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The editor gratefully acknowledges assistance from the following reviewers from Northwest Missouri State University:

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\(^a\)Issue 36 (2017)
\(^b\)Issue 37 (2018)

**Manuscript Submissions**

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Articles
Student-Led Facebook Group in Online Courses: Effect on Engagement

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ABSTRACT

This article considers the potential impact on student engagement of a student-led Facebook group in an online legal studies course. The primary goal of this study was to explore the impact on student engagement resulting from participation in such a group and attempt to isolate the student engagement indicators by analyzing the nature and subject of student posts made to the course Facebook group wall and surveying students enrolled in the course. Our study is exploratory, and we anticipate the initial observations and the normative analysis described in this article will provide a foundation for additional empirical research on this potentially significant topic.

Analysis of our limited survey and the student posts to the group’s Facebook wall suggest that a student-led virtual environment set up for student collaboration in asynchronous online courses can result in more meaningful student interaction and engagement. The nature of posts made to the Facebook page in our class suggests that students left to make choices without instructor involvement naturally do what research suggests, enhances collaboration, and engagement in online courses. Also, our survey at least suggests, that such groups may cultivate increased effort and success in projects and assignments provided by the instructor. The significant open question at this preliminary stage is the extent to which a student-led virtual environment offers benefits unavailable in an instructor-led virtual environment. Our findings indicate a need for further research concerning the impact of student-led as compared to instructor-led virtual environments on student engagement, achievement, and course satisfaction.
**Keywords:** student engagement, Facebook group, online course, student led, student collaboration

**INTRODUCTION**

This article considers the potential impact on student engagement of a student-led Facebook group in an online legal studies course entitled Negotiation, Mediation, and Arbitration in Business. In the spring semester of 2015, the lead author taught the course, which is the subject of this paper, to a group of graduate and undergraduate students at a large Midwestern university. The second author was a graduate student enrolled in the course, who—without instructor involvement—developed, initiated, and facilitated the Facebook group. Her goal was to take advantage of the user-friendly Facebook interface and its real-time notifications as a medium for student collaboration, exchange of ideas, and a community of learning outside Blackboard, the University’s learning management system.

The primary goal of this study was to explore the impact on student engagement resulting from participation in such a student-led group in online courses, and, if possible, to isolate the student engagement indicators by: analyzing the nature and subject of the 506 student posts made to the course Facebook group wall and surveying students enrolled in the course regarding the manner in which they used the Facebook group to engage with other students and their perception of benefits, if any, derived from that engagement. See Section 3, Exhibits 1 and 2. Our preliminary results tend to indicate that the Facebook group deployed in this online course enhanced student interaction and engagement, see Section 4. However, it is important to note that this is an exploratory study and anticipate the initial observations and the normative analysis described in this article will provide a foundation for additional empirical research on this potentially significant topic.

Our research failed to identify any scholarship directly related to the implementation of student-led groups in online courses using social networking sites without instructor involvement. The literature did, however, address several topics pertinent to our analysis, including the varying definitions of student engagement, engagement in online academic environments generally, and student engagement at the intersection of academic activity and Facebook. This analysis led to our preliminary conclusions that a student-led Facebook group may increase individual effort and ability to complete assignments as well as engagement and interaction with other students. As evidenced by their survey responses, students felt that the instructor’s presence in the Facebook group could negatively affect their interaction and engagement.

Section 1 contains a full description of the structure of Negotiation, Mediation, and Arbitration in Business. Briefly, it is a skills-based course, utilizing role-play exercises and other experiential modalities to develop the skills necessary to participate in alternative dispute resolution mechanisms, with primary emphasis on negotiation and mediation. The literature review found in Section 2 examines scholarship addressing the nature and assessment of student engagement in a variety of settings such as seated, online, with and without student groups, and at its intersection with social media. As previously
mentioned, Section 3 presents the nature, goals, and results of our study. Finally, in Section 4, we present our preliminary conclusions regarding the impact on engagement resulting from the addition of a student-led group in an online course and our observations concerning further research.

COURSE DESCRIPTION

Course Requirements

The subject course, Negotiation, Mediation, and Arbitration in Business (NMAB) is described in the course catalog as follows:

A practical, skills-based study of negotiation, mediation, and arbitration from the business manager's perspective. This hands-on course is designed to develop the skills necessary to enable the business manager to effectively participate in negotiation, mediation, and arbitration as alternatives to litigation for resolving business disputes.

NMAB is a three hour “combined” course, consisting of students taking it for both graduate and undergraduate credit. The lead author taught it in a seated format from 2007 to 2011. Subsequently, twelve sections have been presented online, with enrollments ranging from 12 to 42 students each. In the NMAB section under consideration, the Blackboard learning management system was used by the professor to share all course content, assignments, and other materials. A learning management system (LMS) is password protected computer software provided by the institution that creates a virtual learning environment (Sclater, 2008). Several substantive student-student interactions were prescribed during the semester to be completed using the course LMS.

Each semester instructional and assessment strategies vary somewhat, but those deployed in Spring 2015 semester were typical. A basic negotiation textbook and accompanying readings book were required (Lewicky, Barry & Saunders, 2016; Lewicky, Barry & Saunders, 2017). The professor provided students access to numerous other resources including, PowerPoint slides, open source negotiation, mediation, and arbitration resources available on the internet and mediation videos produced by the American Bar Association. The course also included chapter quizzes, discussion board exercises, negotiation and mediation role-play exercises, face-to-face final examination, and an optional extra credit paper. The first assignment was a discussion board exercise that required each student to interview a classmate using Skype, and, based on the information gleaned, post an introduction on a discussion board housed in the LMS.

All students participated in seven exercises in which they played opposing parties involved in negotiations and mediations using role-plays provided by the professor. Students conducted these exercises on their own, utilizing Skype in the negotiations and conference calls in the mediations. Participants then submitted a report describing multiple aspects of the exercise. In another significant part of the course, students participated in six discussion board assignments designed to facilitate direct student-student communication and collaboration on substantive alternative dispute resolution issues. In the online discussion boards, students discussed dispute resolution topics with other
students, again in a format loosely prescribed by the professor. The discussion topics related to negotiation included such things as fairness, power, and coalitions. Mediator style differences based on student review of videos of mediation role-plays was also a discussion board topic. Discussion board entries were assessed based on several criteria including argumentation, generation of further discussion, and contribution to class learning. In addition to these experiential learning opportunities, students were assigned significant reading assignments and assessed utilizing multiple-choice quizzes designed to assure understanding of the basic concepts and terminology of negotiation as presented in the two required texts.

Finally, students in the Spring 2015 semester were required to complete a face-to-face, final examination. It contained a scenario, describing a dispute similar to those in the negotiation role-plays. Students were required to answer substantive questions on negotiation issues raised in the scenario. These questions covered such topics as interests, creative options, best alternatives to a negotiated agreement, and effective arguments. The final examination was designed to assess students’ ability to apply concepts learned during the course and to make reasoned judgments about the best way to approach the negotiating problem.

**Addition of Student-Led Facebook Group to NMAB**

As previously mentioned, the co-author of this article enrolled in the course as a graduate student and created the Facebook group under consideration in this paper. Of the 42 students enrolled at the end of the semester, 24 became members of the Facebook group. As more fully evidenced in Exhibits 1, the student-facilitator organized and administered the group as she and the student members saw fit. The instructor did not join, become involved in, or otherwise monitor the Facebook group in any way. The instructor posted no materials to the Facebook group page. The instructor’s graduate assistant initially accepted the invitation to become a part of this group, but withdrew within the first few days and had no further interaction with the group.

**STUDENT ENGAGEMENT IN ONLINE CLASSES**

**Historical Context of Student Engagement**

Alexander Astin defined student involvement as “the amount of physical and psychological energy that the student devotes to the academic experience” (Astin, 1984, p. 297). Involvement was the cornerstone of Astin’s theory of student engagement. Astin developed “five basic postulates” regarding the involvement theory of engagement. Under these postulates, student involvement is typified by:

- investment of physical and psychological energy;
- presence along a continuum;
- quantitative and qualitative features;
- proportionality to amount of student learning and development; and
- a direct relationship to the effectiveness of policies and practices in increasing that involvement.
Astin found the last two postulates worthy of subsequent focus vis-à-vis student involvement because they inform the design of effective educational programs (Astin, 1984, p. 298).

The work of Chickering and Gamson (1987, pp. 3–5) resulted in a set of principles in the undergraduate setting:

- Frequent student/faculty contact;
- Collaborative learning;
- Active learning;
- Prompt feedback;
- Student time management skills;
- High expectations; and
- Recognition of diversity in student talents and learning styles.

Importantly, their theoretical framework was later used to build the National Survey of Student Engagement discussed below.

Subsequently, student engagement (involvement) was described in other ways. Newmann considered student engagement to be the product of higher order thinking viewed from the perspective of thoughtfulness in which students are challenged to think through the process of classroom discourse (Newmann, 1990). He developed the following indicators of thoughtfulness in classroom discourse:

- Sustained examination of a few topics rather than superficial coverage of many.
- Lesson displayed substantive coherence and continuity.
- Students had an appropriate amount of time to think, that is, to prepare responses to questions.
- The instructor asked challenging questions and structured challenging tasks (given the ability level and preparation of the students).
- The instructor modeled thoughtfulness.
- Students gave explanations and reasons for their conclusions (Newmann, 1992, pp. 68–69).

Skinner and Belmont (1993, p. 572) referred to “the intensity and emotional quality of children’s involvement in initiating and carrying out learning activities.” The “amount, type, and intensity of investment students make in their educational experiences” was another description of the concept (Jennings & Angelo, 2006, p. 6).

The National Survey of Student Engagement (NSSE, 2016) has, since 2000, served as an important resource vis-à-vis student engagement. Perhaps no more so than in the context of teaching and learning benchmarks. NSSE describes its mission this way:

The National Survey of Student Engagement (NSSE) documents dimensions of quality in undergraduate education and provides
information and assistance to colleges, universities, and other organizations to improve student learning. Its primary activity is annually surveying college students to assess the extent to which they engage in educational practices associated with high levels of learning and development (National Survey of Student Engagement 2016).

The NSSE survey is designed to identify activities in which institutions of higher learning are succeeding in the enhancement of learning (Kuh, 2003; Gonyea, 2009). In 2000, NSSE separated issues concerning student engagement into the following benchmarks of effective educational practices: academic challenge, educational experience, interaction between students and faculty, collaborative learning, and level of campus support (Kuh, 2003). More recently, Kuh reaffirmed his earlier conclusion that teaching and learning research supports the judgment that time spent by students on educational activities—such as the benchmarks above—enhances subject knowledge, reasoning, effective communication, among others (Kuh, 2011). Others have interpreted student engagement to mean, “How involved, interested students appear to be in their learning and how connected they are to their classes…” (Axelson & Flick, 2011, p. 38). Regardless of the particular definition, student engagement is an important predictor of academic success and learning is well supported (Carini, et al., 2006; Skinner, Wellborn, & Connell, 1990).

**Student Engagement in the Online Environment Generally**

The focus on student engagement as a way to enhance higher education is growing, particularly in the online environment (Gunuc & Kuzu, 2014; Dixson, 2010). Student communication in online courses has been shown to have a substantial impact on the engagement of those students (Gunuc & Kuzu, 2014; Dixson, 2010). Consistent with that, a majority of online students responding to one survey considered rapport and collaboration among students to be indicators of quality instruction (Gaytan & McEwen, 2007). Another important factor impacting student engagement is the *structure* of online course activities. For example, any number of interactive activities, as well as certain types of student posts, provide evidence of engagement. The interaction between students can come in many forms including such things as reading online comments of other students, responding to answers of other students, asking questions or commenting about non-course topics’ and asking questions regarding course activities (Dietz-Uhler & Hurn, 2013). Exhibition of certain behaviors suggests student engagement. These include: paying attention, taking notes, listening, asking questions, responding to questions, following requests, reacting, reading critically, writing to learn, and interacting with other students (Johnson, 2012; Dietz-Uhler & Hurn, 2013).

Student-instructor and student-student interaction are both necessary and important in online courses. More specifically, certain identifiable practices on the part of the instructor are particularly important. These include maintenance of frequent contact, presence in discussion boards, and clearly identified expectations (Dennen, et al., 2007). Interaction via discussions, collaboration, and forums enhance student engagement and should be encouraged in those
courses (Illinois Online Network, 2005). The nature and purpose of the interaction—social, instruction, or organizational—are also significant vis-à-vis engagement. These interactions can occur in online courses, enhancing learner satisfaction and engagement (Anderson, et al., 2001). Researchers have considered the possible positive effects of student-initiated activities on student engagement indicators of quality instruction in online courses. Many of these positive effects were present in the NMAB Facebook group, including posting relevant questions, assisting classmates, discussing assignments, collaboration, and evaluating or seeking information and feedback (Dietz-Uher and Hurn, 2013; Gaytan and McEwen, 2007; Johnson & Aragon, 2003).

**Student Engagement and Facebook**

The student-learning group established in NMAB utilized a Facebook group page. Accordingly, a discussion of other academic applications of Facebook and Facebook groups will prove useful. A large majority of undergraduate students use Facebook on a daily basis for many social and educational purposes including social coordination, maintaining social and academic relationships, scheduling study group meetings, conducting group projects, completion of assignments, student-student collaboration, and communication with other students and instructors (Ellison, 2010; Selwyn, 2009; Salaway, Caruso, and Nelson, 2008; Fontana, 2010; Lampe, Wohl, Vitak, Ellison & Wask, 2011). Facebook is a way to “create a powerful learning environment through the merging of the creative, collaborative, social and interactive capabilities of this powerful platform” (Fontana, 2010). It is Facebook’s ease-of-use, popularity, and familiarity among students that enhances its potential in academe (Fontana, 2010; Cain, 2008 & Montoneri, 2015).

Estimates show that as many as 90% of undergraduate students make daily use of Facebook to advance their social and academic goals (Ellison, 2010). Responses from survey participants at Michigan State University revealed that more than 50% of undergraduate participants to were “likely or very likely” to use Facebook to organize, schedule or communicate about academic activities, assignments, and goals (Ellison, 2010). Between students who are already close, Facebook is “a valuable means of exchange” for students actively using Facebook for student-student communication between students (Selwyn, 2009, p. 170).

As described by Meishar-Tal, et al., the “group” function on Facebook enables students to become part of a class group. Any Facebook user can create a group, without being “friends” in the Facebook sense. The student creator need only send invitations to members of the class to populate the group. The learning group is closed. Accordingly, published information does not appear on the Facebook “walls” of the individual users and is available only to group members on the group wall. Meishar-Tal, et al. surveyed students enrolled in one online class that used a Facebook group page as an LMS and reported that the Facebook group contributed to learning by facilitating student-student interaction. In fact, nearly one-third of the students in that online class found the Facebook group’s collaborative learning experience to be the primary
contributor to learning in the course and one-fourth described the learning experience as “intense, immediate, and fast” (Meishar-Tal, et al., 2012).

The ECAR Research Study 8, presented in 2008, touched on several issues regarding instructor involvement in social networking sites (SNS) utilized by students for academic pursuits (Salaway, Caruso & Nelson, 2008). As discussed previously, NMAB’s Facebook group was developed, initiated, and facilitated without instructor involvement by one of the enrolled students. Our survey of NMAB students discussed in the next section and presented in Exhibit 2 touched on the effects of the instructor’s absence from the Facebook group. Almost 50% of respondents use SNSs for communications related to their academic studies. Of those who use SNSs to communicate with instructors, they are significantly more likely to employ an SNS for professional pursuits (37.9% vs. 10.1%) and communicate with classmates on academic matters (89.6% vs. 47.4%). But of that group, fewer than 6% use an SNS to communicate with instructors (Salaway, Caruso, & Nelson, 2008).

NMAB FACEBOOK GROUP: STUDENT IMPRESSIONS

NMAB Student Posts

An analysis of the 506 posts made by the 24 students in the NMAB Facebook group (average 21 posts per student) gives perspective to the concerns of the students enrolled in the course. A clear majority of the posts (352/70%) fall into two categories, Homework Support (283/56%) and Peer Support (69/14%). “Homework Support” consists of posts related to such things as clarification of assignments, homework assistance, perceived expectations, deadlines, and partner selection for role-play exercises. “Peer Support” reflects requests for support and encouragement from fellow students. Exhibit 1 gives a detailed categorization of the student posts to the Facebook group page.

NMAB Student Survey

At the conclusion of the Fall 2015 semester, a student survey was used to obtain feedback about how students used the Facebook group to engage other students in the course and to solicit their views regarding any benefits derived from using the group. The survey responses outlined in Exhibit 2 were limited. Nevertheless, the authors have included the results to present, at least anecdotally, additional information about student perceptions of this student-led group.

The NMAB enrollment was 42 at its peak. When the survey was submitted, there were 21 students identified as remaining in the group (50% of enrolled students). Students still in the Facebook group were sent invitations to participate in the online survey. Of this group, 12 were female, and nine were male. Six students responded yielding a response rate of 29% (6/21). The survey consisted of five Likert questions and five questions seeking explanations. Exhibit 2 compiles the survey questions and replies.
The survey results shown below in Appendix 1 revealed that 66% of respondents agreed or strongly agreed that the student-led Facebook group increased student engagement and student interaction. Additionally, 67% agreed or strongly agreed that the use of the student-led Facebook group increased individual effort and the ability to complete assignments. Finally, 67% of students indicated they would change the way they interact with the Facebook group if they knew an instructor was present.

- Using my definition of “engaged” participation in the Facebook Group increased my engagement in the course.
• My participation in the Facebook Group increased my interaction with other students in this course.
• My participation in the Facebook Group increased my efforts in this course.

Consistent with the conclusions discussed in the literature, some of the survey comments yield insight into the possible connection between a student-led Facebook group and enhanced student engagement.

• I was able to gain clarity from certain aspects of the course that I did not understand from other students in the course.
• I was better able to…ask clarifying questions when instructions were not as clear as they could have been.
• Facebook is a familiar platform and is more personal than email thereby making it easier to communicate on a regular basis with classmates.
• Ultimately it was my own studying and perseverance, but it did help to have an alliance and study engagement with other students.

One feature of the NMAB student learning group was the absence of the instructor, which appeared to be a significant factor in the level of student-student communication and the candor of that communication. A majority of the students, 67% agreed or strongly agreed that the presence of the instructor would alter the manner in which they interacted or engaged in a Facebook group. Several of the student comments on this point were enlightening:

• [O]nline students need the same freedom that seated students have. The instructor doesn't follow them to Panera to listen to the students talk about the class. Why would the instructor need to be in the Facebook group? You want to allow the online students to communicate freely to same way [sic] as seated students.
• Blackboard is restrictive in its communication tools. Being able to talk with my classmates is critical. Just like with a seated class, you need to be able to talk outside of the classroom. I feel that anything inside of Blackboard is the classroom.

CONCLUSION

Given the historical course of research into student engagement and its benefits, our limited survey and analysis of student posts to the Facebook wall in our class suggest that a student-led virtual environment set up for student collaboration in asynchronous online courses can result in more meaningful student interaction and engagement. First, the nature of the more than 500 posts made to the student-led Facebook page in our class suggests that students left to make choices, naturally do what research suggests, and in so doing, enhancing
collaboration and engagement, thereby providing opportunities to ask questions, seek clarification, and share experiences like students in a traditional classroom setting. Also, our limited survey at least suggests, that such groups may cultivate increased effort and success in projects and assignments provided by the instructor. The significant open question at this stage is the extent to which a student-led virtual environment offers benefits unavailable in an instructor-led virtual environment. Our findings indicate a need for further research concerning the impact of student-led as compared to instructor-led virtual environments on student engagement, achievement, and course satisfaction.
REFERENCES


Appendix 1: Survey Results

Question #1
Briefly, define what it means to you to be “engaged” in a course.

1. Being engaged in a course is communicating on a daily basis with your Professor and peers. It means truly understanding the goals of the course and the materials that are presented. It also means learning and gaining concise understanding as the coursework becomes more challenging throughout the course, leading up to the exams.

2. To have opportunities to communicate regularly with your Professor and fellow students regularly about the course material and receive regular feedback on progress.

3. To actively engage and receive in discussion on a regular and consistent basis.

4. Feeling of genuine desire to learn course material, desire to dig deeper and develop through practice.

5. It means that I am focused on the activities of the class at a greater degree than I am focused other activities.

6. Able to freely communicate with my other classmates outside of the Blackboard.

Question #2
Using my definition of “engaged,” participation in the Facebook Group increased my engagement in the course.

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<thead>
<tr>
<th></th>
<th>Percentage</th>
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<tr>
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</tr>
<tr>
<td>Total</td>
<td></td>
<td>6</td>
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</table>

Question #3
My participation in the Facebook Group increased my efforts in this course.

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<tbody>
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<td>0</td>
</tr>
<tr>
<td>Disagree</td>
<td>00.0%</td>
<td>0</td>
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<td>Neither agree nor disagree</td>
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</tr>
<tr>
<td>Agree</td>
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</tr>
<tr>
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<tr>
<td>Total</td>
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Question #4
Briefly explain your response to question 3.

1. I was able to gain clarity from certain aspects of the course that I did not understand from other students in the course.

2. I was better able to find partners for weekly assignments and ask clarifying questions when instructions were not as clear as they could have been.

3. Facebook is a familiar platform, and is more personal than email thereby making it easier to communicate on a regular basis with classmates.

4. I was able to look for partners on Facebook – it was easier to accomplish there when it worked – but most people found partners on blackboard already, limiting the pool of potential partners. Otherwise, all I saw on the Facebook group were clarifications and questions regarding deadlines, assignment parameters, and the tech/submission confusion.

5. I give 100% effort in all endeavors regardless of any Facebook group.
6. Blackboard is restrictive in its communication tools. Being able to talk with my fellow classmates is critical. Just like with a seated class, you need to be able to talk outside of the classroom. I feel that anything inside of blackboard is the classroom and so I am not able to free talk about issues with the class.

Question #5
My participation in the Facebook Group increased my interaction with other students in this course.

<table>
<thead>
<tr>
<th>Opinion</th>
<th>Percentage</th>
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</tr>
</thead>
<tbody>
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<td>0</td>
</tr>
<tr>
<td>Disagree</td>
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<td>1</td>
</tr>
<tr>
<td>Neither agree nor disagree</td>
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<tr>
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<td>50.0%</td>
<td>3</td>
</tr>
<tr>
<td>Strongly agree</td>
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<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6</strong></td>
<td><strong>6</strong></td>
</tr>
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</table>

Question #6
Briefly explain your response to question 5.

1. Sometimes it helped me, and other times it did not always make a difference. It depended upon the student you were engaged with.

2. I used it more for clarification and partner assignments than discussing material. Nonetheless it increased interactions.

3. See question 4 - much the same.

4. Only when I had to find a partner—often my requests went unanswered.

5. I don’t believe I participated much in the Facebook communications but it was nice in general to see comments and other information regarding the class circulated. I would estimate that the same could be done on any sort of message board, forum or even group email but I guess people tend to be more accustomed to interacting more on Facebook these days.

6. See #4

Question #7
My participation in the Facebook Group increased my ability to successfully complete the assignments in this course.

<table>
<thead>
<tr>
<th>Opinion</th>
<th>Percentage</th>
<th>Count</th>
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<tbody>
<tr>
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<tr>
<td><strong>Total</strong></td>
<td><strong>6</strong></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>

Question #8
Briefly explain your response to question 7.

1. Ultimately it was my own studying and perseverance, but it did help to have an alliance and study engagement with other students.

2. It helped to find partners once or twice—and I found deadlines sometimes that I had forgotten because of a notification.

3. See Q4.

Question #9
The presence of an instructor in a Facebook Group would change the way I interact or engage in a Facebook Group.

Strongly disagree 0.0% 0
Disagree 0.0% 0
Neither agree nor disagree 33.3% 2
Agree 50.0% 3
Strongly agree 16.7% 1
Total 6

Question #10
Briefly explain your response to question 9.

1. It would not change the way I interact, and I would be more than happy to have a Professor or instructor a part of the Facebook group. Especially when you need answers from the leader.

2. I think the presence of the Professor would be helpful. There is always the option to send a private message to someone if one did not want the Professor to see.

3. Yes, the students used it as a space to be able to voice concerns or issues that they might not if the Professor was there—even if going to the Professor would be more effective at solving their problems.

4. It depends on what the expectation of the Facebook group and class is.

5. See #4, But more to the point—online students need the same freedom that seated students have. The instructor doesn't follow them to Panera to listen to the students talk about the class. Why would the instructor need to be in the Facebook group? You want to allow the online students to be communicate freely to same way as seated students.
A Decade of Progress in Self-Leadership Research

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ABSTRACT

The intent of this article is to document progress in self-leadership research over the past decade, building on Neck and Houghton’s 2006 Two Decades of Research article, to explore additional emerging research streams, and to assess the potential opportunities for future research. The literature search was limited to peer reviewed, quantitative research articles that addressed self-leadership as a construct/variable starting with 2006, ending with December 2015. The search employed Business Source Premier on EBSCO host, ABI Inform, and ProQuest. Self-leadership research continues to advance our understanding and practical use of this theory and practice. The prescriptive nature of self-leadership and evidence of positive results suggests that self-leadership can be employed as a self-development tool in multiple settings. This research review provides a condensed, comprehensive overview of ten years of progress in self-leadership research, acting as an encouragement and guide to future research covering this increasingly important topic.

Key Words: Self-Leadership, Teams, Cross-Cultural
INTRODUCTION

In *Two Decades of Self-Leadership Theory and Research*, Neck and Houghton (2006) traced the historical development of self-leadership theory from its origins in Charles Manz’s 1983 book. The self-leadership concept was further developed by the seminal articles in the *Academy of Management Review* (Manz, 1986), which “laid the basic theoretical foundations of self-leadership” (Neck and Houghton, 2006, p. 273), and the first empirical study, addressing self-leadership in the context empowering leadership and team self-management published in the *Administrative Science Quarterly*, 1987. Neck and Houghton (2006) reviewed a comprehensive list of articles and books that extended and enhanced the study of self-leadership from 1983 to 2005, noting that “self-leadership has earned the respect of many academics” (p. 271), and has been embraced by business executives in terms of training programs and workplace self-leadership development. The authors also concluded that self-leadership represented a distinctive theory and a research stream that composed an impressive body of knowledge, but that the domain of study was under-investigated. The article concluded with a call for more intensive research into multiple paths of study: intercultural/international issues, self-leadership contingency factors, predictable outcomes, health/fitness implications, and shared leadership and impact on teams.

The intent of the current paper is to document progress in each of these areas, explore additional emerging research streams, incorporate complementary conceptual models, and assess the potential opportunities for future research. We first briefly recap the major contributions of the Two Decades article and the research agenda suggested by Neck and Houghton (2006). The body of the paper then documents the specific research findings of scholars over the following decade addressing each of the suggested research paths, along with an assessment of the level of contribution that has been realized in the decade ending in 2015. The suggested research paths are organized in individual sections of this review.

It is not surprising that self-leadership research expanded outside of the promising paths identified by Neck and Houghton. The literature search identified a number of studies focused on antecedents of self-leadership, an area that had not been identified in the 2006 article, which is covered in a separate section of the review. We were also somewhat surprised that the literature search found only one study addressing a contingency approach (one of the suggested paths), where there are potential conditions in which self-leadership is less effective than in others. In that this study also addressed predictable outcomes/mechanisms, it is included in Predictable Outcomes/Mechanisms section.

SELF-LEADERSHIP: A DISTINCTIVE THEORY

The Two Decades article (Neck & Houghton, 2006) made important contributions in understanding self-leadership as a distinctive theory. Self-reinforcing strategies are based upon theories of motivation and self-influence, they are best understood as normative, that is, how things should be done rather than descriptive, which explain the basic aspects of various phenomena. Neck
and Houghton state that “self-leadership represents a unique constellation of strategies that are founded upon, related to, and yet distinct from these various theories, as well as from various personality traits” (p. 275). A short summary of their findings and conclusions are presented in the next few paragraphs. Scholars are encouraged to review the arguments presented in the original article for a more thorough review of these issues.

Neck and Houghton (2006) discussed self-leadership theory within the context of self-regulation theory (e.g., Carver & Scheier, 1998), social cognitive theory (incorporating self-efficacy and self-satisfaction); (e.g., Bandura & Cervone, 1986), self-management (e.g., Manz & Sims, 1980), cognitive evaluation theory/intrinsic motivation (e.g., Deci & Ryan, 1985), and personality (e.g., Markham and Markham, 1998). Self-leadership is distinct from self-regulation in that the latter is descriptive (explains how behavior happens), in contrast to the prescriptive orientation of the former. Self-leadership behavior-focused, natural reward, and constructive thought strategies have the potential to enhance self-regulatory effectiveness. Social cognitive theory represents the second major conceptual framework upon which self-leadership strategies are based, particularly the importance of satisfaction and self-efficacy, an important construct for the theory (Manz, 1986), and is an important objective of natural reward and thought pattern strategies. Moreover, empirical evidence supports the application of self-leadership in enhancing or developing self-efficacy, including the effect of self-leadership training in reducing absenteeism (Frayne & Latham, 1987; Latham and Frayne, 1989), higher self-efficacy levels (Neck & Manz, 1996), and performance outcomes (Prussia, Anderson & Manz, 1998).

Self-management theory, adapted from clinical psychology concepts of self-control (e.g., Mahoney & Arnkoff, 1978; Luthans & Davis, 1979; Manz & Sims, 1980), provides the basis for self-leadership’s behavior-focused strategies (Manz, 1986). Self-leadership theory builds on self-management by facilitating the assessment of externally set standards, addressing what should be done and why (Neck & Manz, 1996), rather than simply why it should be done. According to Neck and Houghton (2006, p. 280), “self-leadership is a more encompassing approach...merging the behavioral strategies suggested by self-management and self-control with cognitive strategies based on the concepts of intrinsic motivation and constructive thinking.” In short, self-leadership theory is more comprehensive in that it also incorporates important concepts from the intrinsic motivation stream of literature (e.g., Deci, 1975), and cognitive evaluation theory (Deci & Ryan, 1985).

The relationship between personality traits and self-leadership has been addressed in a number of studies, where there is some empirical evidence that self-leadership concepts may be related to trait preferences (Williams, 1997), and conscientiousness (Stewart, Carson & Cardy, 1996; Houghton and Jinkerson, 2004); however, research by Stewart and Associates (1996) provides some evidence that self-leadership training impacts low conscientiousness subjects to a greater extent than higher conscientiousness subjects. The evidence supports changes in self-leadership levels, whereas, personality traits are considered relatively stable, establishing that the concepts are different, but interact. This is an important finding indicating that there are significant
opportunities for future research on the relationship and interaction of self-leadership and personality. This perspective is supported by research addressing self-management and self-control, which has already been identified as major contributors to self-leadership strategies.

Over the past decade, the issue of related theories has been addressed in some detail as documented in the Predictable Outcomes/Mechanisms section of this paper.

**SELF-LEADERSHIP MEASUREMENT**

In addition to establishing the theoretical distinctiveness of self-leadership theory and identifying important research opportunities, Neck and Houghton documented substantial progress in the measurement of self-leadership, a critical requirement for building an effective stream of research. The scope of this paper includes an evaluation of progress in this critical area.

Self-leadership measurement is anchored in three categories: behavior-focused strategies, natural reward strategies, and constructive thought pattern strategies (e.g., Manz & Neck, 2004). Behavior-focused strategies include self-observation, self-goal setting, self-reward, self-punishment and self-cueing. Natural reward incorporates two strategies: building pleasant, enjoyable features into a task, and focusing attention away from the unpleasant aspects of a task. Constructive thought pattern strategies encompass identifying and replacing dysfunctional beliefs, mental imagery, and positive self-talk. These constructs are the building blocks for the measurement of self-leadership.

The Two Decades article also documented the development of a reliable and valid assessment instrument, which is critical to building a body of meaningful research around the theoretical base. Neck and Houghton (2006) documented the evolution of the measurement instrument from self-leadership prototypes (Manz & Sims, 1991; Manz, 1992) to the Anderson and Prussia (1997) Self-Leadership Questionnaire (SLQ), to the more recent Revised Self-Leadership Questionnaire (RSLQ; Houghton & Neck, 2002), which addressed psychometric problems from the earlier instruments. Neck and Houghton (2006), while supporting the reliability and construct validity of the RSLQ, called for additional data analysis and assessment of the instrument.

In each section of the paper, the self-leadership research instrument is documented, with an overall summary of progress and opportunities addressed as a separate section after the major topics have been covered.

**Organization of This Review**

In 2006, the field of self-leadership had accumulated a body of empirical results that reinforced the value and importance of the theoretical concept; however, Neck and Houghton’s (2006) review indicated that actual empirical research was relatively limited and scattered over a variety of topics.

In response to this observation, this paper addresses self-leadership research over the past decade to build upon the Neck and Houghton’s review, and seeks to identify research topics that could be most fruitful for scholars to address over the next decade. Each of the areas of study recommended by Neck and
Houghton is reviewed in separate sections of this paper. In each section, there is a brief review of Neck and Houghton’s findings in 2006, a matrix of post-2006 research studies, and observations concerning the research progress made. Our intent is to provide an organized documentation of progress prior to and after the 2006 study and to highlight research opportunities as encouragement to scholars to focus on high potential research topics in order to advance our overall understanding and application of self-leadership theory. The topics covered in this review are structured in distinct sections of this review as noted below:

- **Self-Leadership across Cultures:*** There are seven studies in this section. Five studies developed and/or validated the use of a version of the Revised Self-Leadership Questionnaire (the RSLQ, Houghton & Neck, 2002; or the MSLQ, Ho and Nesbit 2009) designed for China, Germany, or Portugal. Two studies provided cross cultural results that could be compared to existing research results.

- **Predictable Outcomes/Mechanisms – Teams:** Neck and Houghton (2006) specifically addressed research in team environments as a significant future research opportunity. In our review of the literature, all studies that addressed teams also addressed predictable outcomes/mechanisms; consequently, we covered this section separately with a focus on teams. The team studies provide insight into traditional outcomes (e.g., job satisfaction, autonomy, task type, adaptability, and self-efficacy) within a team environment, and address team performance and collectivism. Surprisingly, we found no articles that addressed both shared leadership (a key team concept) and self-leadership.

- **Predictable Outcomes/Mechanisms and Contingency Factors – Individual:** This topic included five studies addressing the relationships and interactions of self-leadership with other leadership constructs, motivation and goal orientation, learning orientation, work role performance, job autonomy, job satisfaction, creativity/originality, job strain, work effort, and psychological empowerment. Where relevant, information from the Team section is included. Studies addressing predictable outcomes/mechanisms incorporated contingency factors in a study of multiple relationships.

- **Psychological and Physiological Benefits:** This section includes three studies in journals outside of the historical stream of literature addressing self-leadership. Ironically, the studies “flip” the approach suggested by Neck and Houghton (2006). Instead of evaluating the effect of health on self-leadership, these studies apply self-leadership approaches to improving health, and represents an interesting intersection of self-leadership with a broader area of research.

- **Antecedents to Self-Leadership:** Four studies explored factors that enhance self-leadership in subordinates, and interesting area of study that had not been addressed by Neck and Houghton. Antecedents included leadership styles, demographic variables, self-efficacy, conscientiousness, and need for autonomy.
Neck and Houghton (2006) identified contingency factors as one of four important current trends that required additional research and study, focusing on the issue of applicability across all types of situation, and questioning the universal application of self-leadership. Follower development, situational urgency and task structure were specifically identified as important contingency factors in determining alternative leadership approaches, such as directive, transactional, transformational or empowering (Houghton & Yoho, 2005). The combination of situational factors and leadership approaches were projected to result in a difference in predictable outcomes. While Neck and Houghton (2006) identified involvement, dependence, creativity, autonomy and empowerment of individuals, the possible outcomes should not be restricted to this list.

The body of this review follows including a section for each major topic.

**SELF-LEADERSHIP ACROSS CULTURES**

In their article, Two Decades of Self-Leadership Theory and Research, Neck and Houghton (2006) noted that “the usefulness and applicability of self-leadership should be examined across a variety of international settings” (p. 286). Despite the importance of employees’ self-leadership strategies to the new organizational environment, Neck and Houghton (2006) noted that there was a lack of international research examining the positive effects of self-leadership on job performance in organizational settings. The authors identified three limited cross-cultural studies. As of 2006, international research addressed differences in self-leadership strategies employed by Chinese and U.S. students (Georgianna, 2005), an examination of psychometric properties of the RSLQ in a Chinese context (Neubert and Wu, 2006), and an examination of the bounded nature of self-leadership within Hofstede’s (1980) cultural dimensions framework.

Over the past 10 years (2006–2015), there has been increased attention to cross cultural research; however, most of the empirical work focused on validating measurements for non-English speaking samples. Only three studies addressed the effects of self-leadership. Since then, we have seen a move in this direction. It is clear that this is significant opportunity for research focused in this area.

A major thrust of cross-cultural research is evidenced by the numerous studies that have validated measurements in multiple languages and cultures. In 2007, Andressen and Konradt (2007) developed and validated a German version of the Revised Self-Leadership Questionnaire (RSLQ). Marques-Quinteiro, Curral, and Passos (2012) also adapted the RSLQ to the Portuguese context. Ho and Nesbit (2009) evaluated a more significant departure from the RLSQ, expanding the instrument to include three additional factors (relation-based natural rewards, relation-based self-observation, and social-oriented evaluation of beliefs and assumptions) in a 47-item questionnaire. Separately, Ho, Nesbit, Jepsin, and Demirian (2012) revealed that the modified self-leadership questionnaire (MSLQ) exhibited a satisfactory condition of psychometric properties across cultures. In 2014, Houghton, Carnes, and Ellison (2014) provided evidence in support of the cross-cultural validity of the RSLQ in U.S., China, Germany, and Portugal. Ho and Nesbit’s (2014) use of MSLQ provides evidence that the measurements and approaches are useful in studying self-leadership across
cultures. The authors found a positive relationship between subordinates’ self-leadership behaviors and supervisor performance rating and job satisfaction with autonomy acting as a moderator in the relationship.

The development and validation of international instruments, a critical contribution, has set the stage for comparative studies. At this time, however, there have been few studies that applied validated instruments to cross cultural comparative studies. Carmeli, Mietar, and Weisberg (2006) found that greater use of self-leadership practices was positively related with self and supervisor ratings of innovative behaviors at work in a sample of Israeli employees, but did not relate the results to U.S. studies. Georgianna (2007) explored the impact of self-leadership intervention on overcoming obstacles and achieving objectives in diverse cultures – the United States and China, but found no significant effect for either sample. The comparative study, did however, show that the U.S. group expressed higher levels of self-leadership than the Chinese sample. They also saw that Chinese students evidenced higher individualistic characteristics. “This research provides some insight into the similarities and differences between people from different cultures as to their use of self-leadership strategies. Future research using more robust validation methodology is warranted to confirm the measurements of the study” (Georgianna, 2007, p. 569).

In a more complex 2014 study in a Chinese context, Ho and Nesbit found positive relationships between subordinates’ self-leadership behaviors and supervisor performance rating, and job satisfaction. These findings parallel those of several U.S. studies relative to the relationship of self-leadership to job satisfaction (e.g., Houghton & Jinkerson, 2004; Politis, 2006; Roberts & Foti, 1998), and to performance (e.g., Godwin, Neck & Houghton et al., 1999; Neck, Stewart & Manz, 1995; Neck, Nouri, Houghton & Godwin, 2003; Stewart & Barrick, 2000).

We would also suggest that cross-cultural studies that focus on a broader range of outcomes and mechanisms to provide comparisons to studies already completed in the United States.

There clearly has been progress in adapting valid measurements of self-leadership for studies in different cultures. This is an important step in studying self-leadership in multiple cultures and situation. We would also suggest that similar studies should be done in additional cultures. This will ensure a broader view of how different cultures view and use self-leadership.

It is somewhat surprising that there is relatively little comparative empirical research that has been completed over the last decade. Only the Georgianna (2007) research used comparative samples. Neither of the two international studies that addressed relationships of interests and mechanisms addressed cultural differences or comparisons. A logical next step would be for scholars to replicate U.S. based studies to evaluate similarities and differences between different cultures. Clearly, there is great opportunity for a broader network of scholars to advance our knowledge of cross-cultural similarities and differences.
<table>
<thead>
<tr>
<th>Authors/Publication</th>
<th>Article Title</th>
<th>Focus of Article of Study</th>
<th>Self-leadership Measurement</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carmeli, Meiter, Weisberg, Intl J of Manpower, (2006)</td>
<td>Self-leadership skills and innovative behavior at work</td>
<td>Investigate relationship between self-leadership skills &amp; innovative behaviors at work</td>
<td>35-item RSLQ measure developed by Houghton and Neck (2002)</td>
<td>Self-leadership, income &amp; tenure are positively associated with innovative behaviors at work</td>
</tr>
<tr>
<td>Andressen, Konradt, U. Zeitschrift für Personalpsychologie, (2007)</td>
<td>“Measuring self-leadership: psychometric validation of the German version of the RSLQ”</td>
<td>The authors developed and validated a German version of the RSLQ (Houghton &amp; Neck, 2002)</td>
<td>27-item German version of the RSLQ (Houghton &amp; Neck, 2002)</td>
<td>Validated the revised German measurement instrument.</td>
</tr>
<tr>
<td>Ho, Nesbit. JMP (2009)</td>
<td>A refinement and extension of the self-leadership scale for the Chinese context</td>
<td>The MSLQ refines the RSLQ to make it more relevant to China</td>
<td>Develops MSLQ (47 item; 11 factors)</td>
<td>Exhibited increased reliabilities over the translated RSLQ</td>
</tr>
<tr>
<td>Ho, Nesbit, Jepsen, Demirian, Asian JoSP (2012)</td>
<td>Extending self-leadership research to the East: Measurement equivalence of the Chinese and English versions of the MSLQ</td>
<td>This study examined the psychometric properties and measurement invariance of the modified self-leadership questionnaire (MSLQ)</td>
<td>MSLQ (Ho &amp;Nesbit, 2000) includes 38 items in 12 subscales – an expansion of RSLQ</td>
<td>Results revealed that the modified self-leadership questionnaire exhibited a satisfactory condition of psychometric properties across cultures.</td>
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</table>
Adapting The Revised Self-Leadership Questionnaire to The Portuguese Context

Adapted the Revised Self-Leadership Questionnaire (RSLQ) for the Portuguese population. Based on 34 item version of RSLQ (Neck & Houghton, 2006), adding a self-learning strategy of 3 new items; only 7 sub-dimensions and 21 items were preserved. Cross-validation multigroup analysis suggested good model fit; Correlations supported the positive relationship of both cognitive flexibility and locus of control with self-leadership.


Examined the relationship between self-leadership behaviors with supervisor performance rating, objective work performance, and job satisfaction in nine Chinese organizations. MSLQ (Ho & Nesbit, 2000) includes 38 items in 12 subscales – an expansion of RSLQ. Positive relationship between subordinates’ self-leadership behaviors & supervisor performance rating, & job sat., controlling for conscientiousness. Job autonomy as moderator.

A cross-cultural examination of self-leadership: Testing for measurement invariance across four cultures.

Examine the cross-cultural validity of self-leadership across 4 cultures: U. S, China, Germany, and Portugal. RSLQ (Neck & Houghton, 2002). Results provide evidence in support of the cross-cultural validity of the Revised Self-Leadership Questionnaire (RSLQ).

SELF-LEADERSHIP PSYCHOLOGICAL AND PHYSIOLOGICAL BENEFITS

In 2006, Neck and Houghton suggested that self-leadership be expanded past “behavioral and cognitive elements to include physiological components as well” (p. 287). They suggested a “comprehensive view concerning the potential of individuals to truly self-lead themselves certainly must be impacted by their fitness level and nutritional habits” (p. 287). We have noticed, however, that the research that relates fitness to self-leadership has “flipped” the relation of interest suggested by Neck and Houghton. Instead of fitness levels affecting self-leadership, studies show that self-leadership may actually affect fitness levels. In 2014, Yun et al. conducted a study that suggests that “self-leadership may enable patients with cancer to proactively focus on overcoming cancer and, thereby, promote their health, posttraumatic growth, and health related quality of life.”

A related set of studies identifies relationships between psychological health and self-leadership as well. In 2008, Steinhardt and Dolbier used self-leadership to help evaluate a resilience intervention. Their results showed that “the experimental group had significantly higher resilience scores, more effective
coping strategies, higher scores on protective factors (i.e. positive affect, self-esteem, self-leadership), and lower scores on symptomatology post intervention than did the wait-list control group” (p. 445). In 2010, Dolbier, Jaggars and Steinhardt used self-leadership to help measure stress related growth before and after a resilience intervention. They found a positive relationship between self-leadership and growth.

Another difference between these recent studies and what has previously been done is the way that these authors have measured self-leadership. In both their articles Steinhardt and Dolbier (2008; Dolbier, Jaggars & Steinhardt, 2010) used a measurement called Self-Leadership Scale (SLS), taken from the Internal Family Systems model, which differentiates the individual as multiple part complex system with descriptions of types identified as critic, caretaker, and achiever (Schwartz, 1995). In a separate study, Yun and associates (2014) used a 9-item Stephen Covey 7HP instrument. The measures employed by researchers in this category (Physical and Psychological Health) differ substantially from the measures for self-leadership in management, which are centered around the Revised Self-leadership questionnaire (RSLQ) and the Modified Self-Leadership Questionnaire (MSLQ), which have been translated into different languages for uses across cultures.

Although outside the traditional set of management and leadership journals that have provided a forum for self-leadership studies, research in relatively non-traditional streams of literature exhibit a promising path for evaluating self-leadership interventions and positive potential. There may be even more potential for a blending of traditional and non-traditional scholars, particularly in employing the more robust traditional measures of self-leadership in the non-traditional areas, leading to cross-functional efforts.

**PREDICTABLE OUTCOMES/MECHANISMS – TEAMS**

Neck and Houghton (2006) suggested that teams and shared leadership would be important (and related) paths for future research. As noted in the introduction, three studies addressed self-leadership predictable outcomes/mechanisms within the team perspective, but as of the end of 2015, there had been no studies that addressed self-leadership and shared leadership. Moreover, each of the three team-related studies also addressed predictable outcomes/mechanisms. To effectively address team-related research, the Outcomes/Mechanisms section has been split between team-related and non-team-related articles. We will first address the team-related research, then the non-team related. The summary includes both sections.

In 2006, Politis examined the relationship between the dimensions of self-leadership strategies, job satisfaction and team performance, and the extent to which job satisfaction mediates the influence of self-leadership on team performance. They found that the relationship between four of five self-leadership strategies (not practice) and job satisfaction is direct and positive and that job satisfaction acts as a mediator in the positive relationship between self-leadership and team performance.
### Table 2: Psychological and Physiological Benefits

<table>
<thead>
<tr>
<th>Authors/Publication</th>
<th>Article Title</th>
<th>Focus of Article of Study</th>
<th>Self-leadership Measurement</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steinhardt, Dolbier, Journal of American College Health (2008)</td>
<td>Evaluation of a Resilience Intervention to Enhance Coping Strategies and Protective Factors and Decrease Symptomatology</td>
<td>the authors examined the effectiveness of a 4-week resilience intervention to enhance resilience, coping strategies, and protective factors, attempting to determine the impact of each on stress symptomology</td>
<td>From the family systems model – a 20 item Self-Leadership Scale (SLS) questions like “I feel a sense of inner peace” and “I treat myself with kindness.” This instrument does not employ any standard Self-leadership approach.</td>
<td>The intervention, which included a type of self-leadership, reduced the symptoms of stress. The measure of self-leadership had virtually no relationship to the self-leadership concept under consideration.</td>
</tr>
<tr>
<td>Dolbier, Jaggars, Steinhardt, J of International Society for Investigation of Stress (2010)</td>
<td>Stress-Related Growth: Pre-Intervention Correlates and Change Following a Resilience Intervention</td>
<td>Self-leadership, self-esteem and resilience positively related to effectiveness of a resilience intervention to enhance stress-related growth.</td>
<td>From the family systems model – a 20 item Self-Leadership Scale (SLS) questions like “I feel a sense of inner peace” and “I treat myself with kindness.” This instrument does not employ any standard Self-leadership approach.</td>
<td>The intervention, which included a type of self-leadership decreased stress symptoms. The measure of self-leadership had virtually no relationship to the self-leadership concept under consideration.</td>
</tr>
<tr>
<td>Yun et al. (multiple authors). Psycho-Oncology (2014)</td>
<td>The association of self-leadership, health behaviors, and posttraumatic growth with health-related quality of life in patients with cancer</td>
<td>To evaluate the association of self-leadership, effective health behaviors, and posttraumatic growth with health-related quality of life (HRQOL).</td>
<td>Self-leadership Competency, measured by a 9-item Stephen Covey 7HP instrument (2004). There may be some relation to 7HP measures and the RSLQ.</td>
<td>Different 7HP skills (interpreted as self-leadership) correlated positively with multiple measures of healthy behavior and post-traumatic growth.</td>
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</table>

In 2009, Konradt, Andressen, and Ellwart examined the relation of self-leadership on team members’ motivation, satisfaction, and performance in organizational teams. Their study confirmed a positive relationship between self-leadership and individual performance, which was partially mediated by self-efficacy and instrumentality. They also found that autonomy and task type showed no moderating effect on self-leadership in teams, which addresses the issue of contingency factors that could alter the relationship between self-leadership and outcomes of interest. Although there was no support for the moderating effect of autonomy and task structure in this case, this remains an interesting and important question for future research.
In 2012, Hauschildt and Konradt examined the relationship between self-leadership and work role performance of team members, including the moderating role of collectivism. The found positive relationships between self-leadership and proficiency. They also found positive relationships between adaptively and proactivity for individual task and tasks within the team. They used collectivism to moderate these relationships.

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<tbody>
<tr>
<td>Politis, Leadership &amp; Organizational Development Journal (2006)</td>
<td>Self-leadership behavioral-focused strategies and team performance; The mediating influence of job satisfaction</td>
<td>Examines the relationship between the dimensions of self-leadership strategies, job satisfaction and team performance, and the extent to which job satisfaction mediates the influence of self-leadership on team performance.</td>
<td>Manz’ 1992 6-factor, 18-item RLQ1 was reduced to 15 items; 5 factors (adding 1 cueing question to self-observation) due to fit issues.</td>
<td>The relationship between 4 of 5 self-leadership strategies (not practice) and job satisfaction is direct &amp; positive. Job satisfaction acts as a mediator in the positive relationship between self-leadership and team performance.</td>
</tr>
<tr>
<td>Hauschildt, Konradt, JoMP, (2012)</td>
<td>Self-leadership and team members’ work role performance</td>
<td>Relationship between self-leadership and work role performance of team members, including the moderating role of collectivism.</td>
<td>27-item RSLQ (Houghton &amp; Neck, 2002) that has been shown to possess good internal consistency, construct validity and criterion validity (Andressen and Konradt, 2007)</td>
<td>Positive relationships between self-leadership and proficiency, adaptivity and proactivity for individual task and the team. Collectivism moderated these relationships.</td>
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</table>

In summary, the efforts of these studies have advanced self-leadership research and theory through self-leadership’s predictable outcomes/mechanisms within work-related teams. Each study has provided support for benefits associated with the role of self-leadership within work-related teams. These studies have advanced the body of knowledge of self-leadership into the area of team...
dynamics, and provide a base for multiple research opportunities in this important area of research.

**SELF-LEADERSHIP PREDICTABLE OUTCOMES/MECHANISMS (AND CONTINGENCY FACTORS)**

Neck and Houghton (2006) suggested that “Future self-leadership research should also strive to investigate empirically the relationships between self-leadership and the predictable outcome variables” (p. 287), specifically addressing commitment, independence, creativity/innovation, trust, potency, positive affect, job satisfaction, psychological empowerment, and self-efficacy as the most important potential outcomes. As of 2006, empirical studies found relationships to self-leadership for three of the specified variables (self-efficacy, job satisfaction and positive affect). The relationship between self-leadership and self-efficacy has received a substantial level of empirical support (e.g., Neck & Manz, 1996; Prussia, Anderson & Manz, 1998). Additionally, Neck and Manz (1996) linked positive affect and job satisfaction to thought self-leadership training in one study, and (Houghton and Jinkerson, 2004) found significant relationships between constructive thought strategies and job satisfaction, reporting a mediating effect associated with an absence of dysfunctional thought processes and with subjective well-being.

Neck and Houghton (2006) identified no other empirical studies addressing predictable outcomes, calling for greater focus on not only the variables that had not been studied, but for additional research on those that had been subjects of research efforts. To some extent, this call has been answered in the most recent decade, but it has also been expanded to include additional outcomes and relationships, including research incorporating more traditional leadership theories. Neck and Houghton had identified traditional leadership theories as important subjects to be studied in conjunction with self-leadership; however, their focus was on the contingent applicability of self-leadership associated with different situations (particularly in terms of leadership styles). The underlying concept was that self-leadership would not be appropriate or helpful under all circumstances, and was addressed under the topic of contingency factors. In the past decade, no research specifically addressed contingency factors in this way; however, we found a number of articles that incorporated mediating and moderating factors that further advance our knowledge of self-leadership, and research that included traditional leadership constructs.

The Two Decades article also suggested a focus on self-leadership within teams as explored in detail at the beginning of this section. There were four articles that addressed teams, and all four focused on predictable outcomes/mechanisms. The findings for the team based research were addressed in detail in earlier paragraphs; however, the summary for this section includes these results.

Andressen, Konradt, and Neck (2012) studied the relationship among self-leadership, transformational leadership, and work motivation (in terms of self-efficacy and instrumentality) relative to job performance and affective commitment. They found that self-leadership mediates the relationship between transformational leadership and employee motivation, whereas the influence of self-leadership on motivation is higher in virtual work structures than in co-
located work structures. This is the only study that addressed the contingent effect of self-leadership in differing work structures, which addresses one of the questions posed by Neck and Houghton in 2006. There are a number of differing work structures and situations where self-leadership is expected to have more or less impact. This is an important area of study with multiple opportunities for research in the future decades.

In 2012, Marques-Quinteiro and Curral’s study of the relationship between goal orientation and proactive work role performance explored the use of self-leadership behavior strategies as a mediator, and thought pattern and natural reward strategies as moderators of the relationship between goal orientation and proactive work role performances. They found that behavior focused strategies could fully mediate the relationship between goal orientation and natural reward strategies and that thought pattern strategies and natural reward strategies could moderate the effect goal orientation has on proactive work role performances.

In 2013, Rogelberg and associates conducted research and theory on self-leadership by examining the leader self-talk and its relation to effective leadership & strain, employing specific self-leadership processes. They found that constructive self-talk positively related to effective leadership and that dysfunctional self-talk related negatively to creativity/originality, which negatively related to job strain. Also in 2013, Furtner, Baldegger, and Rauthmann investigated associations among self-leadership and the full range leadership model – transformational, transactional, and laissez-faire leadership. They found that Leaders’ self-leadership was positively associated with active styles of leading (transformational and transactional leadership) and negatively with passive styles of leading (laissez-faire leadership.)

In 2015, Amundsen and Martinsen evaluated the role of self-leadership and psychological empowerment in linking empowering leadership to subordinates’ job satisfaction, work effort, and creativity. They found that empowering leadership positively affects psychological empowerment both directly and indirectly, through self-leadership and that psychological empowerment influences both job satisfaction and work effort but not creativity, whereas self-leadership influences work effort and creativity but not job satisfaction.

Progress has clearly been made in the area of predictable outcomes/mechanisms. Additional research adds to our understanding of the relationships between self-leadership and the previously studied area of job satisfaction in a more complex study of these relationships and other constructs. As noted in the review of team-related research, the positive relationship between self-leadership and self-efficacy was again found to be significant and positive. Relative to suggested variables that had not been researched as of 2006, creativity was addressed in two of the more recent studies, supporting self-leadership’s positive impact on creativity, and one linking self-leadership with psychological empowerment. Of the nine variables specifically targeted in the 2006 article, four have yet to be addressed in empirical studies: commitment, independence, trust, and potency. A number of the studies also incorporated some type of performance measure, which is consistent with substantial historical study of the self-leadership/performance relationship.
In summary, the past decade of self-leadership research also addressed important and interesting potential relationships with motivation, goal orientation, effective leadership, strain, work effort, instrumentality, autonomy, proficiency, adaptively, and proactivity. The expansion of expected outcomes and mechanisms has been important in enhancing the scope of self-leadership research, and provides a broader opportunity for meaningful research. Research has also explored the relationship between self-leadership and traditional leadership concepts, providing further evidence of the benefits of self-leadership at the managerial and executive level. The studies associated with outcomes/mechanisms provide additional support for the relevance of self-leadership in promoting positive behavior in a broad spectrum of behaviors, reinforces the practical advantages of improving, and enhances self-leadership skills in a broad spectrum of situations. At the same time, it is clear that there is a great deal of opportunity to add to our knowledge of self-leadership and its impact on multiple important variables in the area of expected outcomes and mechanisms, and to evaluate its benefit in different circumstances.

Table 4. Self-Leadership Predictable Outcomes/Mechanisms (and Contingency Factors)

<table>
<thead>
<tr>
<th>Authors/Publication</th>
<th>Article Title</th>
<th>Focus of Article of Study</th>
<th>Self-leadership Measurement</th>
<th>Results</th>
</tr>
</thead>
</table>
leadership & strain, employing specific self-leadership processes. by 17 trained researchers (a unique approach, but tied to self-talk measures) which negatively related to job strain.

Furtner, Baldegger, Rauthmann, European Journal of Work and Organizational Psychology (2013)

Leading yourself and leading others: Linking self-leadership to transformational, transactional, and laissez-faire leadership.

Investigate associations among self-leadership and the full range leadership model (transformational, transactional, laissez-faire leadership).

Leaders' self-leadership was positively associated with active styles of leading (transformational and transactional leadership) and negatively with passive styles of leading (laissez-faire leadership).


Linking Empowering Leadership to Job Satisfaction, Work Effort, and Creativity: The Role of Self-Leadership and Psychological Empowerment

Evaluate the role of self-leadership and psychological empowerment in linking empowering leadership to subordinates’ job satisfaction, work effort, and creativity

Building on the RSLQ, 20 item research version (Martinsen, 2009) – adding focus on new ideas, competence development, cooperation, coordination, priority to interesting tasks, priority to facilitative working conditions, & visualization of outcomes.

Empowering leadership positively affects psychological empowerment both directly and indirectly, through self-leadership. Psychological empowerment influences both job satisfaction and work effort but not creativity, whereas self-leadership influences work effort and creativity but not job satisfaction.

Antecedents to Self-Leadership

Neck and Houghton (2006) did not identify antecedents as a focus of future research interest; however, four studies addressed self-leadership as an outcome associated with leader empowering leadership, follower need for autonomy, leader self-awareness, leader personality, individual self-efficacy and conscientiousness, and leader transformational leadership. To some extent, the relationships associated with individual characteristics have been predicted but in the opposite order (i.e., need for autonomy, self-efficacy and conscientiousness) or as moderating factors.

In 2006, Yun, Cox, and Sims examined the interaction effect of leadership and follower characteristics on follower self-leadership. Their results suggest that empowering leadership and need for autonomy interact to enhance self-leadership. They also concluded that directive leadership negatively interacts with need for autonomy relative to self-leadership.

In 2008, Tekleab, Sims, Yun, Tesluk, and Cox examined the effects of leaders’ self-awareness of their own leadership on followers’ satisfaction, self-leadership, and leader effectiveness. They found that empowering leadership
and leader self-awareness of empowering leadership were related to subordinate self-leadership. However, they also discovered that neither transformational leadership nor leader self-awareness of transformational leadership was related to subordinate self-leadership.

In 2012, Marshall, Kiffin-Peterson, and Soutar, examined the influence personality and leader behaviors have on teacher self-leadership in a vocational education and training setting. They found that generalized self-efficacy and conscientiousness were “positive predictors of self-leadership” (Marshall et al., p. 707). They also found that “transformational leader behaviors positively influenced teacher self-leadership,” (Marshall et al., 2012, p. 707) but not as significantly. It should be noted that Neck and Houghton (2006) were interested in the relationship between self-efficacy and self-leadership, but in terms of self-leadership leading to self-efficacy rather than the structure of the Marshall and associates’ (2012) findings.

In 2014, Steinbauer, Renn, Taylor, and Njoroge, explained how ethical leadership relates to followers’ ethical judgment in an organizational context. They found that ethical leadership positively related to followers’ self-leadership focused on ethics, which was then associated with ethical decision-making, but only where it involved a deliberative approach.

These studies not only contribute to a broader understanding of self-leadership, but also complement the studies addressing predictable outcomes/mechanisms and contingency factors. The work on antecedents also opens a path for more studies that identify characteristics or leader behavior that may predict higher levels or enhancements of individual self-leadership.

**SELF-LEADERSHIP METHODS EMPLOYED IN RESEARCH FROM 2006–2015**

By 2006, there had been substantial progress in the development of self-leadership measurement instruments, coalescing around the Revised Self-Leadership Questionnaire (RSLQ; Houghton & Neck, 2002). The RSLQ had been built on earlier work completed by Manz, Sims, Anderson and Prussia (Mans & Sims, 1991; Manz, 1992; Anderson & Prussia, 1997), and Neck and Houghton (2006) supported the reliability and construct validity of the RSLQ, but also called for additional data analysis and assessment of the instrument.

Over the last decade, the RSLQ and variations of the original instrument, has been the most common instrument employed in self-leadership research overall, and has been the dominant choice in leadership, management and organizational journals (a total of ten studies). Three other instruments (also employed in leadership, management, organizational, and organizational psychology
### Table 5. Antecedents to Self-Leadership

<table>
<thead>
<tr>
<th>Authors/Publication</th>
<th>Article Title</th>
<th>Focus of Article of Study</th>
<th>Self-Leadership Measurement</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yun, Cox, Sims, JMP, (2006)</td>
<td>The forgotten follower: a contingency model of leadership and follower self-leadership</td>
<td>Examine the interaction effect of leadership and follower characteristics on follower self-leadership</td>
<td>Six items addressing behavior at work (problem solving, initiative, responsibility); no other source was noted.</td>
<td>Results suggest that empowering leadership &amp; need for autonomy interact to enhance self-leadership; directive leadership negatively interacts with need for autonomy relative to self-leadership.</td>
</tr>
<tr>
<td>Tekleab, Sims, Yun, Tesluk, Cox, Journal of Leadership &amp; Organizational Studies (2008)</td>
<td>Are We On the Same Page? Effects of Self-Awareness of Empowering and Transformational Leadership</td>
<td>This study examines the effects of leaders’ self-awareness of their own leadership on followers’ satisfaction, self-leadership, and leader effectiveness.</td>
<td>Follower self-leadership was measured as 4 items reflecting teamwork (follower provides support to other members and coordinates activities with other members without direct intervention from leader; Cox, 1993).</td>
<td>Empowering leadership &amp; leader self-awareness of empowering leadership were related to subordinate self-leadership; but not transformational leadership nor leader self-awareness of transformational leadership.</td>
</tr>
<tr>
<td>Marshall, Kiffin-Peterson, Soutar, Educational Management Administration &amp; Leadership (2012)</td>
<td>The Influence Personality and Leader Behaviours have on Teacher Self-leadership in Vocational Colleges</td>
<td>This study examines the influence personality and leader behaviours have on teacher self-leadership in a vocational education and training setting.</td>
<td>Initially 35-item (RLSQ) was employed; however, fit issues reduced the measure to a one-factor model of self-leadership with five indicators (self-goal/self-observe, self-reward, mental imagery, evaluate beliefs, natural rewards).</td>
<td>28 per cent of the variance in teacher self-leadership was explained by gender, education, general self-efficacy, conscientiousness and the transformational leader behaviours of the teachers’ immediate manager.</td>
</tr>
<tr>
<td>Steinbauer, Renn, Taylor, Njoroge, JoBE (2014)</td>
<td>Ethical Leadership and Followers’ Moral Judgment: The Role of Followers’ Perceived Accountability and Self-leadership</td>
<td>Explain how ethical leadership relates to followers’ ethical judgment in an organizational context.</td>
<td>Subset of six self-leadership questions (the ASLQ*) from Houghton et al. (2012), adapted from Houghton and Neck (2002)</td>
<td>Ethical leadership positively related to followers’ self-leadership focused on ethics, which was then associated with ethical decision-making only with deliberative approach.</td>
</tr>
</tbody>
</table>

journals) are closely associated with the RLSQ. The RLQ1 was included in the evolution of the RSLQ, and was employed by Politis and associates (2006)
shortly after Neck and Houghton (2006) had completed their Two Decades review. The RLSQ was, in fact, developed to address previous issues of the prior instruments, including the RLQ1. The Abbreviated Self-Leadership Questionnaire (ASLQ; Steinbauer et al., 2014) provided a valid instrument for circumstances involving longer surveys, allowing for fewer questions, and reduced fatigue by subjects completing the questionnaire. The MSLQ was described as an expansion of the RLSQ by Ho and Nesbit (2009, 2014; Ho, Nesbit, Jepsen, & Demirian, 2012), specifically addressing the cultural differences associated with cross culture studies focused on China and the desirability of incorporating the concept of collectivism. Additional information for each of these instruments is included in appendix B. Each of the above noted instruments showed acceptable reliability and construct validity and embraced the underlying construct and structure of the RSLQ.

This review found six studies that employed unique measurements of self-leadership. Three of these unique instruments were employed in the realm of physical and psychological health. These studies flipped the recommendation made in the Two Decades article, focusing on the health benefits associated with self-leadership behavior, practices, and interventions. Two studies (Steinhardt & Dolbier, 2008; Dolbier et al., 2010) chose the family systems model – a 20-item Self-Leadership Scale (SLS) questions like “I feel a sense of inner peace” and “I treat myself with kindness.” A third study of stress employed Self-Leadership Competency, measured by a 9-item Stephen Covey 7HP instrument (2004). Based on the information provided, the “self-leadership” construct employed in this category of studies is not the same as the self-leadership construct represented in the RSLQ, MSLQ, and ASLQ.

There were three studies outside of the physical/psychological health category that employed unique measures. Yun, Cox and Sims (2006) used a 6-item questionnaire, addressing behavior at work (problem solving, initiative, and responsibility) without providing evidence of construct validity. Tekleab, Sims, Yun, Tesluk, and Cox (2008) employed a measure of follower self-leadership, including four items reflecting teamwork (follower provides support to other members and coordinates activities with other members without direct intervention from leader; Cox, 1993). These instruments are different from each other even though they include two common authors, and clearly measure concepts that are outside those addressed in the mainstream self-leadership literature. It is unclear as to the value of using unique measures without consistency. The final study (Rogelberg, Justice, Braddy, Paustian-Underdahl, Heggestad & Shanock, 2013) limited the measurement instrument to constructive self-talk (five items) and dysfunctional self-talk (four items), which should be titled as self-talk rather than self-leadership. This is a valid area of study and adds to the overall knowledge of self-leadership factors.

The purpose of the measurement section was not to provide a critique of current trends, but to document those trends; however, it is clear that the RSLQ provides an effective base for future self-leadership research. At the same time, there are issues to be addressed. Not all factors or items have been confirmed in all studies. The instrument itself also has some cultural limitations, but progress is
consistent and meaningful. Even the use of a subset of the self-leadership instrument focused on a particular factor in the overall model can be useful.

The usefulness of alternative “unique” measures that have no link to the RSLQ (or its predecessors) should be re-evaluated. There are clear benefits to coalescing around validated measures, and questionable benefits of using constructs that may or may not be consistent with self-leadership. It is perhaps understandable that scholarly communities with differing histories and backgrounds (e.g., physical and psychological health) would employ their own approach to measuring self-leadership, but even these scholars may wish to consider utilizing validated instruments such as the RSLQ or a derivative that is based on three decades of theory and research.

**Table 6: Self-Leadership Measurements**

<table>
<thead>
<tr>
<th>Category</th>
<th>RSQ1</th>
<th>RLSQ/ variations</th>
<th>MLSQ</th>
<th>Unique</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Leadership Across Cultures</td>
<td></td>
<td>5</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Predictable Outcomes/Mechanisms</td>
<td>1</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Including teams)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological and Physiological</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Benefits</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antecedents to Self-Leadership</td>
<td>2</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>1</td>
<td>13</td>
<td>3</td>
<td>6</td>
</tr>
</tbody>
</table>

**SUMMARY**

In our search for quantitative research published in peer reviewed journals since 2006, we identified 23 articles, addressing most of the topics suggested by Neck and Houghton in their 2006 discussion of future opportunities. Meaningful progress has been made in three of the suggested areas: Cross-Cultural, Predictable Outcomes/Mechanisms, Measurement and Teams (all studies in the team category also addressed outcomes and/or mechanisms). In an interesting twist, there has also been progress in the health category, where four studies identified benefits of self-leadership relative to psychological and physical health; however, this stream of research is focused outside the traditional stream associated with self-leadership. The Two Decades article also called for a focus on contingency factors and shared leadership. We found only one article that included contingency factors in a study, in which the primary focus was outcomes/mechanisms; consequently, we included that article in the Predictable Outcomes/Mechanisms section. We found no research that addressed both shared leadership and self-leadership, although we comment on this promising area of study in this concluding section. There were also four articles that addressed antecedents of self-leadership, which brings up the issue of causality and position within a causative model.

**Self-Leadership across Cultures**

Neck and Houghton (2006) noted, “Self-leadership has developed largely within the context of the culture of the USA. As a result, the usefulness and applicability of self-leadership should be examined across a variety of international settings” (p. 286). The greatest progress was not realized in assessing usefulness or applicability, but in adapting and validating the RSLQ for international cultures, including Chinese, Portuguese, and German. These are necessary first steps in broadening the cultural base of self-leadership studies,
which has led to at least one follow-up study of expected outcomes and relationships (Ho & Nesbit, 2014), which found support for previously identified links of self-leadership to job satisfaction and performance, but in a non-U.S. setting. While relevant to factors addressed in U.S. studies, there was no discussion of a comparison. Two studies were probably underway prior to the publication of the Two Decades article. One simply showed higher levels of self-leadership in a U.S. sample as compared to a Chinese sample (Georgiana, 2007). A second study, found a relationship between self-leadership with innovative behaviors at work in a sample located in Israel (Carmelli et al., 2006). This study also did not provide a comparison to a similar U.S. study. There is a great deal of opportunity to build on the measurement progress in international cultures, and a wide field of opportunity to address relationships already identified in U.S. studies.

Self-Leadership Psychological and Physiological Benefits

The starting point for the category of study was that self-leadership would be positively influenced by physical health. This particular approach has received no attention in the traditional streams of research; however, the health care field clearly is interested in concepts like self-leadership that can enhance psychological and/or physical health. Three articles addressing this subject were published in the Journal of American Student Health, the Journal of International Society for the Investigation of Stress, and Psycho-Oncology. Two studies found positive benefits of interventions that included self-leadership strategies in reducing stress (Dolbier et al., 2010; Steinhardt & Dolbier, 2008), employing a 20-item Self-Leadership Scale (SLS) a from the family systems model (with examples of questions as follows: “I feel a sense of inner peace” and “I treat myself with kindness”). A third study found a correlation between self-leadership (as measured by the 7HP skills assessment) and healthy behavior in patients experiencing post-traumatic stress. The measurements of self-leadership are not consistent with the construct employed in the majority of self-leadership studies and do not claim any association with the construct suggested by Manz (1983, 1986) in his early works, and which has been refined over the last three decades (e.g., Amundsen & Martinsen, 2015; Neck and Houghton, 2006), and it reverses the proposition contemplated in the Two Decades article. Yet, this is an intriguing approach to applying self-leadership to health improvements, and it suggests the opportunity to evaluate the benefits of self-leadership training and development in a much broader field of study, including sociological issues.

Predictable Outcomes/Mechanisms in Teams

In this study, we separately categorized research on teams in terms of Predictable Outcomes/Mechanisms in Teams to isolate progress on team related research and clarify that these studies were focused on expected relationships, and would also explore mediating and moderating factors. There are two research related benefits realized in employing a traditional approach in a team setting: explore potential differences in a team environment, and expand and replicate studies of individuals.
Consistent with individual based research, Politis (2006) found that job satisfaction mediated the positive relationship between self-leadership and team performance, confirming the expected benefits in a team environment. Konradt and associates (2009) confirmed positive relation between self-leadership and individual performance, partially mediated by self-efficacy & instrumentality, and explored the situational impact of autonomy and task type, but found no significant moderating effect on individual self-leadership in teams. Hauschildt and Konradt (2012) found positive relationships between self-leadership and team oriented behaviors of adaptively and proactivity, also finding the expected relationship to proficiency. These studies represent a positive step forward in expanding research on self-leadership within teams, and is an initial step in assessing relevant factors that contribute particularly to team performance.

**Predictable Outcomes/Mechanisms and Contingency Factors**

In the last decade, results of studies addressing predictable outcomes and mechanism were consistent with earlier research, whereas, self-leadership was found to exhibit positive relationships with desirable outcomes including, transformational and transactional leadership (Furtner, Baldegger, & Rauthmann, 2013), effective leadership (Rogelberg et al., 2013), proficiency, adaptively, proactivity (Hauschildt & Konradt, 2012), and individual performance (Konradt et al., 2009). However, results for the relationship between self-leadership and job satisfaction were mixed. Amundson and Martinsen (2015) found no relationship. While Politis (2006) showed the relationship to be direct and positive, and that job satisfaction mediated the relationship between self-leadership and team performance. The lack of relationship in the Amundson and Martinsen study may challenge earlier literature that supported this relationship, or suggest a benefit in investigating moderating or contingency factors that could alter the relationship.

Studies involving moderation or mediation also supported the beneficial impact of self-leadership. Konradt and associates (2009) identified both self-efficacy and instrumentality as mediators of the positive relationship of self-leadership to individual performance. Self-leadership acted as a mediator between empowering leadership and work effort and creativity. Amundson and Martinsen (2015) found that self-leadership acted as a mediator of the relationship between empowering leadership and work effort and creativity. Marques-Quinteiro & Curral (2012) found that behavior focused strategies fully mediate the relationship between goal orientation and work role performance while thought pattern strategies and natural reward strategies moderate the effect.

Although the number of studies incorporating mediating or moderating effects has increased in a meaningful way, there are few studies that specifically address the issue of conditions in which self-leadership is more or less effective or relevant. Both avenues provide substantial opportunities for future research. The increase in more complex studies expands the range of potential interactions and relationships, advancing the study of self-leadership to another level. The lack of situational research, on the other hand, continues to offer fertile ground for quantitative exploration and investigation.
Antecedents to Self-Leadership

Although not a topic suggested by Neck and Houghton (2006), the articles addressing self-leadership as antecedent, are closely related to the Predictable Outcomes/Mechanisms and Contingency Factor topic addressed in this review. In assessing antecedents of self-leadership, positive relationships were found with empowering leadership, need for autonomy, leader self-awareness, self-efficacy, conscientiousness, transformational leadership, and ethical leadership (Yun et al., 2006; Tekleab et al., 2008; Marshall, et al., 2012; Steinbauer et al., 2014). These results generally support the relationships found in the historical research stream and the results identified in the Predictable Outcomes section, but suggest that factors of interest in these other studies may involve a more complex relationship with self-leadership. Individual and leadership factors may, in fact, interact in a complex set of relationships that are potentially integrated in personal, team and leadership development. As importantly, these studies provide some insight to the nature of self-leadership in terms of its distinctiveness, and addresses, to some extent, Neck and Houghton’s (2006) discussion of theoretical contexts.

Self-Leadership Measures

Neck and Houghton (2006) noted that a potential reason for the lack of extensive empirical research on self-leadership was the slow development of a valid measurement scale. Building on the work of Manz and Sims (1991) and Anderson and Prussia (1997), Houghton and Neck (2002) developed the Revised Self-Leadership Questionnaire (RSLQ; Houghton & Neck, 2002), which has been employed consistently in traditional research streams over the past decade in its original form and in modified versions to address reliability issues, to incorporate cultural differences, to expand the set of subscales, and to provide an abbreviated form. The broad use of the RSLQ in multiple quantitative studies is evidence that it has provided a valid base for building knowledge of self-leadership and in encouraging a broad range of research.

While the RSLQ has provided the underlying structure for international variations and measurement instruments in most studies in the past decades, scholars should explore the potential issues suggested by the variations found in this stream of literature. For example, Marshall, and associates (2012) reduced the 35-item RSLQ, due to fit issues, and reduced the measure to a one-factor model of self-leadership with five indicators (self-goal/self-observe, self-reward, mental imagery, evaluate beliefs, natural rewards). Konradt and associates (2009) employed an abbreviated 27-item version of the RSLQ (Houghton and Neck, 2002), excluding natural reward scale due to poor reliability. Several studies have employed selected subscales, such as Rogelberg and associates’ 2013 study that employed only constructive self-talk (five items) and dysfunctional self-talk (four items). Others have expanded the RSLQ to include additional subscales, particularly in adapting the instrument to international cultures. Ho and Nesbit (2009) introduced the MSLQ includes 38 items in 12 subscales, extending three self-leadership components (natural rewards, self-observation, and evaluating beliefs and assumptions) with the incorporation of social/relation-based features associated with collectivism.” The Abbreviated
Self-Leadership Questionnaire (ASLQ) provides a promising, valid version of the RSLQ that could be valuable in future research to reduce questionnaire fatigue (Steinbauer et al., 2014).

While the development and utilization of the RLSQ is unambiguously an important step in the expansion of all types of self-leadership research, the number of variations suggest that there is ample opportunity for cross-validation, refinement, and development.

CONCLUSION

We had initially begun this literature review in preparation for a research project that would address specific recommendations provided by the Ten Decades article, but found that an update of that article could be a meaningful contribution to the advancement of self-leadership research. Organizing the review around the suggested categories of research provided structure to the review, but also created complications, where a number of articles addressed more than one of the categories (e.g., teams, outcomes, antecedents, contingent factors and cross-cultural studies). The objective of this paper is to provide as much information as possible for future research that builds on what is now three decades of self-leadership research. This review did not encompass additional theoretical and conceptual articles that provide additional insight to future opportunities. The focus on empirical works was a conscious one, particularly considering the complexity and breadth of the subject matter.

The review of empirical studies provides some important conclusions. First, self-leadership research has increased somewhat in complexity and in the variations of proposed causal relationships and interaction effects (e.g. this work suggests the progress made on outcomes, mechanisms, and cross-cultural studies). Second, recent research reinforces the positive benefits associated with higher levels of self-leadership. Third, there are future opportunities in each area of research suggested by Neck and Houghton (2006). Fourth, the RSLQ provided a validated base for future research, but there still are issues associated with fit, expanded factors, and abbreviations. Fifth, the emergence of research addressing antecedents of self-leadership and self-leadership studies addressing psychological and physical health expand the potential areas of study. Lastly, there are topics of study that have not been addressed in any depth, particularly the study of shared leadership in conjunction with self-leadership, a suggested opportunity where no empirical work was found. The overall conclusion is that self-leadership provides a very broad set of opportunities for future research.

Additionally, the multiple positive outcomes associated with self-leadership and the prescriptive nature of the construct suggests that self-leadership can be developed and learned. The results of the health category provide some support for this. Research presented at several conferences provides additional benefits of self-leadership in initiating change processes in college students (Phillips, Kern, Tewari, Jones, Carden, 2012). Self-Leadership Change Project: An Ongoing Experiential Program. Advances in Business Research. 3: 1: 120–129. The potential benefits associated with self-leadership training and development could be employed in multiple contexts with great potential improvement in skills, behavior, and individual success. It is quite possible that there are more
studies similar to those initiated by Phillips and associates (2012), but are not captured in a traditional literature review. We specifically seek out studies of this type, and encourage scholars to provide information to the authors.
REFERENCES


APPENDIX A: LITERATURE REVIEW CRITERIA

The full focus of the literature search was to identify and document quantitative and qualitative research that addressed self-leadership as a construct/variable starting with 2006 and ending with December 2015. To select as many appropriate articles as possible, the following databases were chosen: Business Source Premier on EBSCO host, ABI Inform, and ProQuest. Due to the research focus only peer reviewed articles were included. The initial selection of articles was based on the inclusion of self-leadership (or self leadership) in the abstract or list of topics. Each article was reviewed by the authors to eliminate purely conceptual articles. (Note that there are a number of interesting conceptual articles that should be addressed separately from specific research results.) Any articles that had been reviewed by Neck and Houghton in their 2006 literature review, were not included in the list of new articles, but were included in our summary of the Neck and Houghton reported results of the prior two decades.

APPENDIX B: MEASUREMENT INSTRUMENTS

The MSLQ is described by Ho and Nesbit as a modification of the RSLQ as noted in the following quote from Ho and Nesbit (2009): “Although the measurement of self-leadership (RSLQ) has been developed and validated with samples from the USA with promising reliability and construct validity, its generalizability to the Chinese context is problematic. The purpose of this study is to modify the existing self-leadership scale (RSLQ) in order to make the application of self-leadership theory and measurement more relevant to the Chinese culture. This modification includes: enhancing the generalization of self-leadership measurement to the Chinese context by refining the items of four existing dimensions (self-observation, evaluations of beliefs and assumptions, natural rewards, and self-punishment) found to have low-reliabilities in one previous validation study; and extending the breadth of some self-leadership components based on the cross-cultural theory about self-concept differences between individualism and collectivism. Three self-leadership subscales are newly developed through extending three self-leadership components (natural rewards, self-observation, and evaluating beliefs and assumptions) with the incorporation of social/relation-based features associated with collectivism” (p. 450).

The ASLQ: Using six major dimensions from the RSLQ, including three factors believed to embody the RSLQ. The EFA produced a nine-item scale. According to Houghton and associates (2012), this shortened survey was found to be a reliable and valid measure that inherits the nomological network of associations from the original version of the RSLQ.
The Roles of Cultural Distance and Psychic Distance on Outward FDI: The Case of Turkey

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ABSTRACT

This paper examines the role of culture and psychic distance in Turkish outward foreign direct investment (ODI) decisions to invest in a foreign country, thereby addressing an existing gap in the literature regarding ODI from a developing economy, Turkey. We also believe that, Turkey is a good test case for the general theory of ODI since it presents many special conditions. Accordingly, this study aims to answer the following two questions. First, is cultural distance associated with ODI from Turkey? Second, is psychic distance associated with ODI from Turkey? Accordingly, we apply Hofstede’s cultural dimensions using Kogut and Singh’s (1988) method and examine if there is any relationship between the ODI location decisions of Turkish multinationals and cultural distance. We also use Dow and Karunaratna (2006) psychic distance stimuli measures and examine the relation between the ODI location decisions of Turkish multinationals and psychic distance. We use a sample of thirteen countries that host over 53% Turkish ODI stock over the 2001–2012 period. We find that cultural distance plays an important role in the decisions of Turkish Multinational Enterprises (MNEs) outward investments. However, we do not find any statistically significant relation between the psychic distance and Turkish ODI. The main limitation of our study is the lack of availability of Hofstede’s national cultural values for all countries that host Turkish ODI. We also note that the impact of psychic distance may vary depending on the size of the MNE or its industry, which we leave it to future research.

Keywords: Cultural Distance, Psychic Distance, Hofstede, Outward Foreign Direct Investment, Turkey.
INTRODUCTION

Turkey’s integration to the world economy began in 1980 following the liberalization of its economic and legal structure. This process accelerated with three major events; (1) the collapse of the Soviet Union and as a result the emergence of independent Turkic states in Central Asia, (2) the integration of Turkey’s economy to Europe in 1996 through the implementation of Customs Union agreement and commencing of accession negotiation with the European Union in 2004, and (3) the 2001 economic crisis and application of reforms in both judiciary and economic systems that improved the business environment and increased competition in the domestic market. All these pull and push factors forced Turkish companies to seek new markets and invest abroad. Although literature exists that investigated the Turkish Outward Direct Investment (ODI), these papers either use a case study approach (Erdilek, 2008) or provide cross sectional evidence (Demirbag, Tatoglu and Glaister, 2009; Anil, Armutlulu, Canel, and Porterfield, 2011) without fully considering the role of cultural and psychic distance; hence understanding the Turkish ODI remains incomplete. Accordingly, this paper examines the roles of cultural distance and psychic distance in ODI decisions of Turkish MNEs, thereby addressing an existing gap in the literature regarding ODI from a developing economy, Turkey. We also believe that Turkey is a good test case for the general theory of ODI since it presents many special conditions. Accordingly, this study aims to answer the following two questions. First, is cultural distance associated with ODI from Turkey? Second, is psychic distance associated with ODI from Turkey?

Within the literature, psychic distance has been defined as the concept of subjective perceptions of self and others operating across international markets. In simpler terms, it is the degree of difference in behaviors and beliefs between the parties involved in an event; in this case the event being the expansion of business across borders. Psychic distance has been linked to international business in many studies (Evans and Mavondo, 2002; Johanson and Vahlne, 1977; Johanson and Wiedersheim-Paul, 1975; Nordstrom and Vahlne, 1994; Vahlne and Wiedersheim-Paul, 1977) as a significant element that helps explain how firms approach internationalization. It has been suggested that psychic distance is a main determinant when firms choose a foreign country in which to expand to. Considering the popularity and widespread acceptance of psychic distance as a factor that influences internationalization decisions, it is somewhat surprising to see that the metrics associated with it are less than stellar. Dow and Karunaratna (2006) states “Psychic distance is one of the most commonly cited, yet vaguely measured, constructs within the realm of international business research.” Also, it has, and arguably more importantly, been suggested that psychic distance has significant value as an indicator for the expected level of success of a firm in the host country. Accordingly, we first examine the drivers of outward foreign direct investment (FDI) for Turkish multinationals and

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1 Turkey straddles Asia and Europe, is the only member of customs union of the EU without full membership to the Union, has cultural ties with Central Asian countries, its ODI stock is growing rapidly, and has an important diaspora in EU countries.
scrutinize if countries receiving high direct investment from Turkey are close to Turkey in Dow and Karunaratna’s (2006) psychic distance measures.

Given the challenges that psychic distance present to researchers trying to study international business behavior based on it, we also use Hofstede’s cultural dimensions (Hofstede, 1980) and hence measure the role of cultural distance in the ODI decision of Turkish MNEs. Dow and Karunaratna (2006) and Shenkar (2001) among many others have a consensus agreement that psychic distance is a multidimensional construct. However, at the empirical level the numerous studies used a single metric, specifically Kogut and Singh’s (1988) index of Hofstede’s (1980) four national culture dimensions (Harzing and Pudelko, 2016). Even though it is disputed that Hofstede index is only a narrow component of psychic distance, it is still accepted as an appropriate measure of national culture (Dow and Ferencikova, 2010). We argue that countries with high cultural distance may be preferred for foreign direct investment (FDI) rather than other entry methods such as exporting or joint ventures due to potential high psychic distance. Thus, in this paper, we also examine if countries that are host to Turkish ODI are close to Turkey in Hofstede’s perceptual maps of cultural dimensions.

In our empirical analysis, we use a sample of 13 countries that host over 53% Turkish ODI stock over the 2001–2012 period. We find that cultural distance plays an important role in the decisions of Turkish Multinational Enterprises (MNEs) outward investments. To be more precise, we find positive relationships between Turkish ODI and cultural distance between the host country and Turkey. However, we do not find any significant association between the psychic distance and Turkish ODI.

This paper is organized as follows. First, we review the literature and develop our hypotheses. Next, we describe the recent developments in the universe of the Turkish Outward FDI. Third, we present our sample and test our model. Fourth, results of the analysis are reported and discussed. Finally, we make the concluding remarks.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Cultural characteristics are more of an abstract concept that has been debated across many fields on the proper way of quantifying it. Using Hofstede’s model allows for a quantification approach of culture that can be used to execute studies of business behaviors in relation to cultural behaviors. Previous research has attempted various methods to properly use Hofstede’s results in the analysis. Loree and Guisinger (1995) used Hofstede’s dimensions in their study by including it as one of the independent variables in a regression. Their initial results based on data from 1977 showed significant explanatory power from the culture variable, but the results they attained with data from 1982 did not show explanatory significance in the culture variable. They explain this end result by stating that it seems that cultural difference is losing its explanatory power over time because the world is moving toward homogeneity, at least in business
practices, to a point that cultural differences are becoming less of a concern. The results found in Sehti et al. (2003) support the notion of cultural differences losing influence over the internationalization of a business. However, a review of the methodology used in Loree and Guisinger (1995) brings attention to the use of arithmetic average in an attempt to condense all cultural dimensions in one variable. If firms are concerned with some cultural dimensions over others when considering a foreign country for expansion, the arithmetic average approach may cause the dimensions to cancel each other leading to insignificance. Other studies, like the one performed by Li and Guisinger (1992) show relationships between cultural differences and international business behavior. In addition, there is ambiguity that accompanies conducting transnational business, and it is largely represented by the cultural differences between diverse markets (Doole & Lowe, 2008). The differences in culture are expected to increase information requirements and search costs (Hakanson and Ambos, 2010). Moreover, the greater the cultural distance between the home country and the host countries, the more difficult it will be both to recognize and to analyze information about the host country (Sousa and Bradley, 2006). Accordingly, we argue that, the greater the cultural distance between the home (Turkey) and host countries, Turkish MNEs will be more likely to penetrate into foreign markets in the form of ODI. Thus, we posit that; 

H1: The greater the cultural distance between Turkey and the host country of the investment, the more likely the investment is made in the form of ODI.

The Uppsala model of internationalization argues that the psychic distance constrains the internationalization of firms (Johanson and Vahlne, 1977, 1990, 2003). The literature about the mode choices of developed countries MNE’s have documented that there is a positive relationship between cultural distance and FDI (Padmanabhan & Cho, 1999; Pan, 1996; Thomas and Grosse, 2001). Besides, according to Li (2003), psychic distance impacts the market selection process and the FDI destination of MNEs from developing countries. To put it alternatively, the greater the psychic distance between the home and host countries, MNEs will be more likely to penetrate into foreign markets in the form of ODI. So, based on these discussions we hypothesize that; 

H2: The greater the psychic distance between Turkey and the host country of the investment, the more likely the investment is made in the form of ODI.

GROWTH OF ODI FROM TURKEY

Before the onset of the third millennium, both the economic and political environment in Turkey has offered little incentive for Turkish companies to internationalize. However, since the end of the last decade, there is a growing tendency toward more international involvement from Turkish firms, mainly in the form of the acquisition of companies and the building of new subsidiaries around the globe. The surge of Turkish ODI has both domestic push and international pull factors. The domestic push factors can be summarized as: the liberalization of the Turkish economy in the last two decades of the 20th
century; increased domestic competition following the implementation of Customs Union with the European Union in 1996; and regulatory reforms that exempted the holding companies from taxation for their gains abroad. We can also list the international pull factors as: political changes in the region mainly as the dissolution of Soviet Union and as a result emergence of independent Turkic States (such as Azerbaijan, Turkmenistan, Kazakhstan that have close psychic distance to Turkey), opening the Russian Federation to the world economy, access to natural resources, and access to technology\(^2\).

In Table 1, we present the Turkish Outward FDI flows to host countries used in our analyses for selected years. Turkish outward investment has seen something of a surge in recent years. Table 1 present several insights. We see that, after crossing the USD 1 billion mark for the first time in 2005, outward FDI annual flow reached to over USD 4 billion in 2012. We observe that over one-third of Turkish Outward FDI stock, about 9.3 billion USD, is hosted by Netherlands in 2012\(^3\). The Netherlands is followed by the United States, which is the only other country with Turkish Outward FDI stock of over USD 1 billion by 2012 in our sample. In Table 1 we also observe that thirteen countries that constitute our sample received between 43.2\% (in 2005) to 94.8\% (in 2002) of the Turkish ODI annual flows. Moreover, these sample countries host over 53\% of total Turkish ODI stock as of 2012.

The majority of Turkish ODI is carried out by conglomerates with diversified investment portfolios which include; electrical equipment, electronics, and consumer durables. These conglomerates are followed by oil and gas industry, infrastructure, construction, glass, energy, food and beverage, communications, and fertilizer\(^4\).

**DATA AND ECONOMETRIC MODEL**

We collected data for Turkish ODI annual flows from the UNCTAD over the period 2001–2012. Cultural dimensions are gathered from Geert Hofstede’s website and psychic distance measures are collected from Douglas Dow’s website. Data for control variables are collected from a variety of resources. We gathered host country Gross Domestic Product (GDP in current USD), ratio of ore and metal exports to merchandise exports, inflation rate, and openness to FDI (annual Inward FDI flows scaled by GDP) from World Bank Development Indicators website. Exports to Turkey from host country and imports from Turkey to host countries are gathered from Turkish Statistical Institute website (both in current USD). Also, we collected annual exchange rates between host country currencies and Turkish Lira from the UNCTAD website and Geographic Distance (the distance between the host country capitals and capital of Turkey,

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\(^2\) For a more detailed discussion of the causes of Turkey’s recent outward foreign direct investment (ODI) surge, see Erdilek (2008).

\(^3\) Although Azerbaijan hosts more than 5 billion USD of Turkish ODI we exclude it from our analysis due to lack of Hofstede’s cultural values for the country. Following Cross et al. (2007), we also exclude Luxembourg and Malta since these countries are known tax havens.

To measure psychic distance, we follow the formative index developed by Dow and Ferencikova (2010). This index uses the five of the major dimensions of psychic distance (differences in language, religion, industrial development, education, and degree of democracy) created by Dow and Karunaratna (2006). Algebraically, the Dow and Ferencikova’s psychic distance index is calculated as:

$$PD_i = \sum_{k=1}^{5} (I_{ijk})^2 / V_k / 5$$  \hspace{1cm} (1)

where:

$I_{ijk}$ is the distance between countries $i$ and $j$ for the $k$th dimension of psychic distance, and

$V_k$ is the variance of the $k$th dimension of psychic distance across 13 countries.

We follow the method developed by Kogut and Singh (1988) and use the four cultural dimensions of Hofstede (Power Distance; Individualism; Uncertainty

<table>
<thead>
<tr>
<th>Host Country</th>
<th>Annual Outward FDI Flows from Turkey</th>
<th>Stock</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>1 9 1 18 7</td>
<td>167</td>
</tr>
<tr>
<td>Romania</td>
<td>25 29 20 27 32</td>
<td>144</td>
</tr>
<tr>
<td>Iran</td>
<td>3 3 13 4 2</td>
<td>224</td>
</tr>
<tr>
<td>Russia</td>
<td>0 7 74 88 162</td>
<td>426</td>
</tr>
<tr>
<td>France</td>
<td>1 1 8 28 4</td>
<td>18</td>
</tr>
<tr>
<td>Belgium</td>
<td>1 6 1 1 7</td>
<td>206</td>
</tr>
<tr>
<td>Italy</td>
<td>0 106 14 45 23</td>
<td>16</td>
</tr>
<tr>
<td>Germany</td>
<td>17 158 68 90 61</td>
<td>759</td>
</tr>
<tr>
<td>Switzerland</td>
<td>17 10 37 28 67</td>
<td>406</td>
</tr>
<tr>
<td>Netherlands</td>
<td>122 91 699 526 2,765</td>
<td>9,307</td>
</tr>
<tr>
<td>United States</td>
<td>43 21 53 41 139</td>
<td>1,746</td>
</tr>
<tr>
<td>Ireland</td>
<td>6 1 0 501 0</td>
<td>759</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>2 18 25 20 84</td>
<td>274</td>
</tr>
<tr>
<td>Sample Total</td>
<td>238 460 1,013 1,417 3,353</td>
<td>14,452</td>
</tr>
<tr>
<td>World</td>
<td>251 1,065 1,823 2,542 4,334</td>
<td>27,190</td>
</tr>
<tr>
<td>Sample Total/World</td>
<td>94.8% 43.2% 55.6% 55.7% 77.4%</td>
<td>53.2%</td>
</tr>
</tbody>
</table>

Source: UNCTAD Country Report and authors’ own calculations
Avoidance Index; and Masculinity) to create a composite index for each host country measuring the “cultural distance” from Turkey. The deviations are corrected for differences in the variance of each dimension and then arithmetically averaged. Algebraically, the cultural distance index is calculated as:

\[ CD_j = \sum_{i=1}^{N} \frac{(I_{ij} - I_{iN})^2}{V_i} / 4 \]  

where;

- \( I_{ij} \) denotes index value for cultural dimension I of country j,
- \( V_i \) denotes variance of index for dimension i
- \( N \) denotes home country (in our case, Turkey)

Table 2 reports the psychic and cultural distance values between the host country and Turkey. First, we summarize the Dow and Karunaratna psychic distance measures. We observe that Bulgaria is the most proximate country to Turkey with a psychic distance score of 0.4562, followed by Romania, Iran, and Russia. On the other hand, United States is the most distant country to Turkey with a psychic distant score of 2.1043, and followed by Italy, France, and The Netherlands.

<table>
<thead>
<tr>
<th>Country</th>
<th>Psychic Distance with Turkey</th>
<th>Cultural Distance with Turkey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>0.4562</td>
<td>0.0474</td>
</tr>
<tr>
<td>Romania</td>
<td>0.5217</td>
<td>0.3412</td>
</tr>
<tr>
<td>Iran</td>
<td>0.7392</td>
<td>0.3437</td>
</tr>
<tr>
<td>Russia</td>
<td>0.7829</td>
<td>0.4871</td>
</tr>
<tr>
<td>France</td>
<td>1.5836</td>
<td>0.5042</td>
</tr>
<tr>
<td>Belgium</td>
<td>1.3811</td>
<td>0.7176</td>
</tr>
<tr>
<td>Italy</td>
<td>1.6873</td>
<td>1.2832</td>
</tr>
<tr>
<td>Germany</td>
<td>1.5230</td>
<td>1.3869</td>
</tr>
<tr>
<td>Switzerland</td>
<td>1.4898</td>
<td>1.7244</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1.5710</td>
<td>2.3534</td>
</tr>
<tr>
<td>United States</td>
<td>2.1043</td>
<td>2.4961</td>
</tr>
<tr>
<td>Ireland</td>
<td>1.1850</td>
<td>2.7183</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1.2811</td>
<td>3.0983</td>
</tr>
</tbody>
</table>

Second, we look at the Kogut and Singh’s (1988) cultural distance index values based on Hofstede’s (1980) four national culture dimensions. Accordingly, we observe that Bulgaria is the most proximate country to Turkey with a cultural distance score of 0.0474, followed by Romania, Iran, and Russia. On the other
hand, United Kingdom is the most distant country to Turkey with a score of 3.0983, and followed by Ireland, United States, and the Netherlands.

As we are estimating the impact of the psychic distance and cultural distance on Turkish ODI, we use a number of control variables that are considered to affect FDI following the previous studies. We discuss the justification for each of these variables now.

**Gross Domestic Product (GDP)**

We control for Gross Domestic Product (GDP) of the host country in current USD as the measure of the market size. Many studies cite GDP as an indicator of the size (Tsai, 1994; Buckley, 2009; Ramasamy and Yeung, 2010; Voss, 2011). Moreover, many studies document positive association between GDP and ODI (Amal et al., 2009; Frenkel, et al., 2004).

**Exchange Rate**

The literature on exchange rate and FDI presents conflicting results yet it is accepted that exchange rate impact FDI (Aliber, 1970; Stevens, 1993; Blonigen, 1997). An overvalued (undervalued) home country currency (i.e., Turkish lira) is-a-vis host country currency encourages (discourages) ODI for MNEs undertaking efficiency-seeking projects to decrease production and operational costs (Stevens, 1993; Chen, Rau, and Lin, 2006). In our sample period of 2001–2012 the value of Turkish Lira appreciated and depreciated vis-à-vis the host country currencies. Thus, it is reasonable to accept that an association relation between ODI and exchange rates. Accordingly, we include exchange rate in our model as a control variable.

**Openness**

Openness (annual Inward FDI flows scaled by GDP) of an economy for foreign investment plays a significant role in drawing FDI (Chakrabarti, 2001). Besides, openness is a proxy measure for the attitude of the host country to FDI and its integration to the global economic system. Hence, it is assumed that it is more (less) likely that a host country that is more open (close) to the world attracts more (less) Turkish ODI.

**Geographical Distance**

Internalization theory hypothesizes that there is a positive relation between the geographical distance and FDI (Buckley and Casson, 1976). Following Buckley et al. (2007) we use the geographical distance measure to isolate the impacts of cultural distance and psychic distance variables in our models. Based on the theory we can argue that Turkish MNEs would favor FDI to other methods of penetration as geographical distance increases with the host country.

**International Trade (Exports and Imports)**

The Uppsala internationalization model predicts that as the bilateral trade flows increase between two countries, the firms will increase their knowledge of the foreign market and therefore increase their involvement through FDI (Johanson & Vahlne, 1977). This argument indicates a positive correlation.
between bilateral trade and FDI, and postulates that trade and FDI are complements. On the other hand, many other researchers (Swenson, 2004; Amal & Raboch, 2010) claim that FDI and exports are substitutes. Thus, we include annual export and import flows between Turkey and host countries in our model.

**Natural Resources**

Internalization theory claims that companies invest abroad to control or gain access to scarce natural resources (Buckley and Casson, 1976). Also, Aleksynska and Havrylchyk (2013) documents a positive relation between natural resources in host country and FDI from developing economies. Anil et al. (2011) show that Turkish MNEs invested abroad especially in Turkic Central Asian and also in Balkan countries to gain access to their natural resources such as petroleum, natural gas, and glass. Accordingly, we control for natural resources of the host countries.

**Inflation**

Inflation rate is a relevant macroeconomic indicator of the economic stability and business climate of host countries. Thomas and Grosse (2001) document that high levels of inflation diminish the appeal of investing in a country. Moreover, Erdilek (2008) argues that galloping inflation rates in Turkey has been one of the push factors for Turkish MNEs to invest abroad. Consequently, we control for annual host country consumer price index in our model.

**Econometric Models**

Based on our discussion we lay down our econometric models as:

$$LODI_{Turkey,j,t} = \beta_0 + \beta_1 CD + \beta_2 LGDP_{jt} + \beta_3 LORE_{jt} + \beta_4 LERATE_{jt} + \beta_5 LOPEN_{jt} + \beta_6 LDIST_{Turkey,j,t} + \beta_7 LXPR_{Turkey,t} + \beta_8 LIMP_{Turkey,t} + \beta_9 LINF_{jt} + \epsilon_{jt}$$  

(3)

$$LODI_{Turkey,j,t} = \beta_0 + \beta_1 PD + \beta_2 LGDP_{jt} + \beta_3 LORE_{jt} + \beta_4 LERATE_{jt} + \beta_5 LOPEN_{jt} + \beta_6 LDIST_{Turkey,j,t} + \beta_7 LXPR_{Turkey,t} + \beta_8 LIMP_{Turkey,t} + \beta_9 LINF_{jt} + \epsilon_{jt}$$  

(4)

In our econometric models, $\beta_0$ is the constant and $\epsilon_{jt}$ is the residual error. All variables are represented by $j$, the host country, and $t$, the year. Our dependent variable, $LODI_{Turkey,j,t}$, is the natural logarithm of the official per year amount of capital export of Turkey to host countries. We transform variables other than the psychic distance (PD) and cultural distance (CD) into natural logs to overcome the nonlinearities following the empirical work in the literature (Buckley et al. 2007; Kalotay and Sulstarova, 2010). $LGDP_{jt}$, $LORE_{jt}$, $LINF_{jt}$ are the host country characteristics (host country GDP in current dollars, share of natural resources in total merchandise exports in the host country, annual consumer price index changes), $LDIST_{jt}$ is the distance of host country capitals from the capital city of Turkey, Ankara, $LXPR_{Turkey,t}$ is the exports of Turkey to...
host country, $LIMPRT_{Turkey,t}$ is imports of Turkey from the host country, $LERATE_H$ is the host country annual exchange rate against the Turkish lira, and $LOPEN_H$ is the openness of the host country (the ratio of host country FDI flow to GDP).

Table 3: Descriptive Statistics of Turkish ODI
Sample: 2001–2012

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Mean</th>
<th>Median</th>
<th>Std. Dev.</th>
<th>Max.</th>
<th>Min.</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Turkish ODI Flow (million USD)</td>
<td>76.54</td>
<td>13.5</td>
<td>247.42</td>
<td>2,765</td>
<td>0.00</td>
<td>156</td>
</tr>
<tr>
<td>Psychic Distance</td>
<td>1.2544</td>
<td>1.3811</td>
<td>0.4762</td>
<td>2.1043</td>
<td>0.4562</td>
<td>156</td>
</tr>
<tr>
<td>Cultural Distance</td>
<td>1.3463</td>
<td>1.2832</td>
<td>1.0025</td>
<td>3.0983</td>
<td>0.0474</td>
<td>156</td>
</tr>
<tr>
<td>GDP (billions USD)</td>
<td>2,050</td>
<td>658</td>
<td>3,518</td>
<td>16,155</td>
<td>14</td>
<td>156</td>
</tr>
<tr>
<td>GDP per capita (USD)</td>
<td>31,304</td>
<td>36,150</td>
<td>19,846</td>
<td>88,003</td>
<td>1,762</td>
<td>156</td>
</tr>
<tr>
<td>GDP growth (%)</td>
<td>2.25</td>
<td>2.11</td>
<td>3.23</td>
<td>9.12</td>
<td>–7.82</td>
<td>156</td>
</tr>
<tr>
<td>Exchange Rate</td>
<td>1.3539</td>
<td>1.5050</td>
<td>0.7843</td>
<td>2.8371</td>
<td>0.0001</td>
<td>156</td>
</tr>
<tr>
<td>Openness (%)</td>
<td>7.16</td>
<td>2.84</td>
<td>10.79</td>
<td>87.44</td>
<td>0</td>
<td>156</td>
</tr>
<tr>
<td>Geographic Distance (km)</td>
<td>2,263</td>
<td>2,039</td>
<td>1,806</td>
<td>8,071</td>
<td>442</td>
<td>156</td>
</tr>
<tr>
<td>Imports from Turkey (billion USD)</td>
<td>3.49</td>
<td>2.47</td>
<td>3.01</td>
<td>13.95</td>
<td>0.15</td>
<td>156</td>
</tr>
<tr>
<td>Exports to Turkey (billion USD)</td>
<td>5.92</td>
<td>3.6</td>
<td>5.94</td>
<td>31.36</td>
<td>0.38</td>
<td>156</td>
</tr>
<tr>
<td>Natural Resources (%)</td>
<td>8.77</td>
<td>3.17</td>
<td>17.81</td>
<td>96.26</td>
<td>0</td>
<td>156</td>
</tr>
<tr>
<td>Inflation Rate (%)</td>
<td>4.82</td>
<td>2.48</td>
<td>5.81</td>
<td>34.47</td>
<td>–4.48</td>
<td>156</td>
</tr>
</tbody>
</table>

Table 3 reports the descriptive statistics of the Turkish ODI, Cultural Distance and Psychic Distance (variables of interest) and control variables used in our model for thirteen sample countries over the 2001–2012. The mean (median) psychic distance of the countries was 1.2544 (1.3811) and showed a large range as the difference between the maximum and minimum was about 1.65. The mean (median) cultural distance of the countries was 1.3463 (1.2832) and showed even a larger range that psychic distance as the difference between the maximum and minimum was about 3.05. The mean (median) value of host country GDP per capita was USD 31,304 (36,149). In view of that, we can argue that Turkish outward investments are directed to high-income countries. We also see that the average economic growth of the sample markets has been only 2.25%. This is not surprising considering the fact that our sample encompasses 2007–2008 global economic recession. We similarly observe that the mean distance of the host countries was 2,262.5 kilometers and shows that the majority of Turkish ODI is directed toward countries with long distances from the home market. In other words, we can argue that Turkish ODI had more global character rather than regional. The average (median) inflation rate was 4.82% (2.48%) and point to stable host country economies. According to UNCTAD 84 countries were host to Turkish ODI as of 2012. In our sample, we use 13 countries (USA, Germany, U.K., The Netherlands, Belgium, Romania, Russia Federation, Italy, France, Switzerland, Ireland, Bulgaria, and Iran) and

Northwest Missouri State University
run our regression models on these countries due to the abovementioned data limitations. We use balanced pooled regression to estimate our models.

ANALYSIS AND RESULTS

In Table 4, we document the pairwise correlations among the variables used in our model. Overall, the correlation matrix shows that there are no general problems with the data. Specifically, the correlation matrix shows correlations between the model variables do not exceed 90%, which could cause multicollinearity.

Table 5 presents the results of the regression analysis that estimates Equation 3. Model 1 only includes the cultural distance (CD) variable. In Model 2 we add all the control variables described above. The coefficient on the cultural distance (CD) variable has the hypothesized sign (i.e., positive) and is statistically significant in both models. These findings support our hypothesis that the greater the cultural distance between Turkey and the host country of the investment, the more likely the investment is made in the form of FDI. This finding indicates two conceivable implications. The first implication suggests that the higher the cultural distance is, the more likely Turkish MNEs will show greater commitment and higher allocation of resources in the host country. The participation in countries with high cultural distance implies more risk and uncertainty, inducing Turkish MNEs make a higher effort to the development of specific ownership advantages and capabilities to overcome the liability of foreignness.

Model 3 only includes the psychic distance (PD) variable. In Model 4 we add all the control variables described above. The coefficient on the psychic distance (PD) has the hypothesized sign (i.e. positive) yet it is marginally statistically significant in model 3 and insignificant in model 4. These findings do not support our hypothesis that the greater the psychic distance between Turkey and the host country of the investment, the more likely the investment is made in the form of FDI. In Model 5, we add the CD variable in addition to all variables in Model 4. We see that the CD variable is still significant and positive and PD is still insignificant. We also observe that the value of the adjusted $R^2$ increases as we add the CD variable from 18% to 21% in model 5. This finding suggest that CD is an important factor that affect ODI decisions.

In all three models (Model 2, 4 and 5), we find that the $LXPRT$ variable is the only significant control variable. This finding indicates that Turkish ODI has both a conventional and an idiosyncratic nature. This also supports the existing literature that FDI and exports are substitutes. On the other hand, we see that $LIMPRT$ variable is insignificant. The insignificant $LGDP$ variable indicates that size of the market is not a major factor in ODI decision of Turkish MNEs. This is not surprising considering that most of our sample countries are European Union members and Turkish MNEs can export to these markets without any
Table 4. Correlation Matrix of Model Variables

<table>
<thead>
<tr>
<th></th>
<th>PD</th>
<th>CD</th>
<th>LODI</th>
<th>LGDP</th>
<th>LORE</th>
<th>LERATE</th>
<th>LOPEN</th>
<th>LDIST</th>
<th>LXPRT</th>
<th>LIMPRT</th>
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<tbody>
<tr>
<td>PD</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>CD</td>
<td>0.5932</td>
<td>1.0000</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LODI</td>
<td>0.1340</td>
<td>0.1488</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LGDP</td>
<td>0.8037</td>
<td>0.4670</td>
<td>0.2706</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>LORE</td>
<td>-0.1780</td>
<td>0.2773</td>
<td>-0.1853</td>
<td>-0.3277</td>
<td>1.0000</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>LERATE</td>
<td>0.6546</td>
<td>0.6074</td>
<td>0.1626</td>
<td>0.3997</td>
<td>0.1409</td>
<td>1.0000</td>
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</tr>
<tr>
<td>LOPEN</td>
<td>-0.0197</td>
<td>0.1846</td>
<td>0.0450</td>
<td>-0.2590</td>
<td>0.2638</td>
<td>0.2420</td>
<td>1.0000</td>
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<tr>
<td>LDIST</td>
<td>0.7723</td>
<td>0.5826</td>
<td>0.0219</td>
<td>0.7232</td>
<td>0.0448</td>
<td>0.2883</td>
<td>-0.0251</td>
<td>1.0000</td>
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<tr>
<td>LXPRT</td>
<td>0.3549</td>
<td>0.0490</td>
<td>0.4386</td>
<td>0.7173</td>
<td>-0.4878</td>
<td>0.2731</td>
<td>-0.2247</td>
<td>0.1382</td>
<td>1.0000</td>
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<tr>
<td>LIMPRT</td>
<td>0.3167</td>
<td>-0.0813</td>
<td>0.2818</td>
<td>0.7184</td>
<td>-0.4704</td>
<td>-0.0179</td>
<td>-0.3559</td>
<td>0.2564</td>
<td>0.8250</td>
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<tr>
<td>LINF</td>
<td>-0.6109</td>
<td>-0.4761</td>
<td>-0.1316</td>
<td>-0.3663</td>
<td>-0.0936</td>
<td>-0.7743</td>
<td>-0.1738</td>
<td>-0.2861</td>
<td>-0.1845</td>
<td>-0.0373</td>
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</table>
### Table 5: Turkish ODI and Psychic and Cultural Distance Regression Model Results

<table>
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<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
</tr>
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<tbody>
<tr>
<td>CD</td>
<td>0.753*</td>
<td>1.599**</td>
<td>1.695**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.064)</td>
<td>(0.014)</td>
<td>(0.012)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PD</td>
<td></td>
<td>1.427*</td>
<td>–0.215</td>
<td>1.517</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.095)</td>
<td>(0.935)</td>
<td>(0.572)</td>
<td></td>
</tr>
<tr>
<td>LGDP</td>
<td>–1.012</td>
<td>0.239</td>
<td>–1.373</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.350)</td>
<td>(0.829)</td>
<td>(0.276)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LORE</td>
<td>–2.163</td>
<td>0.672</td>
<td>–1.100</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.558)</td>
<td>(0.872)</td>
<td>(0.791)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LERATE</td>
<td>–2.911</td>
<td>–1.901</td>
<td>–3.668</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.126)</td>
<td>(0.400)</td>
<td>(0.116)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOPEN</td>
<td>5.104</td>
<td>7.770</td>
<td>4.788</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.319)</td>
<td>(0.130)</td>
<td>(0.354)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LDIST</td>
<td>0.172</td>
<td>–0.169</td>
<td>–0.051</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.901)</td>
<td>(0.909)</td>
<td>(0.972)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LXPRT</td>
<td>3.739***</td>
<td>3.301***</td>
<td>4.016***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td>(0.003)</td>
<td>(0.000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LIMPRT</td>
<td>–0.569</td>
<td>–1.368</td>
<td>–0.530</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.538)</td>
<td>(0.123)</td>
<td>(0.568)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.317)</td>
<td>(0.421)</td>
<td>(0.382)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td>(0.013)</td>
<td>(0.000)</td>
<td>(0.013)</td>
<td>(0.054)</td>
</tr>
<tr>
<td>N</td>
<td>156</td>
<td>156</td>
<td>156</td>
<td>156</td>
<td>156</td>
</tr>
<tr>
<td>Adj. $R^2$</td>
<td>0.02</td>
<td>0.22</td>
<td>0.01</td>
<td>0.18</td>
<td>0.21</td>
</tr>
</tbody>
</table>

***, ** and * indicate that the coefficient is significant at the 1, 5 and 10% levels, respectively.

Trade barriers. We see that the LORE variable is insignificant. This finding is potentially the result of our limited sample due to the lack of cultural distance values. The negative and insignificant LERATE variable indicate that exchange rate did not play a significant role in the ODI decisions of Turkish MNEs in our sample period. This finding is potentially due to our limited sample size and time period. Our model also presents the expected positive signs both for LOPEN and LDIST variables and a negative sign for LINF. However, coefficients of all these variables are insignificant. These results are potentially driven by the lack of variation in the openness, geographical distance, and inflation variables in our sample.

Our adjusted $R$-squared values for models 3, 4 and 5 has the range of 18% to 22%. Albeit these figures might be considered low, it is consistent with the single country ODI literature. For instance, Buckley, Forsans, and Munjal (2009) examine the determinants of Indian ODI and report adjusted $R$-squared
values ranging between 17% and 19%. Similarly, Kalotay and Sulstarova (2010) models the Russian ODI and report adjusted $R^2$-squared values ranging between 19% and 21% and Amal and Kegel (2012) models the Brazilian ODI and report adjusted $R^2$-squared values ranging between 27% and 29%.

**CONCLUSIONS**

In this study, we aimed to establish the impact of cultural and psychic distance on ODI decisions of Turkish MNEs. We believe that this study represents a significant contribution in understanding the dynamics of Outward FDI from Turkey. The results of the econometric model used to test our hypotheses show that cultural distance proximity, our variable of interest, is statistically and economically significant in relation to Turkish ODI.

Our results suggest that culture, as prescribed by Hofstede, does play an important role in the foreign investment decision of Turkey enterprises. We show that the greater the cultural distance between a host country and Turkey, the more ODI can be expected. This result supports our hypothesis and is in accordance with Padmanabhan and Cho (1999) and Pan (1996), which states that countries with cultural proximity are more inclined to invest in each other’s capital markets, but when they are culturally distant their investments may come in the form of FDI because it provides better control mechanisms to the investors. Besides, high cultural distance spawns ODI because of the need to customize products to host country conditions (consumer tastes and preferences, regulations, barriers to exports), rather than just exporting from the home country. The main limitation of our study is the lack of availability of Hofstede’s national cultural values for all countries that host Turkish ODI. We also note that the impact of psychic distance may vary depending on the size (i.e. market capitalization) of the MNE or its industry. Our study does not control for these factors and leave it to future research.
REFERENCES


Book Reviews
The Sales Acceleration Formula: Using Data, Technology, and Inbound Selling to go from $0 to $100 Million

By Mark Roberge
Wiley, Hoboken, NJ © 2015

Reviewed by Douglas S. Russell

The Sales Acceleration Formula, by Mark Roberge, takes an engineering, process based approach to developing a sales team. Prioritizing the important tasks and using data-driven techniques to increase efficiencies and quality of a sales team are fundamentally important to accelerating a sales team’s production. An engineer by trade, Mr. Roberge applied an analytical approach to devise a formula for sales that took his current company, HubSpot, to a 100 million-dollar company in seven years. The Sales Acceleration Formula is a blueprint to modernize today’s sales organizations.

The book is divided into four components or formulas, or as Mark calls them: keys to success:

1. The Sales Hiring Formula
2. The Sales Training Formula
3. The Sales Management Formula
4. The Demand-Generation Formula

The Sales Hiring Formula

Hiring the best people is the most important determinant of success. According to Mark, “world-class sales hiring is the biggest driver of sales success.” Defining the characteristics of successful salesperson is the first step in the sales hiring formula. Mark, at HubSpot, found that the characteristics that predicted the most sales success were coach-ability, curiosity, prior success, intelligence and work ethic. He also mentioned the list of characteristics might be different.
for every company, depending on the organizations’ type of sale: complex vs. transactional, competition, and economy.

Finding top-performing salespeople can be accomplished by establishing both an external and internal recruiting agency. Both efforts must be incentivized to get maximum results. Mark also suggests using LinkedIn, for top sales performers usually don’t need to apply for a job, you have to go after them. In the book, Mark provides an example for the “ideal” first hire. He provides a list of candidates with their background and gives his reasons as to which candidate would be his first hire. The entrepreneur, according to Mark, would be the best first hire. Whoever you hire, make sure they align with your organization’s goals, the maturity level of your business, and the characteristics you have deemed necessary for a successful salesperson.

**The Sales Training Formula**

Most salespeople are trained with what is called: the ride-along approach. The salesperson is teamed up with a veteran salesperson, and the rookie salesperson rides-along with the veteran, observing and hopefully learning from the ride-along experience. According to the book, the traditional ride-along approach does not take into account the individuals “super powers.” For example, some may be extremely personable, while others may be more introverted. Shadowing someone of a different super power does not allow a salesperson to understand his or her strengths and how they can make the job their own. Plus, it’s neither scalable nor predictable.

Mark recommends a systemized training program around the buyer journey, the sales process and the qualifying matrix. The buyer journey begins with identifying the buyer’s needs, and that these needs will remain front and center during all aspects of the selling process. The sales process supports the customer along his buying journey. The qualifying matrix defines the information needed from a potential buyer to understand whether the salesperson can help the prospective buyer. Mr. Roberge explains that one of the most helpful training exercises you can provide is to allow your salespeople to walk in their prospects shoes. For example, in the book, HubSpot’s new salespeople create a blog and use social media to amass a following.

**The Sales Management Formula**

The number one best sales management practice is, according to the book: sales coaching. Coaching is critical and needs to be focused on the one skill that will have the biggest impact at a time rather than on many areas simultaneously. In the book, Mark provides the example of learning a proper golf swing. If on your first lesson the golf coach gives you tips on your stance, your backswing, your follow through, your grip, and more, your head would be spinning. Instead, if your golf coach instructs you to correct your grip and take 100 swings, it starts to sink in. Once you have mastered one skill, you can then move on to the next.

Facilitate a culture of coaching rather than managing. Mark devised a process in which sales managers meet with their team each month for an open dialogue, with the discussion focused on their skills. The salesperson comes to this meeting prepared to discuss skills they can improve on, and then, the sales
manager and salesperson, mutually agree upon which skills need improvement and a plan to improve these skills. According to Mr. Roberge, this type of sales coaching enables accountability and buy-in with your salespeople.

**The Demand-Generation Formula**

The corporate world today is quickly becoming the “demand-generation.” No longer can organizations rely on interruptive marketing/sales, you have to have the prospective customer find you. For example, the book talks about hiring an experienced journalist to focus on providing “content” in all aspects of your social media. Have a highly ranked and interactive web site. Frequent online participation in all types of social media, especially where your customers and prospects are already active. Mark suggests each salesperson monitor their prospects social media activity, and then contact them with information such as, “I saw on your Facebook, where you are attending the Electronics show in Vegas, I will be there as well, and would like to set up a time we can meet.” Focus on the right lead at the right time, especially for the “demand-generation.”

The Sales Acceleration Formula is a fascinating book, especially because it is written from the perspective of an engineer. Mark Roberge interconnects the objective process and technical aspects of engineering, with the subjective and dynamic world of sales. I found the book extremely interesting and it is full of actionable practices that can be applied to any sales organization looking to increase its sales productivity.
Pre-Suasion: A Revolutionary Way to Influence and Persuade

By Robert Cialdini

_Simon & Schuster, NY © 2016_

_Reviewed by Cindy Kenkel_

Thirty years after publishing a business classic that introduced the world to the Six Principles of Influence still referenced today (reciprocity, social proof, liking, authority, scarcity, and consistency), social psychologist Dr. Robert Cialdini has taken the art of persuading others to a new level. In his new sure to be classic book _Pre-Suasion: A Revolutionary Way to Influence and Persuade_, Cialdini builds on behavioral science to familiarize the reader with the power of “pre-suasion.” His book offers critical insight for anybody wanting to be more influential by introducing the reader to the critical “process of arranging for recipients to be receptive to a message before they encounter it” (p. 4). I love the layout of the book that relies heavily on anecdotes and stories; yet, it also has 75 pages of notes for those of us wanting more background and research-based insight.

At the core of his scientifically backed theme, he acquaints us with the practice of getting recipients sympathetic to your message before they experience it. The reader is introduced to the concept of privileged moments, which sounds straightforward enough, but actually revolves around a complex topic that relates to both the period when the pre-suasive opportunity is most powerful and the unique force that a well-timed comment can bring about unprecedented movement (p. 14). Would you be surprised to find that simply asking potential survey participants if they consider themselves helpful increased their willingness to participate in a survey from 33.0% to 75.7% (p. 26)? Such an impressive increase in compliance is related to effectively using the privileged moments you have.
Concepts in the book challenge long-held sales techniques such as opening a meeting with your strongest benefit and encourage the reader to instead start with a disadvantage to immediately build trust with your audience. Cialdini places trustworthiness above attractiveness, intelligence, cooperativeness, compassion, and emotional stability, and challenges the current assumption that it takes time to develop trust. A communicator who points out a weakness early on in an exchange is immediately seen as more honest and the effectiveness of this approach has been documented in legal settings, political campaigns, and even advertising. The use of transitional words such as however, or but will quickly channel the listeners’ attention away from the weakness and move it toward the countervailing strength (p. 166).

I found the section on If/When-Then Plans extremely useful and congruent with recent habit formation research. Results such as a 44% increase in medication adherence by epilepsy suffers after they have used the technique to associate their daily dosage with brushing their teeth seems ridiculously simple to put into place. It begs the question as to why this technique isn’t common knowledge (p. 139).

Techniques discussed in the book can of course be used for all kinds of influence, ethical and unethical but the author does an exceptional job of going beyond the traditional sermon indicating the knowledge should be used only in situations where all involved will benefit. By outlining the impact that unethical use of these techniques has on employee performance, turnover, and employee fraud and malfeasance, it is made clear that in the end an organization that chooses to use the techniques in a dishonest unethical manner will suffer economic consequences because employees who decide to stay are those who tolerate dishonest practices. Particularly convincing was the prevalence of dishonesty practiced by participants who opted to stay in a dishonest environment. “They cheated 77% more than the average of everyone else” (p. 220). “The key finding was that employees in unethical organizations who preferred to remain in them were abnormally likely to engage in such deceitful, financially costly workplace activity” (p. 221).

Influencing others is at the heart of a successful career and life. So, if you need to influence clients to purchase your product or service; if you are a teacher wanting to obtain and hold the attention of your students; if you are a researching wanting to increase compliance with your surveys; if you are an applicant wanting to impress your interviewer; if you are a medical provider wanting to decrease patient no-shows, or a charity wanting to increase the likelihood that you will receive donations, this book is for you.
The subject of grit is the current self-help topic de jour among academics and business leaders. Duckworth is a professor of psychology at the University of Pennsylvania and is a leading researcher in the area of the factors that determine individual success and achievement. Duckworth began to wonder what the differences between success and failure are and what the differentiating factor is. Her research along with her co-researchers found something beyond intelligence and SAT scores that help to explain achievement. Duckworth's research began by studying cadets at the U.S. Military Academy, perhaps one of the most rigorous institutions of higher learning, if not among the most competitive. Duckworth wanted to investigate if grit was a factor in explaining why some cadets with innate talent failed during basic cadet training commonly referred to as Beast Barracks.

Beast Barracks is a 7-week intensive and rigorous program designed to test the mettle of civilians and turn them into soldiers with leadership potential. Duckworth and her colleague's research suggested that talent alone not be a sufficient predictor of the likelihood of a West Point Cadet succeeding under the punishing physical and emotionally demanding conditions of Beast Barracks 17-hour training days. Those that remained had something more than just talent, they had grit.

According to Duckworth, grit is the perseverance and passion for achieving long-term goals (p. 21). In a larger context, looking at why some people are successful and why some people fail is an appropriate framework for academic leaders in institutions of higher learning who struggle with retaining students, especially first-year students and who are the first in their family to attend...
college. Understanding why grit works for those that are not as talented deserves investigation.

The Grit Scale developed by Duckworth assesses people's willingness to approach life's challenges with determination. Duckworth found similar results in sales organizations, among students in the Scrips National Spelling Bee, students in her high school classes, and in testing at-large general populations. Duckworth's conclusion is that people who have grit tend to be more optimistic, tend to be more self-critical of their performances, and possess a mindset that focuses on perseverance and continued self-growth.

Is grit real? Surprisingly it just might be that the need for passion and perseverance is more important than mere talent alone. Like many self-help books, Grit is strong on circumstantial stories and light on quantitative evidence. Duckworth argues that grit is a predictor of individual success over the long run. Duckworth offers two formulas: Talent x Effort = Skill and Skill x Effort = Achievement. According to Duckworth, effort counts twice as much as skill.

As one might expect, Duckworth offers no shortcut to attaining success in education or business settings. However, Duckworth reaffirms that success is more about determination and passion than talent alone. Determination and passion closely follows the premise of Malcolm Gladwell in *Outliers: The Story of Success* that successful individuals often put in 10,000 hours to get good at anything. Like, Gladwell, Duckworth argues that it takes effort and determination to achieve success and not mere talent alone. Talented people often fail because they lack grit – the perseverance and passion to succeed is a difference maker, according to Duckworth.

Academic leaders are discovering that grit may be an essential ingredient in the classroom and in how teachers can relate to students helping students to achieve success. Likewise, business leaders may use grit questionnaires as a way of reducing turnover. The question of how to create a business environment, college culture, or classroom ethos where grit is encouraged in students and employees may be as simple as leaders modeling gritty behaviors related to perseverance. Praise and positive corrective feedback may provide people with the attitude of never giving up. Helping students or employees to find a calling in life may be among the most important things teachers and business leaders can do for students or employees.

Knowing that accomplishment takes hard work is necessary for individual success, but that is nothing new. What differentiates grit from other perspectives is the notion that success comes from having a real passion and to persevere until one achieves success. The concept of grit crosses the boundaries of many fields of human endeavor. Duckworth distinguishes activity (industriousness) from stick-to-itiveness. Grit may explain why some people become high performers while others who encounter obstacles or difficulties may cut and run. Knowing that practice is essential to success may not be as important as deliberate practice by focusing on those skills not yet mastered. Success may also come from positive self-talk and affirmations as well as well-placed praise from parents, teachers, and mentors.
Grit is not fun. Nor is grit glamorous. Grit requires personal commitment and sacrifice. Grit requires the stamina of a marathon runner and the personal recognition that failures are minor setbacks. Anyone who has faced a challenge or a setback always has two choices: to quit or to stay in the game to face adversity and the problems head on. One can only fail by quitting. Otherwise, keep trying until achieving success.

The Grit Scale developed by Duckworth assesses people's willingness to approach life's challenges with determination. Duckworth developed a self-administered questionnaire and a Grit Scale to predict which of the 1,200 first year West Point cadets would quit. Duckworth correctly predicted the 71 cadets who would drop out. Making it through Beast Barracks was unrelated to high school standing, SAT score, physical fitness, or experience as a leader. Grit turned out to be a sufficient predictor of the likelihood of succeeding under the punishing physical and emotionally demanding conditions of the seven-week long Beast Barrack.

Duckworth found similar results in sales organizations, students in the Scrips National Spelling Bee, students in her high school classes, and in testing at-large general populations. Duckworth's conclusion is that people who have grit tend to be more optimistic, tend to be more self-critical of their performances, and possess a mindset that focuses on perseverance and growth.

Duckworth does not provide a prescriptive way to build grit in people. Nor does she solid evidence in support of her assertions. While the book is a relatively quick read, it is also light on evidence. Research by Duckworth and her associates published in 2007, provides better evidence for grit, but the concept of grit needs more research.

There is nothing truly new in the book not found in many other self-help books dealing with passion, perseverance, dedication, determination, and tenacity. Long established as requisite for success, the idea that hard work and perseverance are routine. While some may find the book inspirational, without recommendations of how mentors and leaders can implement practices that lead to grit, Duckworth falls short of accomplishing real formula for change. The major shortcoming of the book is in its lack of quantitative evidence, leaving the reader with an empty feeling at its conclusion. Readers should consider reading Extreme Ownership: How Navy Seals Lead and Win, by Jocko Willink and Leif Babin or GRIT: The New Science of What It Takes to Persevere, Flourish, Succeed, by Paul G. Stoltz. The authors of these books provide better clarity for leaders looking how to inspire and lead. Perhaps more research will provide a better understanding of how grit can be a distinguishing factor in student and employee success. Nevertheless, Duckworth contends that the application of perseverance and passion for success trumps mere talent alone.
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Does Self-Insurance Add Value? 
Evidence from Retailers that Have Self-Insured for Workers’ Compensation in California

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**ABSTRACT**

This study examines the use of self-insurance among retailers and evaluates its effect on firm value. Some employers expecting to improve their performance have established self-insurance programs as an alternative risk transfer mechanism to handle their workers’ compensation liabilities. The expected improvement in performance has to come largely from controlling costs and maximizing cash flows. The sample comprises an annual panel data of retailers in the S&P 500 index from 1986 to 2016. This paper tests the differences in corporate performance, measured by Tobin’s Q, between retailers with and without using self-insurance for workers’ compensation risk in California. The results from treatment effects regression support a positive relationship between firm value and self-insured retailers, particularly in the period before the 2009 global economic crisis.

**Keywords:** firm value, self-insurance, alternative risk transfer, workers’ compensation, retail, retailers

**INTRODUCTION**

The retail trade industry accounts for approximately 11% of the U.S. labor force in 2015, and this share of employment has seen little change since 2000 according to the Bureau of Labor Statistics. Even as the second largest sector in

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1 According to Hortaçsu and Syverson (2015), the retail sector has seen little change in its share of economic activities since the onset of the Great Recession. Bronnenberg and Ellickson (2015) also highlight retail constitutes a large fraction of overall economic activity.
terms of employment based on the two-digit North American Industry Classification System (NAICS), the retail trade sector (NAICS 44–45) is characterized by a large number of low-wage workers.\(^2\) About 90% of its workers have a median annual pay of $25,230 or less in 2016, compared with a median of $37,040 in all occupations.\(^3\) This earnings gap between retail and the general economy provides an interesting topic of how retailers handle their workers’ compensation (WC) liability.

WC coverage is usually mandatory in the U.S., and employers are responsible for the full cost of work-related injuries and illnesses.\(^4\) Risk-financing solutions to WC losses essentially consist of two approaches: buying market insurance and using self-insurance. Market insurance is purchased by employers who want to transfer the financial responsibility for payment of losses to insurance companies. By contrast, self-insurance is a different risk management technique than simply the purchase of market insurance because self-insured employers are actively engaged in risk retention. That is, self-insurers implement all the services an insurer typically performs, retain part of the losses resulting from WC risk, and pay losses out of their reserves. Even though the literature suggests self-insurance is more cost effective than market insurance over the long run, it remains to be seen whether the savings from this alternative mechanism reflect on the performance of self-insured employers.

The objective of this study is to examine the financial performance of publicly traded retailers in the S&P 500 index who either buy market insurance or self-insure for workers’ compensation in California (CA). The retail trade is a unique industry distinguished by not just a large share of employment but also a large number of low-salary employees in the U.S. The focus on the WC market in CA is due to the fact that insurance is regulated at the state level, and each state maintains its own list of self-insured employers operating in its jurisdiction. In particular, self-insurance serves as an important risk-financing technique among retailers. Chang (2017) report that almost 40 percent of the workforce in the retail industry in CA is covered by self-insurance programs. Those workers of self-insured retailers account for almost thirty percent of employees of all self-insurers in CA. The existing studies put forth that self-insurance is prevalently adopted by nonprofit health care facilities, state and state-related colleges and universities, publicly owned manufacturers in the production of nonmetallic mineral, petroleum and coal, primary metal, and paper products (Chang, Chiu, &

\(^2\) The health care industry (NAICS 62) is the mainstay of employment in the U.S., making up 13% of the entire workforce in the nation. In addition, restaurants and bars were included in the retail sector under the Standard Industry Classification (SIC) system used in the U.S. before 1997. All discussions in this paper are based on the NAICS. More discussions on low-wage jobs in the retail industry can be found in Luce and Fujita (2012) and Bernhardt (1999).


\(^4\) WC coverage is mandatory in all states with the exception of Texas (Baldwin & McLaren, 2016, page 6).
Moreover, Kwon and Grace (1996) and Butler and Worrall (1991) suggest that employers in the risky manufacturing, construction, and transportation sectors tend to make choices in favor of the alternative option. However, the prior work has not explained the self-insurance phenomenon in the retail industry. Furthermore, the focus on the retail industry helps control for differences that might arise because of regulatory and market divergence across industries. In consequence, this industry presents a valuable opportunity to explore whether self-insurance is a value-enhancing risk management tool.

This empirical study concentrates on the differences between retailers that self-insure and those that do not for WC risk when it comes to corporate valuation. The sample contains an annual data of 964 firm-year observations for retailers in the S&P 500 index over the period 1986 through 2016. The data on self-insurance programs comes from the Office of Self-insurance Plans at the CA Division of Workers’ Compensation offers. Tobin’s Q is used as a dependent variable in the regression, while the status of self-insurance is treated as the variable of interest in the model. As a result, this testable data set facilitates the study of whether self-insurance helps retailers increase firm value. Consistent with the general practice in the corporate finance literature, Tobin’s Q is used as a proxy for firm value and measured by a ratio of a firm’s market value to the replacement costs of its assets. According to Lang and Stulz (1994) and Lindenberg and Ross (1981), this measure dominates other performance measures (e.g., accounting measures) for two key reasons. First, it does not require risk adjustment or normalization. Second, it reflects market expectations and is relatively free from managerial manipulation of historical accounting performance.

In a classic world with perfect capital markets based on Modigliani and Miller’s (M&M) model, risk management should be irrelevant. Without information asymmetries, taxes, transaction costs, and self-insuring for WC risk should not add value to the firm. Neither tax provisions nor risk preferences are able to explain observed variations in corporate policies (Smith & Watts, 1992). In practice, firms choose to self-insure because of managerial risk attitude toward WC risk and/or inefficiencies in the WC market related to adverse selection, moral hazard, and other imperfections.

This research can help bridge the gap between theory and practice in the real world by examining self-insurance among retailers—an industry characterized by a large pool of low-wage workers. The results of this study can not only provide insight into the performance of retailers that favor self-insurance over market insurance. They can also generate a comparison with the previous studies that rely on healthcare and manufacturing industries.

The empirical analysis first compares self-insurers and firms that do not self-insure in a univariate setting. On average, self-insured retailers are much larger in size, but their Tobin’s Q ratios are lower than those of their counterparts that do not self-insure. Then, multivariate analysis is conducted using the maximum likelihood treatment effects model. The entire sample is also disaggregated into two subsamples based on pre- and post-crisis periods (1986–2008 and 2009–2016) to examine any change in the aftermath of the 2009 financial crisis. After
controlling for corporate characteristics and the likely endogenous issues of self-insurance decision, the results show evidence that the use of self-insurance among retailers is positively associated with their firm value, particularly in the period 1986 through 2008.

The rest of this paper is divided into four sections. The second section presents a brief review of risk management theoretical background. The third section describes the data, sample, and methods used for analysis. The fourth section shows the regression results. The final section is composed of conclusions and avenues for future research.

**RISK MANAGEMENT THEORIES AND REVIEWS**

Every day, corporations are faced with the pressure to strive for more: lower costs and more profits. This relentless drive to cut costs to stay competitive on a global basis has led to divergent corporate decisions for the U.S. retailers. One of cost reduction methods has to do with the choice of risk management tools for handling a firm’s loss exposures. In the face of WC liability—one of the key loss exposures for businesses, employers have to determine which risk financing technique should be used that provides for the funding of WC losses after they occur. Typically, market insurance policies are purchased by employers to transfer the financial responsibility of loss payments to carriers. Self-insurance serves as an alternative solution to managing WC risk. Employers may favor self-insurance over market insurance because of potential cost effectiveness and inefficiencies in the market place.

Two essential classes of theories justify why managers undertake different risk management methods. The first predicates that a method is chosen to maximize shareholder value. The second connotes that managers make a choice to maximize their personal utility. Theoretically, risk management can create shareholder value as a result of reduced cash flow volatility and lower expected taxes (Smith & Stulz, 1985; Mayers & Smith, 1982). The present value of the saved costs should be transformed into a higher market valuation. Nevertheless, empirical results are mixed for the value maximization theory (Bartram, Brown, & Conrad, 2011; Carter, Rodgers, & Simkins, 2006; Guay & Kothari, 2003; Graham & Rogers, 2002; Allayannis & Weston, 2001).

In addition, risk management decisions may be motivated by the incentive of managers to maximize their personal utility functions (Rajgopal & Shevlin, 2002; Tufano, 1996). The choice is aligned with the risk preference of managers rather than with the maximization of shareholder value. That is, whether firms take on more risks on their own by self-insuring WC is concerned with managerial risk-aversion. Chang (2013) suggests that risk attitude plays an important role in the decision to self-insure. Therefore, the use of any risk management technique should not be related to corporate performance.

The Self-Insurance Institute of America, a trade association for self-insured WC programs, indicates that the self-insurance approach serves to control costs and
maximize cash flows.\(^5\) According to Rejda and McNamara (2017), the advantages of risk retention are the savings on insurance premiums, lower expenses, greater incentive for loss prevention, and increased cash flow. Since all firms operate under uncertainty, and the uncertainty surrounds their risk management decisions, it is a subject of interest to observe what makes self-insured retailers and those that do not self-insure different from each other when it comes to financial performance.

**DATA AND METHODOLOGY**

This study draws on the financial data for the retailers in the S&P 500 index from COMPUSTAT, examining how well self-insured employers perform in comparison with those using a conventional risk management method via market insurance. All of the COMPUSTAT data are in dollar terms except for the number of employees. These large-cap publicly traded retailers facilitate the analysis of individual self-insurance rather than group self-insurance.\(^6\) The information on when firms started self-insurance comes from the Office of Self-Insurance Plans of the CA Division of Workers’ Compensation.\(^7\) The initial sample contains 999 yearly observations with the retailers in the S&P 500 index from 1986 to 2016. Then, the data keep those observations without missing data on basic accounting variables and stock price that are used to calculate value measures. The final dataset consists of a panel of 964 firm-year observations for 36 retail components of the S&P 500 over the period 1986 through 2016.

The analytical approach of this work employs a treatment effects model to explore the relationship between financial performance and self-insurance

---


\(^{6}\) The Office of Self Insurance Plans (OSIP), http://www.dir.ca.gov/osip/ (accessed August 28, 2017), authorizes qualified employers to provide their own coverage for workers’ compensation liabilities in California. The website shows that there are 268 individual employers and 22 group self-insurers with 4,213 members as of January 1, 2014. There are only 268 individual self-insured employers out of tens of thousands of employers in CA. According to OSIP, self-insurance can be arranged on an individual or a group basis. Self-insured employers are required to provide the same scope of benefits as an insurance company. Large firms are more likely to experience the cost-efficiency of operating a self-insurance program in compliance with state requirements. Small and medium-sized businesses interested in risk retention have the option of joining with others in the same industry to self-insure their workers’ compensation liability as a group. A self-insurance group is arranged like a mutual organization where a number of employers with common interests enter into an agreement to pool their WC liabilities, while an individual self-insured employer just implements its own risk retention plan. This study focuses on individual self-insurance in this research because of complexity and legal issues existing between individual self-insurers and self-insurance groups. In addition, the data for individual self-insured employers is publicly available, but that for members of self-insurance groups is not. In addition, Feldman (2012) suggests that the increase in self-insurance was driven mainly by employers with at least 1,000 workers.

\(^{7}\) The data on self-insurance were kindly provided by Ms. Lyn Asio Booz, Chief of the Office of Self-insurance Plans, on February 8, 2017.
application. Consistent with the general finance literature, Tobin’s Q is used to proxy for firm value as the dependent variable. It is measured by the ratio of the market value of equity plus the book value of liabilities to the book value of assets. In their survey of empirical studies on the value implications of risk management, Smithson and Simkins (2005) report that the vast majority of studies favor Tobin’s Q to proxy for firm value. Hoyt and Liebenberg (2011) suggest that Tobin’s Q is more useful as a prospective performance measure than a historical accounting performance measure, such as ROA, because the former captures future expectations of investors, while the latter is subject to managerial discretion and reflective of historical performance. This is particularly important because the benefits of risk management are not expected to materialize immediately and some lag exists between risk management implementation and benefit realization.

Self-insurance is treated as the variable of interest in the model along with several control variables. In other words, this model estimates the impact of self-insurance on firm value, conditional on other determinants of Tobin’s Q. The specification of the regression model is formulated below:

\[
Tobin's \ Q = \alpha + \beta \text{ Self-insurance}_i + \sum \lambda_i \text{ Control variable}_i + \epsilon
\]  
(1)

where Self-insurance\(_i\) represents whether the self-insurance treatment is assigned to the \(i\)th firm in year \(t\) and the observed status of self-insurance in a particular year has a value of one if a retailer engaged in self-insurance in any given year during the period 1986-2016, and zero otherwise. The dummy is set to one if the company self-insures. Thus, it is equal to 1 for firm-years starting with the year that a firm was granted a self-insurance permit, and equal to 0 for firm-years prior to that permission. A vector of control variables is included to explain differences in firm value. In particular, the binary decision to self-insure is modeled as the outcome of an unobservable latent variable \(\text{Self-insurance}^*\). It is assumed that \(\text{Self-insurance}^*_i\) is a linear function of the coefficient vector \(\omega_i\) that contains hypothesized determinants of self-insurance choice.

\[
\text{Self-insurance}^*_i = \delta \omega_i + \mu
\]  
(2)

Both equations (1) and (2) are estimated simultaneously using maximum-likelihood estimation to control for potential selectivity bias that arises due to the likely endogeneity of self-insurance decision. As in Hoyt and Liebenberg (2011), the analysis jointly estimates the decision to self-insure and the effect of that decision on Tobin’s Q in a two-equation model. The determinants of Tobin’s Q and the determinants of self-insurance (denoted by the vector \(\omega_i\)) are listed in the functions below and discussed thereafter.

\[
Tobin's \ Q = f(\text{Self-insurance} \mid \text{Size, Profitability, Investment growth, Leverage, Dividend})
\]  
(3)

\[
\text{Self-insurance} = f(\text{Size, Opacity, Slack})
\]  
(4)
Determinants of Tobin’s Q

Each firm’s market value is measured using Tobin’s Q. This measure is calculated as the ratio of the market value of equity plus the book value of liabilities to the book value of assets. Following previous work, this study includes the following control variables in the model.

1. **Size**: Previous studies are not conclusive about the effect of firm size on firm value. However, self-insured employers tend to be large in size. Therefore, it is important to control for size because large firms are more likely to self-insure than small firms. The proxy is the natural logarithm of the number of employees. The sign of this variable should be positive.

2. **Profitability**: Profitable firms are more likely to trade at a premium than less profitable firms. The ROA is used as a proxy, calculated as the ratio of net income to total assets. A positive coefficient is expected on this variable.

3. **Investment growth**: Firm value may also be related to future investment opportunities. The proxy used is capital expenditures over total assets. The expected sign for this variable is positive.

4. **Leverage**: A firm’s capital structure may affect its value. A leverage variable is defined as the book value of long-term debt over the market value of common equity. No particular sign of this variable is expected.

5. **Dividend**: Previous empirical evidence is inconclusive regarding the relationship between dividend payment and firm value. On the one hand, dividends may reduce free cash flows available for capital projects. Therefore, the sign of the coefficient should be negative. On the other hand, dividends can be perceived as a positive signal from management and thus increase firm value. A dividend dummy is included and equals one if the firm paid dividends on common equity in that year. No priors on the sign of this variable are expected.

Finally, year dummies are also included in the Tobin’s Q equation to control for the impact of cyclical, economic trends on firm value over the sample period.

Determinants of Self-insurance

1. **Size**: Large firms are more likely to implement self-insurance for WC losses because losses are more predictable from their large pools of workers. The proxy is the natural logarithm of the number of employees. The sign of this variable is expected to be positive.

2. **Opacity**: A firm’s asset composition may also affect its risk management decisions. According to Pagach and Warr (2011), assets that are relatively more opaque are more difficult to liquidate at the time of financial distress. Opacity is used as a measure of tangibility of corporate assets. It is calculated as the ratio of intangible assets to the book value of total assets, expected to have a negative coefficient.

3. **Slack**: Cash reserves owned by a company may be associated with the use of self-insurance. Thus, slack is measured as the ratio of cash and marketable securities to total assets. A positive sign of this variable is expected.

Finally, year dummies are also included in the Tobin’s Q equation to control for the impact of cyclical, economic trends on firm value over the sample period.
All variables are further defined in Table 1, summary statistics are reported in Table 2, and the correlation matrix of Tobin’s Q and its determinants appears in Table 3. Self-insured employers make up 22% of all firm-years. This figure is less than the average 30% of WC benefits in CA paid by self-insurers according to Baldwin and McLaren (2016). This may be explained in Table 3 that self-insurance is positively correlated with firm size, self-insured employers are larger in size. In addition, self-insurance is positively correlated with leverage, but negatively with Tobin’s Q and investment growth. In brief, multicollinearity is not detected due to a lack of high correlation coefficients between the independent variables in the regression analysis.

### Table 1
**Variable Definitions**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobin’s Q</td>
<td>(Market value of equity + Book value of liabilities)/Book value of assets</td>
<td>Compustat</td>
</tr>
<tr>
<td>Self-insurance</td>
<td>= 1 if the firm self-insured for that year, 0 otherwise</td>
<td>Office of Self-insurance Plans, the CA Division of WC</td>
</tr>
<tr>
<td>Size</td>
<td>In (the number of employees)</td>
<td>Compustat</td>
</tr>
<tr>
<td>ROA</td>
<td>Net income/assets</td>
<td>Compustat</td>
</tr>
<tr>
<td>Leverage</td>
<td>Book value of long-term debt/Market value of equity</td>
<td>Compustat</td>
</tr>
<tr>
<td>InvestGrowth</td>
<td>Capital expenditure/total assets</td>
<td>Compustat</td>
</tr>
<tr>
<td>Dividend</td>
<td>= 1 if the firm paid dividends in that year, 0 otherwise</td>
<td>Compustat</td>
</tr>
<tr>
<td>Opacity</td>
<td>Intangible assets/total assets</td>
<td>Compustat</td>
</tr>
<tr>
<td>Slack</td>
<td>Cash and short-term investments/total assets</td>
<td>Compustat</td>
</tr>
</tbody>
</table>

### Table 2
**Descriptive Statistics**

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobin’s Q</td>
<td>972</td>
<td>2.34</td>
<td>1.94</td>
<td>0.06</td>
<td>26.84</td>
</tr>
<tr>
<td>Self-insurance</td>
<td>999</td>
<td>0.22</td>
<td>0.42</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Total assets</td>
<td>999</td>
<td>11.33</td>
<td>23.730</td>
<td>0.31</td>
<td>204.751</td>
</tr>
<tr>
<td>Employees</td>
<td>982</td>
<td>116.84</td>
<td>266.91</td>
<td>0.0066</td>
<td>2.300</td>
</tr>
<tr>
<td>ROA</td>
<td>999</td>
<td>0.08</td>
<td>0.10</td>
<td>-1.76</td>
<td>0.91</td>
</tr>
<tr>
<td>InvestGrowth</td>
<td>999</td>
<td>0.08</td>
<td>0.05</td>
<td>0.00</td>
<td>0.80</td>
</tr>
<tr>
<td>Leverage</td>
<td>973</td>
<td>0.20</td>
<td>0.51</td>
<td>0.00</td>
<td>9.33</td>
</tr>
<tr>
<td>Dividend</td>
<td>999</td>
<td>0.60</td>
<td>0.49</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Opacity</td>
<td>999</td>
<td>0.08</td>
<td>0.14</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Slack</td>
<td>999</td>
<td>0.11</td>
<td>0.12</td>
<td>0.00</td>
<td>0.92</td>
</tr>
</tbody>
</table>

*Notes:* The dataset contains a yearly panel data of retailers in the S&P 500 index over the period 1986–2016. Tobin’s Q is used as a proxy for firm value and is calculated as ([Market value of equity + Book value of liabilities]/Book value of assets). Self-insurance is a dummy variable that equals 1 if the company self-insured for that year; otherwise it equals 0. Total assets is the book value of total assets. Employees represents the number of workers in a retail company. ROA measures accounting performance and is equal to net income divided by total assets. Leverage equals the ratio of book value of long-term debt divided by market value of equity. InvestGrowth is computed as capital expenditure divided by total assets. Dividend is a dummy equal to 1 if the company paid out dividend for that year, and 0 otherwise. Opacity is measured as the ratio of intangible assets to total assets. Slack is computed as cash and short-term investment divided by total assets. This is the observation for EBAY in 1996. Its number of employees has been over a thousand since 1999.
Table 3
Pearson Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>Tobin's Q</th>
<th>Size</th>
<th>InvestGrowth</th>
<th>Dividend</th>
<th>Leverage</th>
<th>Opacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobin's Q</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-insurance</td>
<td>-1.167**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size</td>
<td>-3.033**</td>
<td>.333**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>.212**</td>
<td>-0.053</td>
<td>-0.049</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>InvestGrowth</td>
<td>.211**</td>
<td>-0.099**</td>
<td>-0.046</td>
<td>.117**</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Leverage</td>
<td>-2.088**</td>
<td>.078*</td>
<td>.094**</td>
<td>-.202**</td>
<td>-.121**</td>
<td>1.000</td>
</tr>
<tr>
<td>Dividend</td>
<td>-1.022**</td>
<td>.264**</td>
<td>.382**</td>
<td>.119**</td>
<td>0.005</td>
<td>-.013</td>
</tr>
<tr>
<td>Opacity</td>
<td>-1.303**</td>
<td>-.0066</td>
<td>.093**</td>
<td>-.095**</td>
<td>-.347**</td>
<td>-.0066</td>
</tr>
<tr>
<td>Slack</td>
<td>.312**</td>
<td>-.152**</td>
<td>-.263**</td>
<td>-.010</td>
<td>-.093**</td>
<td>-.108**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.139**</td>
<td>-.069**</td>
</tr>
</tbody>
</table>

Notes: Tobin’s Q is used as a proxy for firm value and is calculated as [(Market value of equity + Book value of liabilities)/Book value of assets]. Self-insurance is a dummy variable that equals 1 if the company self-insured for that year; otherwise it equals 0. Size is measured as the natural log of the number of employees in a retail company. ROA measures accounting performance and is equal to net income divided by total assets. Leverage equals the ratio of book value of long-term debt divided by market value of equity. InvestGrowth is computed as capital expenditure divided by market value of equity. Dividend is a dummy equal to 1 if the company paid out dividend for that year, and 0 otherwise. Opacity is measured as the ratio of intangible assets to total assets. Slack is computed as cash and short-term investment divided by total assets. ** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

RESULTS

Univariate Analysis

This section starts with a comparison between retailers with and without self-insurance programs. Univariate results, presented in Table 4, show what differentiates self-insured retailers from those that do not self-insure in terms of various financial measures. Self-insured retailers differ statistically from those that do not self-insure in all measures but Opacity. Consistent with Chang (2013), Feldman (2012), and Chang and Weiss (2012), self-insured retailers are much larger than their counterparts that do not self-insure. Self-insured retailers are almost one and a half times the size of those without using the self-insurance technique in terms of the number of employees.

In general, self-insured employers tend to be larger in assets (or have more employees), less leveraged, more likely to pay dividends, but equipped with a lower level of cash reserves. Self-insured retailers invest more in capital expenditures for growth. However, firms that self-insure are significantly less profitable than firms that do not self-insure. Of particular interest is the difference that self-insurers, on average, are worth less than those firms that choose market insurance when it comes to firm value measured by Tobin’s Q. At first glance, the potential benefits of cost savings via self-insurance do not reflect in a higher market valuation in a univariate setting. It remains to be observed whether this result holds up with multivariate analysis.

Multivariate Analysis

To test whether self-insurance is value-added in a multivariate condition, this study applies a maximum-likelihood treatment effects model. The two-equation system simultaneously estimates the decision to self-insure and the impact of
such decision (treatment) on Tobin’s Q. Table 4 shows correlation between variables, and Table 5 presents the results for the full sample.

### Table 4

**Retailers that Have Self-Insured vs. Retailers that Have Not (1986–2016)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Self-insurers</th>
<th>Firms that Do Not</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>Value</td>
</tr>
<tr>
<td>Tobin’s Q</td>
<td>217</td>
<td>1.702</td>
</tr>
<tr>
<td>Total assets</td>
<td>222</td>
<td>16,147</td>
</tr>
<tr>
<td>Employees</td>
<td>220</td>
<td>155</td>
</tr>
<tr>
<td>ROA</td>
<td>222</td>
<td>0.071</td>
</tr>
<tr>
<td>Leverage</td>
<td>222</td>
<td>0.069</td>
</tr>
<tr>
<td>InvestGrowth</td>
<td>217</td>
<td>0.271</td>
</tr>
<tr>
<td>Dividend</td>
<td>222</td>
<td>0.840</td>
</tr>
<tr>
<td>Opacity</td>
<td>222</td>
<td>0.080</td>
</tr>
<tr>
<td>Slack</td>
<td>222</td>
<td>0.071</td>
</tr>
</tbody>
</table>

**Notes:** The comparison is based on a yearly panel data of retailers in the S&P 500 index over the period 1986–2016. Tobin’s Q is used as a proxy for firm value and is calculated as (Market value of equity + Book value of liabilities)/Book value of assets). *Self-insurance* is a dummy variable that equals 1 if the company self-insured for that year; otherwise it equals 0. *Total assets* is the book value of total assets. *Employees* represents the number of workers in a retail company. ROA measures accounting performance and is equal to net income divided by total assets. Leverage equals the ratio of book value of long-term debt divided by market value of equity. *InvestGrowth* is computed as capital expenditure divided by total assets. *Dividend* is a dummy equal to 1 if the company paid out dividend for that year, and 0 otherwise. Opacity is measured as the ratio of intangible assets to total assets. Slack is computed as cash and short-term investment divided by total assets. Difference in means is calculated using a *t*-test assuming unequal variances.

The first column of Table 5 reports the results for the self-insurance equation. Consistent with the hypothesis, *Size* is the pivotal factor in the use of self-insurance. This implies that firms with a larger number of workers tend to choose self-insurance over market insurance. However, neither *Opacity* nor *Slack* is significant in the model. In other words, the extent to which a firm owns intangible assets or cash and marketable securities does not contribute to the choice of self-insurance.

The second column of Table 5 reports the effect of self-insurance on firm value, measured by Tobin’s Q ratio. The results show that *Self-insurance* is positively related to Tobin’s Q for the full sample over 1986–2016. This suggests that self-insurance have a positive effect on firm value thanks to the benefits of cost savings and increased cash flows from this alternative tool. After controlling for potential selectivity bias due to the likely endogeneity of self-insurance decision, this finding is consistent with the hypothesis of shareholder value maximization that the use of self-insurance is positively related to firm value.

It is worth noting that the size variable is significant in both equations, but in opposite directions. The sign is positive in the self-insurance equation but negative in the Tobin’s Q equation. Even though firm size contributes to the use of self-insurance, but it is detrimental to firm value. A large number of workers...
provide a predictive pool for risk retention, but it is not the driving force behind firm value.

| Table 5 | Full Estimates of Maximum-Likelihood Treatment Effects for the Period 1986–2016 |
|-----------------|------------------|------------------|
| Self-insurance (Equation 2) | Tobin’s Q (Equation 1) |
| Self-insurance | 2.173*** |
| Size | 0.942*** (0.31) |
| ROA | 8.972** (4.15) |
| InvestGrowth | 4.759 (1.26) |
| Leverage | -0.260 (0.30) |
| Dividends | 0.140 (0.20) |
| Opacity | -0.037 (0.42) |
| Slack | -0.669 (0.77) |
| Constant | 3.387*** (1.30) |

No. of observations 964
No. of clusters 36
Log pseudolikelihood -2112
Wald test of independent equations 61.97***

Notes: Tobin’s Q is used as a proxy for firm value and is calculated as ((Market value of equity + Book value of liabilities)/Book value of assets). Self-insurance is a dummy variable that equals 1 if the company self-insures for that year; otherwise it equals 0. Size is measured as the natural log of the number of employees in a retail company. ROA measures accounting performance and is equal to net income divided by total assets. Leverage equals the ratio of book value of long-term debt divided by market value of equity. InvestGrowth is computed as capital expenditure divided by total assets. Dividend is a dummy variable equal to 1 if the company paid out dividend for that year; and equals 0 otherwise. Opacity is measured as the ratio of intangible assets to total assets. Slack is computed as cash and short-term investment divided by total assets. Year dummies for 1986-2016 are included in the model but not reported. In brackets are standard errors adjusted for firm-level clustering. ***, ** and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

To investigate whether the 2009 global financial crisis imposed a great shock to the economic system, the full sample is divided into two subsample periods: 1986–2008 and 2009–2016. This step allows a comparison between the pre- and post-crisis periods regarding the relationship between firm value and self-insurance. The results of disaggregated subsamples are reported in Table 6. Consistent with the results from the entire sample period, the results based on the pre-crisis period show supportive evidence that the use of self-insurance is positively related to firm value. However, this relationship fails to sustain in the post-crisis period. It is noteworthy that the Wald test for independent equations cannot reject the null hypothesis that the residuals from Equations (1) and (2) are uncorrelated and support their joint estimation for the subsample 2009–2016.
The reason may be due to a short post-crisis period for these retailers. As a result, no conclusions can be made for the results based on the post-crisis period.

Table 6
Subsample Estimates of Maximum-Likelihood Treatment Effects

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Panel A: Tobin’s Q Equation Results</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-insurance</td>
<td>2.200*** (0.45)</td>
<td>-0.244 (0.52)</td>
</tr>
<tr>
<td>Size</td>
<td>-1.533** (0.61)</td>
<td>-0.194 (0.37)</td>
</tr>
<tr>
<td>ROA</td>
<td>6.964 (4.86)</td>
<td>10.485*** (3.30)</td>
</tr>
<tr>
<td>InvestGrowth</td>
<td>4.364*** (1.45)</td>
<td>8.773*** (3.07)</td>
</tr>
<tr>
<td>Leverage</td>
<td>-0.256** (0.30)</td>
<td>-1.569** (0.76)</td>
</tr>
<tr>
<td>Dividends</td>
<td>-0.256 (0.30)</td>
<td>-0.300 (0.40)</td>
</tr>
<tr>
<td>Panel B: Self-insurance Equation Results</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size</td>
<td>0.990*** (0.29)</td>
<td>0.963* (0.53)</td>
</tr>
<tr>
<td>Opacity</td>
<td>-0.247 (0.57)</td>
<td>-1.105 (1.47)</td>
</tr>
<tr>
<td>Slack</td>
<td>-0.831 (0.60)</td>
<td>-2.113 (2.07)</td>
</tr>
<tr>
<td>Constant</td>
<td>-2.132*** (0.53)</td>
<td>-2.268** (1.12)</td>
</tr>
<tr>
<td>No. of observations</td>
<td>679</td>
<td>285</td>
</tr>
<tr>
<td>No. of clusters</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td>Log pseudolikelihood</td>
<td>-1555</td>
<td>-493</td>
</tr>
<tr>
<td>Wald test of independent equations</td>
<td>96.51***</td>
<td>1.32</td>
</tr>
</tbody>
</table>

Notes: Tobin’s Q is used as a proxy for firm value and is calculated as ([Market value of equity + Book value of liabilities]/Book value of assets). Self-insurance is a dummy variable that equals 1 if the company self-insures for that year; otherwise it equals 0. Size is measured as the natural log of the number of employees in a retail company. ROA measures accounting performance and is equal to net income divided by total assets. Leverage equals the ratio of book value of long-term debt divided by market value of equity. InvestGrowth is computed as capital expenditure divided by total assets. Dividend is a dummy variable equal to 1 if the company paid out dividend for that year; and equals 0 otherwise. Opacity is measured as the ratio of intangible assets to total assets. Slack is computed as cash and short-term investment divided by total assets. Year dummies for each subsample (1986-2009 and 2009-2016) are included in the model but not reported. In brackets are standard errors adjusted for firm-level clustering. ***, **, and * denote statistical significance at the 1%, 5% and 10% levels, respectively.

CONCLUSIONS

Several employers, including retailers, have put up a self-insurance program in place to handle their WC risk—one of main property/casualty loss exposures for companies in America. Using this alternative approach, self-insured employers expect to improve their operating performance as a result of better loss control and increased cash flow. However, it is not clear whether using self-insurance as an alternative risk financing tool is conducive to firm value. This research
examines the impact of self-insurance on firm value with evidence from retailers.

The sample is composed of a yearly panel dataset of retailers in the S&P 500 over the years 1986 through 2016. The retail industry is selected because it makes up about 11% of the labor force in the nation. This industry features a large number of low-pay workers at the bottom of the society, allowing the study to investigate how retailers deal with WC risk. The analytical approach employs a maximum-likelihood treatment effects model that jointly estimate the determinants of self-insurance and the effect of self-insurance on firm value. Tobin’s Q is measured as a proxy for firm value for each retailer in our sample. The results in the multivariate setting present evidence that a positive relationship exists between firm value and self-insurance implementation, particularly in the period before the 2009 global economic crisis.

This work sheds light into whether alternative risk transfer in the form of self-insurance enhances market valuation among retailers that have self-insured for WC in CA. The literature has provided the corporate incentives toward self-insurance and economic factors associated with a higher self-insurance level in a state. This study further offers evidence that self-insurance increases firm value because of the realized benefits of reduced costs and increased cash flows.

There are limits on this study due to a lack of national dataset in the analysis. The sample based on the self-insurance data in CA may reduce the extent to which these results explain value implications of self-insurance across the country. However, CA has the largest WC market in the nation and ranks the world’s 5th largest economy, and all of these retailers in the sample operate with a national presence. WC regulations also vary from one state to another. Thus, this research serves as a stepping stone for a national landscape of how self-insurance is used by retailers across the states. Additional research using aggregate data in the U.S. would contribute to a better understanding of whether an alternative risk transfer in the form of self-insurance is linked to firm value at the national level.

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8 Source: Center for Continuing Study of the California Economy in Palo Alto. World Wide Web: [http://www.csce.com/](http://www.csce.com/) (accessed August 1, 2017). Making up 14 percent of the U.S.’s GDP ($18.7), California’s $2.6 trillion economy in 2016, put this state only after four countries: China ($11.2), Japan ($4.9), German ($3.5), and Britain ($2.6). In parentheses are the numbers for GDP in trillion dollars.
REFERENCES


The Assessment Challenge in Business Schools: Adjunct and Short-term Faculty

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ABSTRACT
A major changing requirement in higher education today is assessment or the demonstration that students are in fact learning what is intended or promised. For traditional faculty, this has often seemed like an enormous hurdle. Few PhDs are trained to be teachers and essentially learn on the job. It is no surprise in these circumstances that almost no one comes to teaching in higher education with the pedagogical knowledge to build, much less assess, curricula, yet assessment must be completed and documented if not for internal continuous improvement processes, then for the external demands of accrediting bodies. This challenge is even greater for contingent faculty such as adjuncts or short-term professors who usually have less experience, are paid relatively little, and are not usually contractually bound to contributions beyond teaching the course(s) for which they are hired. But the challenge, nonetheless, must be addressed. Programs are accountable for demonstrated student learning, and courses taught by adjunct or short-term faculty are an essential part of these programs. This paper surveys the challenges of implementing assessment with adjunct and short-term faculty and presents a proven system by which these teachers become effective and contributing members to the processes of students learning and assessment for the continual improvement of business school programs.

Keywords: University Assessment, adjunct faculty, short-term faculty, AACSB, HLC
INTRODUCTION

A major requirement in higher education today is assessment or the demonstration that students are in fact learning what is intended or promised. Though this expectation began more than a decade ago—with the publication of *A Test of Leadership: Charting the Future of U.S. Higher Education* by the Secretary of Education’s Commission on the Future of Higher Education (U.S. Department of Education, 2006)—it is still highly relevant to all schools. Not only should schools be accountable for what they promise to deliver regarding student learning, but they are now held to this standard by accrediting bodies. Weiner (2009) notes that this is not a fad but that with the report’s publication “regional accreditation bodies stepped up the urgency of local assessment programs in an effort to ward off federally mandated programs that many worried would overlook local needs” (Administrative Support and Understanding section, para. 2). That schools must be accountable for educational outcomes externally, has been perceived by some faculty to reflect a lack of trust or be viewed as punitive, but it is not intended to. Those in higher education are there to further learning and intellectual development. It only stands to reason that those who seek this would also want to know the degree to which their efforts are successful. In cases where they fall short, the scholar would naturally want to address deficits to improve learning outcomes. It is this context that assessment fits. Ideally, it is a system of continuous improvement where learning levels are measured, and changes in curricula or teaching methodologies can be made. Hutchings (2010) notes, “Assessment was seen first and foremost as an educational practice, and its champions…held up a vision of educational quality based not on reputation and resources but on the institution’s contribution to learning—and, therefore, on the work of students and faculty” (p. 8). This has great potential for advancing education, but for traditional faculty assessment, this has often seemed like an enormous hurdle.

Few PhDs receive training to be teachers and essentially learn on the job. It is no surprise in these circumstances that almost no one comes to teaching in higher education with the pedagogical knowledge to build or assess curricula. Yet, assessment must be completed and documented—if not for internal continuous improvement processes, then for the external demands of accrediting bodies. This challenge is even greater for adjunct or short-term faculty (sometimes also referred to as contingent faculty) who usually have less experience, are paid relatively little, and are not usually contractually bound to contributions beyond teaching the course(s) for which they are hired. However, the challenge nonetheless must be addressed. Programs are accountable for demonstrated student learning, and courses taught by adjunct or short-term faculty are an essential part of these programs. This paper surveys the challenges of implementing assessment with adjunct and short-term faculty and presents a proven system by which these teachers become effective and contributing members to the processes of students learning and assessment for the continual improvement of business school programs.
THE ASSESSMENT CHALLENGE

There are a number of requirements for assessment to be successful. The first and most obvious is that it must be employed. This flows not only from the desire of educators to always improve but also from external bodies. The Higher Learning Commission (HLC; 2017) requires that an “institution demonstrates a commitment to educational achievement and improvement through ongoing assessment of student learning” (p. 22); this requires systematic measuring of student learning with respect to established learning goals as well as processes that are used to improve learning as guided by assessment outcomes (Higher Learning Commission, 2017). The Association to Advance Collegiate Schools of Business (AACSB; 2017) echoes these expectations in the standards for business accreditation: “The school uses well-documented, systematic processes for determining and revising degree program learning goals; designing, delivering, and improving degree program curricula to achieve learning goals; and demonstrating that degree program learning goals have been met” (p. 32).

Though some organizations have tried to meet these demands by creating a centralized administrative head of assessment, that is not the intended outcome from the perspective of these organizations nor is it effective in meeting the goal (Hutchings, 2010; Myers, Myers, Stewart and Nynas, 2015). The HLC demands that “The institution’s processes and methodologies to assess student learning reflect good practice, including substantial participation of faculty and other instructional staff members” (Higher Learning Commission, 2017, p. 22). The AACSB (2017) is even more directed in its expectations of what faculty do regarding assessment. It states: “ Appropriately qualified faculty members are involved in all aspects of curricula management, including the determination of learning goals and the design and ongoing revision of degree program content, pedagogies, and structure to achieve learning goals” (p. 33).

This focus on faculty involvement makes sense as successful assessment can only happen when there is faculty ownership. Weiner (2009) argues:

If the faculty does not own it, it is not going to happen. At best, if faculty fail to assume responsibility for assessing student learning outcomes, a college will have a faculty of “defiant complaint.” As anyone who is employed by a college knows, the real energy for program implementation comes from faculty members. They need to take part in planning and developing an assessment program, because they will certainly be the implementation team (Faculty Ownership section, para. 1).

Unfortunately, assessing student learning has been resisted by some faculty members. Hutchings (2010) echoes the call for faculty involvement in the assessment process:

The assessment literature is replete with admonitions about the importance of faculty involvement, a kind of gold standard widely understood to be the key to assessment’s impact “on the ground,” in classrooms where teachers and student meet. Unfortunately,
much of what has been done in the name of assessment has failed to engage large numbers of faculty in significant ways (p. 3).

DeMoranville (2010) cites three reasons for the lack of faculty involvement in assessment. First, faculty are already occupied with the teaching, scholarship, and service expectation of their positions. Second, they do not perceive the level of benefits of assessment outcomes to students to justify the perceived high level of additional work. Finally, faculty fear constraints on their freedom in the classes to design their course and teach them as they choose. Hutchings (2010) also sees four obstacles to greater faculty involvement in assessment: “the language of assessment has been less than welcoming,” “faculty are not trained in assessment,” “the work of assessment is an uneasy match with institutional reward systems,” and “faculty have not seen sufficient evidence that assessment makes a difference” (Hutchings, 2010, pp. 8–9). If assessment is posing such a challenge to faculty who have committed their entire professional careers to education, how much greater a challenge will it be for adjunct and short-term faculty?

ADJUNCT AND SHORT-TERM FACULTY

The role of part-time faculty has dramatically increased across all higher education institutions and in 2011 surpassed the percentage of full-time faculty members (Jolley, Cross & Bryant, 2014). The trend is fueled not only because they provide a cost savings to the university in the form of lower salaries and in some cases no benefits, but also because short-term contracting gives greater overall flexibility in staffing courses with enrollment fluctuations from term to term. Like assessment, this seems to be a trend that will not be changing any time soon.

Though this provides great benefits to institutions of higher learning, it can pose significant challenges. One challenge flows from the very nature of adjunct and short-term workers; they receive lower pay, are required to use shared resources, often receive no benefits or raises, and are often not included in decision making and have little access to professional development (Roney & Ulerick, 2013; Wallin, 2004). Multiple studies cite possible weaknesses when student-learners are in adjunct and short-term faculty classrooms. These range from lower performance on tests to use of less challenging and/or adaptable instructional approaches and fewer high impact practices, less accessibility by students, fewer student interactions, and lower engagement with the academic and campus culture (Gerlich & Sollosy, 2015; Lei, 2007; Galbraith & Shedd, 1990; Center for Community College Student Engagement, 2014; Schuetz, 2002; Schuster, 2003; Umbach, 2006; and Cohen & Brawer, 2008). All of this contributes to the challenge of meeting assessment needs for the continuous improvement of student learning. Leszinske, Jolley and Bryant (2012) ask, “…the question is how effective can processes, curriculum and student outcomes be when the majority population has minimal investment in the resources supporting the environment?” (p. 6).
It seems insurmountable. Not only may there be challenges in learning with short-term and adjunct faculty that need to be addressed to meet program goals, but such faculty are also expected to do so without a long-term commitment by the institution while still actively participating in continuous improvement processes necessary to the profession and to accreditation. It is a puzzle that must be solved.

**EFFECTIVE ASSESSMENT**

Certain requirements are necessary for assessment to be effective. Weiner (2009) lists fifteen major elements necessary to “achieve a culture of assessment”:

- [1] clear general education goals,
- [2] common use of assessment-related terms,
- [3] faculty ownership of assessment programs,
- [4] ongoing professional development,
- [5] administrative encouragement of assessment,
- [6] practical assessment plans,
- [7] systematic assessment,
- [8] the setting of student learning outcomes for all courses and programs,
- [9] comprehensive program review,
- [10] assessment of co-curricular activities,
- [11] assessment of overall institutional effectiveness,
- [12] informational forums about assessment,
- [13] inclusion of assessment in plans and budgets,
- [14] celebration of successes, and finally,

Hutchings (2010) gives six recommendations to improve faculty involvement in assessment: 1) “building assessment around regular, ongoing work or teaching and learning,” 2) “make a place for assessment in faculty development,” 3) “build assessment into the preparation of graduate students,” 4) “reframe the work of assessment as a vehicle of scholarship,” 5) “create campus spaces and occasions for constructive assessment conversation and action,” and 6) “involve students in assessment” (pp. 13–16). While some of these recommendations are beyond the purview of a hiring institution of adjunct or short-term faculty—such as better formation of graduate students—others are accessible and usable in very real terms with adjunct and short-term faculty.

**ASSESSMENT AT THE HELZBERG SCHOOL OF MANAGEMENT, ROCKHURST UNIVERSITY**

An example of a successful assessment process is drawn from the Helzberg School of Management at Rockhurst University. The diagram below lists not only what the steps of assessment seek to do but also what each step entails (Rockhurst University-Helzberg School of Management, 2015, p. 34); it introduces a common language and faculty expectations for assessment. The Helzberg School’s assessment process addresses both the language challenge of assessment and contributes to the training in assessment discussed in Hutchings (2010).
Engaging in this assessment process also addresses some of the needs that Weiner (2009) found as key for an assessment environment—faculty set clear goals for programs. While common language across all programs is used, faculty 1) devise the rubrics or measurement instruments, 2) decide where assessment happens, and 3) determine which activities will serve for assessment. Assessment proceeds systematically and across all programs and courses. The process, beyond the diagram shown above, involves comprehensive program review both in the beginning steps and then as recommendations are made and implemented. The process also builds in required meetings for assessment discussions which also serve as a celebration of success, and, thereby, addressing Hutchings’ recommendations for building assessment into ongoing teaching and creating conversations about teaching and learning.

A robust process is necessary but insufficient for effective assessment as meeting some of the guidelines at the university level necessarily happen outside of the assessment process. Administration at different levels is where
responsibility for some of the guidelines fall. Administrators can foster the desired environment by linking assessment to reward structures, professional development, institutional effectiveness, and other budgetary considerations.

Higher education institutions have significant challenges successfully doing this with full-time, long-term faculty, and these challenges are compounded with adjunct or short-term faculty. In the Helzberg School, assessment process have been paired with an organizational structure that meets some of these environmental needs as well as addresses training of faculty in assessment itself for both long-term and contingent faculty. Given lack of faculty knowledge of—and in some cases resistance to—assessment, there must be a structure to guide and promote assessment. This is not an organization that performs the steps of the assessment process, but rather, one that facilitates and supports it.

The assessment process at Rockhurst is set by each of its programs. For example, economists are responsible for making the determinations for each step of assessment for the economics program. This process is facilitated, however, by individuals trained in assessment. These individuals assist the program faculty in setting up all steps of the assessment process. This gives faculty ownership with access to the pedagogical knowledge necessary if the faculty members do not already possess it. It is true that adjunct faculty will not likely participate in this part of the process, but short-term faculty—such as visiting professors—in the discipline do. Once this process is set by the program faculty, carrying out the ongoing assessment will be performed by faculty teaching specified courses regardless of their status as contingent or not.

As part of the ongoing development of the faculty in assessment, faculty assigned a particular assessment are also assigned a liaison who will work with them individually at any step—or every step—of the assessment process as they desire. At the beginning of each semester, mandatory program meetings are held for faculty teaching in a program to present assessment results. Faculty members collectively evaluate student learning, decide on recommendations, and individuals are tasked to implement needed changes to the program. All records are kept in a central repository that all faculty, regardless of status, teaching in a term can readily gain access. These records include all course and or program changes that have been made to preserve the outcomes of assessment to improve student learning.

So, what does it mean for an adjunct or short-term faculty member? These challenges fall into two categories. The first is understanding the program itself. This includes the learning goals to be met in general and the student learning outcomes through particular classes, the level of rigor expected, and the type of student engagement the department seeks in its contingent faculty. This is the responsibility of the program or department chair. It is his or her field of expertise and is part of the guidance expected for new faculty of any status. The second area is one that is the mechanics of assessment. This includes understanding what assessment seeks to do, which tools are used, which rubrics or measures are used, what the different dimensions in a rubric translate to, how to gather student data, and how to analyze and report the data. Helping/teaching/guiding the faculty assigned assessment with this is the responsibility of the assigned assessment liaison. By logically separating the
responsibilities all faculty members face when teaching and assessing that teaching, the Helzberg School increases not only the likelihood that instructors deliver what is desired in the classroom but also meaningful assessment and improved student learning outcomes.

Observers are justified to wonder what incentives exist to entice contingent faculty members to carry out assessment or to take the process seriously. In the Helzberg School, three primary factors have been identified. First, the school includes a provision requiring all faculty to complete any course or program assessment as needed in their employment contracts. Second, the program chair and assessment liaison periodically checks in with contingent faculty members at the beginning, middle, and after the end of each semester to ensure the required assessment is assigned and completed. Third, all adjunct and short-term faculty members are invited to program assessment meetings (at the beginning of each semester) to present their findings and recommendations. Full-time faculty treat contingent faculty with respect and take recommended program changes seriously. The collegial environment makes the adjunct and short-term faculty members feel they are doing more than “just teaching.” In fact, the contingent faculty has a voice in continuous program improvements. Contingent faculty members who already have full-time employment and are not looking to enter academia feel a sense of civic duty in their affiliations with the school, both in the classrooms and in the assessment process. They are helping to shape the education of future economists and business leaders. For other adjunct and short-term faculty members who are looking to become full-time instructors, they recognize that the assessment process provides an opportunity to gain pedagogical skills that are usually not taught in graduate education.

CONCLUSION

The results of our assessment approach with short-term and adjunct faculty largely mirror the results we get from long-term faculty who have had formal assessment training and experience. The model has proven to be very strong, and in many cases, some of the best and most consistent assessment has come from contingent faculty. Perhaps the best testament to the success of the process is that two of the three authors of this paper learned assessment through this process as contingent faculty in the Helzberg School and set examples as outstanding assessor before attaining long-term positions. Assigning mentors (such as program chairs) to contingent faculty also has an added advantage. The best way to learn something well is to teach it, and the mentoring that is done continues to extend and grow our culture of assessment.

As all good processes do, ours is continually being examined and adapted to improve effectiveness. One additional incentive to foster engagement can be providing monetary compensation for adjunct or short-term faculty assigned assessment, especially given the modest pay they receive. Short-term and adjunct faculty also tend to need more guidance from mentors in the beginning so there is a need for the mentors to foster this process. Regardless, the improvement in both assessment and the faculty engagement in continuous
improvement have grown greatly. By admission of many of the faculty themselves, successful assessment of programs has become “no big deal.”
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