins.

As noted by the farmers, changes in how one runs the business of farming by embracing and implementing technology may increase profits and decrease the need for an off-the-farm job. The findings from this study helped to explain how technology is affecting young farmers and their decision to pursue farming careers and filled the gap in the extant literature of how technology may influence career choice among younger farmers. There is a greater need to understand and embrace technology in the world of farming in order to be better prepared for the fourth industrial revolution.

Implications

The farmers in this study chose careers as farmers because family was their greatest influence. Farming embraces a clan culture in which leaders are influenced by family (Ballaro & Washington, 2016). Sharing the experience of farming with their families brings these farmers closer together. Love for family and working the land were also reasons for these young farmers to pursue careers in farming. Even with the passion and interest of those interviewed, farming as a career choice is on the decline (Harvie, 2017; FFA, 2018a; Prager et al., 2018). Current policy provides little support for older farmers while discrimination toward younger farmers occurs due to a lack of land ownership (Cush & Macken-Walsh, 2016). Furthermore, the findings from this study provide a greater understanding of the career choice of farming among those in the new farmer movement who are more open to new technology that will increase profits and reduce expenses.

Schwab (2016) posits that the nation stands on the brink of a technological revolution that will fundamentally alter the way one lives, works, and relates to one another. Farmers in this study understand that technology will change the future of farming. We do not know just how the technological revolution will unfold, but one point is clear; the response to it must be integrated and

comprehensive, involving all stakeholders and leaders of the global polity, from the public and private sectors, to academia and civil society (Schwab, 2016).

The fourth industrial revolution is creating new experiences by attempting to bridge technology, information, and communication together (Gabriel & Pessl, 2016). With the implementation of these systems, there is a growing importance of the perspective of social and environmental sustainability (Gabriel & Pessl, 2016). The findings from the emergent themes and the analysis of the literature for this study support the need for the development and implementation of leadership strategies to support how farming technology affects young farmers and their decision to pursue farming careers. Leadership strategies that bring together experts in farming technology, current farmers (young and old), agricultural college graduates, agri-science, and the government will result in successful cooperation and a greater understanding and sustainability in future farming. The farmers in Minnesota provided evidence in their interview responses as to why they pursued careers in farming, and as young farming leaders, they are more open to new technology than their older counterparts.

Conclusion

This case study focused on the need to understand the leadership role the new farmer movement in technology has on meeting the food demands for future generations and to how technology has played a role in the career choices of a group of farmers in Minnesota. As noted by the farmers in this study, family was their greatest influence, and although they appeared to embrace technology, they do so cautiously, understanding that technology enhances efficiency levels, but are offset by the expense outlay. Research in new technology and new farming techniques and methods can identify leaders for future farming based on work preference, passion for farming, education requirements, and a greater understanding of how farming can be a profitable profession.

During the literature review, a gap was noted that prompted a need for this research. Through triangulation, this gap was filled where data were gathered, and an analysis was conducted using agricultural statistics, studies on farming

technology worldwide, and in-depth interviews and observations with farmers on their farms. The analysis and findings provided a better understanding of how technology may influence career choice among young farmers.

There is a need to embrace and accept advanced technology in farming and to garner an understanding of how new technology brings greater efficiencies to the operation of farming, not only for the United States, but for all nations. The research conducted for this study on new technology in farming brought to the surface the need to be prepared for the fourth industrial revolution, which has gleaned responses internationally; leaders agree that technology will change agriculture and a team effort must be realized between today's leaders in farming, education, society, government, and techno students in order to sustain and transform farming. There is a greater need to understand and embrace technology in the world of farming in order to be better prepared for the fourth industrial revolution, in which global leaders must cooperate to resolve food shortages through technology in order to provide ample food to feed future generations.

Limitations

Finding farmers who were willing to be interviewed was extremely difficult due to their busy schedules and time constraints. There were no female farmers available to participate in this study, which limited the participants to male farmers who operate farms in southwest Minnesota. Interviewing participants in a face-to-face manner within their own farm environment led to scheduling complications. Scheduling complications also occurred as interviews were scheduled during the peak season of planting for the farmer. An additional challenge arose in scheduling because of work–life balance, as many farmers were committed to family events.

Recommendations for Future Research

Additional research by expanding the demographic area will generate a more inclusive understanding of farming. The demographic area could include other parts of Minnesota, the United States, and other locations around the world. Since the sample for this study was entirely male, another recommendation for future research

would be to include female farmers. More insight could be gained by comparing female and male farmers to identify leadership similarities and differences.

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PRACTICE

Résumé Factors That Predict Candidate Selection for Interviews*

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This study investigated the résumé factors that predict candidate selection for job interviews. To determine the key factors, 200 qualified résumés for a position from a pool of more than 1,000 résumés were randomly selected and analyzed. Regression analyses determined the factors that led to actual candidate interviews. In order of importance, findings indicate that candidates with (1) relevant, current, and continual work experience; (2) a college degree or enrollment in college; and (3) achievements listed on their résumés were more likely to be selected by hiring managers for employment interviews.

Key words: cover letter, hiring decisions, job applicant, personnel selection, résumé

Employers have high expectations when it comes to filling their vacant positions. Meanwhile, many confident jobseekers say, "if I could just get the interview, I could get the job." At the early stages of the selection process, the résumé is an important factor for both the employer and the job applicant (Breaugh, 2009). For example, Chen, Huang, and Lee (2011) found that employers make inferences about job-related knowledge, interpersonal skills, general mental ability, and conscientiousness of the applicant after viewing a résumé.

Despite this, the research relating to factors that determine which candidate will be selected for a job interview is limited (Risavy, 2017). There was no research found that was based on actual hiring decisions. Instead, the research identified is based on evaluations of hypothetical résumés and job openings.

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Literature Review

Thoms, McMasters, Roberts, and Dombkowski (1999) found that employers prefer specific objective statements over general ones, one-page résumés over two-page résumés, listing grade point averages above 3.0, relevant coursework, and accomplishment statements. Knouse (1994) found that job-relevant education and related experience were positively correlated to résumé evaluations. Nemanick and Clark (2002) found that extracurricular activities enhanced résumé evaluations, particularly if there were a significant number of activities, there was evidence of leadership, and the activities were related to the job for the applicant is seeking.

However, Cole, Rubin, Field, and Giles (2007) found that the résumé factors interact with each other in ways that are complex and often difficult to predict. They found that academic qualifications, work experience, and extracurricular activities are all valued by hiring managers but being above average in one factor is better than being above average in all three. For example, an applicant with higher levels of extracurricular involvement but less work experience and academic achievement would be evaluated higher than a candidate who has high levels of all three.

Knouse (1994) looked at the role that impression management by the applicant had on résumé evaluations. In the résumé context, Knouse defines *impression management* as self-descriptions on a résumé that portray the applicant in a positive light. He found that impression management enhanced perceptions if they were specifically related to the job. In an earlier study, Knouse, Giacalone, and Pollard (1988) found that impression management statements that were unrelated to the job negatively affected résumé evaluations.

Method

Rather than speculate about what might drive interview decisions, this study based its conclusions on actual interview decisions made by hiring managers. In the present study, 200 qualified résumés were randomly selected and analyzed for positions from a pool of more than 1,000 résumés. Candidates in the sample had

an average of 9.2 years of work experience. These candidates were under consideration for positions that required either a college degree or equivalent work experience. All résumés selected met the basic qualifications for the jobs as described in employers' job advertisements, and all candidates were called to verify their qualifications. These résumés were then presented to hiring managers.

The purpose of this research was to predict which candidates would be selected for employment interviews based on 15 résumé characteristics. Résumés were evaluated and coded for each of these 15 characteristics by two trained coders. Table 1 presents the résumé characteristics that were investigated. Multiple regression was used to determine which résumé characteristics were most predictive of interview decisions. A significant regression equation was found: $F(4, 95) = 7.014$ ($p < .000$), with an R^2 of .228.

Table 1: Résumé Characteristics Studied

Total Months in the Workforce	
Total Months in Current Jobs	
Total Number of Regular Positions	
Gaps in Employment Greater Than One Month	
Total Months Unemployed	
Total Months Unemployed from Last Job	
Gender	
Currently Enrolled in a Degree Program	
Highest Degree Completed	
Degree Relevant to Applied Position	
Number of Years Out of School Since Last Degree Earned	
Grade Point Average (GPA)	
Experiential Index	• Military experience • Volunteer/charitable work • Non-relevant certifications
Leadership Index	• Leadership position in a volunteer, charitable or professional association
Achievement Index	• Job-relevant certifications • Number of languages fluent in other than English • Professional organization membership • Honors society membership • Peer-reviewed publications and patents • Professional presentations

Key Findings

Table 2 shows the résumé characteristics that best predicted the candidates who were selected for employment interviews. In order of importance, candidates with (1) relevant, current, and continual work experience; (2) a college degree or enrollment in college; and (3) achievements listed on their résumés were more likely to be selected by hiring managers for an employment interview.

Table 2: Résumé Characteristics That Best Predict Selection for Interviews

Predictor	Significance
Relevant Work Experience	$p < 0.025$
College Degree	$p < 0.010$
Currently Enrolled in College	$p < 0.042$
Achievements	$p < 0.000$

Moderating Factors

Several statistically significant correlations between predictors and other characteristics help us understand how hiring managers evaluate résumés.

Employment vs. Unemployment. Results show that hiring managers considered both the amount of work experience in relationship to the number of months unemployed as well as the number of unemployment gaps displayed on the résumé. Candidates with more work experience and continual employment were more likely to receive a job interview. In fact, 80% of candidates with relevant work experience and no employment gaps on their résumés were selected to be interviewed. For candidates with qualified résumés who were unemployed for 20% or more over the past 10 years, only 50% were selected for employment interviews (see Table 3).

Table 3: Correlation of Unemployment to Interview Selection

Unemployment History	# Invited to Interview
20% or more of their career unemployed (past 10 years)	1 out of 2
Have no unemployment history (past 10 years)	4 out of 5

A statistically significant inverse relationship also exists between the number of gaps in employment and hiring managers' decisions to interview. As the number of gaps in unemployment increased, a candidate's chance of being offered an

interview decreased. Even a gap of 30 days or more decreased a candidate's chance of receiving an interview from 76% to 63% (see Table 4).

Table 4: Correlation of Unemployment Gaps Longer Than 30 Days to Interview Selection

Unemployment Gaps Longer Than 30 Days	Percentage Invited to Interview
None	76%
1 to 2	63%
3 to 5	43%

College Degree vs. High School Diploma and the Role of Achievement Indicators. Table 5 shows the breakdown of interviewed and rejected candidates by high school diploma and college degree.

Table 5: Interviewed vs. Rejected Candidates

College Degree		High School Diploma		Total	
Interview	**Reject**	**Interview**	**Reject**	**Interview**	**Reject**
65 (60%)	43 (40%)	48 (52%)	44 (48%)	113 (57%)	87 (43%)

There is a greater preference for degreed candidates. Sixty percent of college graduates are interviewed compared to 52% of candidates with only high school diplomas. Table 6 shows that those selected for employment interviews have, on average, greater work experience, are enrolled in school, and/or have more achievement characteristics than those rejected.

Table 6: Résumé Characteristics Most Influencing Hiring Managers' Interview Decisions

All Candidates							
Work Experience (Mean # Months)		Unemployed (Mean # Months)		# of Gaps Longer Than One Month		Achievement Indicators/Enrolled in Degree Program	
Interview	**Reject**	**Interview**	**Reject**	**Interview**	**Reject**	**Interview**	**Reject**
114	106	10	16	< 2	> 2	1 or more	0–1
High School Diploma							
104	85	10	10	< 2	< 2	2 or more	0–1
College Degree (Associate/Bachelor's/Master's)							
121	128	9	22	< 2	> 2	1 or more	0–1

Note: Numbers in table are rounded to nearest whole numbers.

For candidates with high school diplomas, résumé gaps longer than 30 days as well as months unemployed were equally distributed among those interviewed and rejected. On average, candidates with high school diplomas chosen for employment interviews had 104 months of work experience and two or more achievement indicators or enrollment in a degree program. In contrast, high school graduates who were rejected on the basis of their résumé had, on average, 85 months of work experience and either were not enrolled in a degree program or lacked one or more achievement indicators.

Candidates with college degrees who were selected for employment interviews tended to have two or less gaps of 30 days or more on their résumés and an average of nine months of unemployment. College degree holders who were rejected had three or more gaps of 30 days or more and an average of 22 months of unemployment. Candidates with college degrees who were selected for employment interviews also tended to have one or more achievement factors or were enrolled in a higher degree program (for example, a candidate with an associate degree enrolled in a bachelor's degree program). Unlike candidates with high school diplomas, work experience beyond the minimum required on the job requisition did not make up for increased number of résumé gaps longer than 30 days or excess time unemployed for those with college degrees.

Discussion

It is worth noting that there were no gender preferences in this study. Approximately the same number of men and women received interviews. Grade point average (GPA) also did not serve as a strong determinant in predicting who was invited to an interview, nor did it override or serve in the place of the factors that did. This is likely because GPA is far more important to employers when evaluating candidates who will or have recently graduated than those who have several years of work experience post-graduation.

Although most employers emphasize the importance of leadership qualities, résumé characteristics comprising our leadership index did not seem to

significantly influence interview decisions. This may be due to the nature of the jobs in our sample or the fact that the characteristics making up our leadership factor are secondary to more dominant factors such as work experience. It is equally feasible that corporate recruiters and hiring managers relay on other selection methods, like an in-person interview, to infer leadership characteristics.

Finally, candidates with high school diplomas had, on average, fewer résumé gaps and shorter unemployment durations than those with college degrees. This may be explained by the fact that those with high school diplomas had 29 fewer average months of work experience at 95 months than the college degree candidates, who averaged 124 months of work experience.

Who Do Employers Interview?

Employers most want candidates who have current, relevant work experience with few gaps on their résumés, a college degree or enrollment in college, and indicators of success. These are the most highly desirable candidates. Work experience matters, but having more experience does not always serve as a substitute for other key influencers. For those lacking a college degree, having more job-related experience does appear to make up for not having one. After considering both educational level and work experience, hiring managers look for other positive success indicators. Achievements speak volumes and stand out to hiring managers. Being enrolled in a degree program or having multiple achievement characteristics increased the likelihood of a hiring manager selecting a candidate for an employment interview.

Theory Behind the Results

Our findings suggest a risk-aversive decision-making heuristic in place. This could be explained by *zero-risk bias theory* (Baron, 2007), which states that people prefer small guaranteed benefits to larger, uncertain benefits. Candidates who have job-relevant and adequate work experience, possess a college degree, and do things to advance their job knowledge and skills appear to be safer bets than those without these characteristics or don't do these things at all. For example, two candidates with qualified résumés, one with no résumé gaps and

the other with three résumé gaps, with all other factors identical, will likely result in only one employment interview. According to our research, the candidate with three gaps of employment has a 43% chance of receiving an interview, or half the likelihood of the candidate with no employment gaps.

Hiring decisions are high-stake decisions. As such, it makes sense that employers would err on the side of caution and focus on the most desirable candidates. From an employers' perspective, selecting candidates with current, relevant work experience and achievement factors is far less risky and a better use of employers' time than interviewing every candidate. The question then becomes what are the "best" indicators to use from a résumé that predict or are indicative of subsequent job performance and tenure.

The focus of this field study was limited to how candidates with qualified résumés were selected for employment interviews. We did not measure who received job offers, began employment, job performance, or tenure post-hire. In other words, we do not know if the interview characteristics that influenced the decision to grant an employment interview are indeed predictive of performance and tenure post-hire. To the extent they do not correlate well with post-hire criteria, recruiters and hiring managers should adjust their decision-making heuristics. The research findings in this study have many implications for both employers and jobseekers.

Implications for Jobseekers

The study suggests that individuals who become unemployed should diligently work towards reemployment as quickly as possible. Taking time off before assertively beginning to look for new employment is not advisable. In fact, the longer you are unemployed, the less likely it is for you to become reemployed. This is the case even when a candidate's résumé meets the basic requirements of the position. To increase a candidate's chance of reemployment when he or she is unemployed, enrolling in a college degree program is one consideration. If a job candidate does not have an associate degree, that person should consider working toward one. If a job candidate has an associate degree, it makes good sense to enroll in a bachelor's degree program. The key word is enrolled, not

necessarily completed. Finally, candidates should consider advancing their qualifications by completing items from the Achievement Index in Table 1, such as learning a second language, earning job certifications, or joining a professional association.

Implications for Employers

This study shows that factors on the résumé beyond just prerequisite qualifications drive interview decisions. This means that an employer's candidate pool is immediately reduced to those selected to be interviewed based on the résumé itself. Well-qualified, talented individuals may be passed over because of employment gaps or the number of months they have been out of work listed on their résumés.

Employers are advised to train recruiters and hiring managers to minimize "unconscious biases" they may have regarding what gaps in employment and time spent unemployed truly convey about a candidate. Beliefs held regarding those with gaps or long-term unemployment may not reflect reality. Great employees can be victims of circumstance or simply have had a string of bad luck. While a résumé may indicate whether a candidate has the right experience for the job, it may not tell the full story. The following suggestions can aid in identifying hidden talent among the unemployed and underemployed.

- When reviewing a candidate's résumé, evaluate the employment history for the past 10+ years, rather than just the past 5 or 7 years. Candidates who had a consistent progression in their career prior to their most recent roles should be considered.
- While reviewing a candidate's résumé, pay particular attention to the candidates with educational credentials and certifications not required in the current or most recent role. These are likely to be the candidates who are currently underemployed workers or working on developing a career change. These candidates will welcome an opportunity to work for the company.

- When reviewing candidates' résumés, identify individuals who are continually developing their skill sets, such as enrolling in courses or attending certification programs.
- Speak with candidates before rejecting them for employment gaps on their résumés to ensure a thorough understanding of the circumstances related to their job transitions or employment gaps.

Future Research

The goal of the present study was to identify the factors that result in candidates receiving job interviews. In a recent literature review, Risavy (2017) noted that there is a shortage of research in this area, and much of the research that exists is based on older studies conducted in contrived settings. Research needs to be performed that updates and extends the findings of prior studies. There needs to be more research relating to the factors that determine candidate selection for interviews. With regards to the present study, future research should further investigate the effect of employment gaps, work experience, education, and job-related achievements in interview decisions. In addition, future research needs to identify the psychological mechanisms that are the basis for the decisions that hiring managers make after viewing résumés. Finally, employers should investigate the résumé characteristics associated with job performance and tenure criteria post-hire. By identifying these factors and incorporating them into talent acquisition and assessment strategy initiatives, the quality of the candidate pool can be improved, and better hires can be made.

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