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An Exploratory Study Examining a Transformational Salesperson Model Mediated by Salesperson Theory-of-Mind

Philip (Tony) A. Pizelo Dr.
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An Exploratory Study Examining a Transformational Salesperson Model Mediated by Salesperson Theory-of-Mind

Philip A. (Tony) Pizelo

A dissertation proposal submitted in partial fulfillment of the requirements for the degree of
Doctor of Philosophy

In
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Dedication

I dedicate this dissertation to:

Philip Pizelo Jr. and Marie A. Pizelo
parents, role models, overcomers

You were the best example of hidden excellence and humble brilliance that I have witnessed. You multiplied your talents, rebounded from challenges, and consistently served others. Your children, grandchildren, the church, and the entire community are so enriched from your lives.

and

Hannah, Samuel, Stephanas, and Esther Pizelo
children, torchbearers, love

Your love and belief in me inspire me every day to perform at my highest level and to give everything I have. I am the proudest father I know, and I continue to be blessed by your accomplishments. I am encouraged by your prayer and love.

and

Bonnie A. Pizelo
wife, teammate, love

I could not have done this without your prayer, sacrifice, and support. I love you forever!

and

Jesus Christ
Lord, Savior, King

“whatever you do, do all to the glory of God” 1 Corinthians 10:31
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As I mentioned in the dedication, my family has been a source of amazing support and faith. I am so grateful to Bonnie, Hannah, Samuel, Stephanas, and Esther.
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Abstract

A customer revolution caused by the popularity of internet commerce, the reliance on social media, and the globalization of the retail industry, calls for an examination of a sales model driven by transformational salespeople. This study examined potential salesperson performance drivers and a proposed moderated mediation model of salesperson performance. This study relied upon a foundation of transformational and other leadership attributes and salesperson theory-of-mind (SToM). Although the conditional indirect effects of the model were not statistically significant, transformational leadership was found to be a statistically significant predictor of sales performance ($c' = .024, t = 2.63, p = .0088$). Several sub-components of transformational leadership were also statistically significant such as individualized consideration ($c' = .133, t = 3.75, p = .0002$). Other statistically significant leadership attribute predictors were contingent reward leadership ($c' = .102, t = 2.65, p = .0084$), and laissez-faire leadership, negatively correlated, ($c' = -.061, t = -2.07, p = .039$). The study also found that transformational leadership is positively related to SToM ($a_i = .768, t = 2.88, p = .0042$). Although the study found these predictors statistically significant, caution must be exercised in the interpretation of results due to the low effect sizes. This study is suggestive for sales theory and for sales practice. The study contributes to the pioneering work of Bass (1997) who originally made the theoretical connection between transformational leadership attributes and effective sales performance. He theorized that because sales is an influence process involving the alignment of the customer’s goals and objectives with the organization’s solutions, it is like transformational leadership, which is also an influence process in which the leader responds to followers’ needs by aligning goals and objectives of individuals with the organization. The results not only confirm Bass’s theory, but also extend it with the addition of other leadership attributes, contingent reward leadership and laissez-faire leadership. This study employed a cross-sectional sampling approach and used data generated by
an online package of surveys covering transformational leadership, salesperson theory-of-mind, and personality.

*Keywords: sales, sales performance, sales drivers, transformational leadership, salesperson theory-of-mind, idealized influence, inspirational motivation, individualized consideration, contingent reward leadership, laissez-faire leadership*
CHAPTER I

Introduction and Literature Review

“To me, job titles don’t matter. Everyone is in sales. It’s the only way we stay in business.”
Harvey MacKay

Introduction
The relevance and importance of sales to organizations and the economy has never been higher and it is experiencing unprecedented growth (Manning, Ahearne, & Reece, 2015). Likewise, the importance of salespeople to organizations is evident by the $15 billion investment made in them each year (Blocker, Cannon, Panagopoulos, & Sager, 2012; Cespedes, 2015; Kumar, Sunder, & Leone, 2015; Salopek, 2009; Training, 2013). For the purposes of this study, the definition of sales (or selling) is “an important part of marketing that relies heavily on interpersonal interactions between buyers and sellers to initiate, develop, and enhance customer relationships” (Ingram, LaForge, Avila, Schwepker, & Williams, 2015; p. 4). The current economic climate is forcing pressure upon organizations to adapt to major leaps in technology and globalization (Beeler, Zablah, & Johnston, 2017; Moncrief, Marshall, & Rudd, 2015) and is causing a customer revolution (Manning et al., 2015; Ogbuehi & Sharma, 1999; Piercy, 2010; Piercy & Lane, 2005; Stacho, Stachová, & Hudáková, 2015). This customer revolution has implications on sales interactions between businesses and consumers (Ingram et al., 2015) and the role of the salesperson (Baumann & Le Meunier-Fitz Hugh, 2015; Palmatier, Scheer, & Steenkamp, 2007). For example, strong customer–seller relationships tend to positively affect sales performance (Palmatier, Dant, Grewal, & Evans, 2006). Furthermore, the vital role of the salesperson is supported by the evidence that they create firm value (Blocker et al., 2012; Kumar, Sunder, & Leone, 2014). The customer revolution must be met with a revolution in sales that encompasses important interpersonal skills as sales predictors (Franke & Park, 2006; Lassk, Ingram, Kraus, & DiMascio, 2012).
**Purpose of the study.** The purpose of this study is to examine a sales model that in the context of the customer revolution provides a foundation for a revolution in sales. This model involves a moderated mediational analysis. Specifically, I will examine the performance effects of a salesperson’s transformational and other leadership attributes mediated by their salesperson theory-of-mind (SToM), which is moderated by sex. My approach involves leveraging the leadership field and SToM as analysis tools and the basis for a model for predicting and explaining a major development in sales. I define the revolution in sales as a paradigm shift in effective sales drivers utilizing transformational and other leadership attributes and SToM. Traditional sales models do not fully explain the salesperson characteristics that influence sales performance. The foundation for this approach is that leadership and sales are both influence processes (Bass, 1997) that align the objectives of followers and customers to those of the sales organization. Bass (1997) hypothesized the potential link between selling and transformational leadership. This leads to the testable question of whether transformational and other leadership attributes can be a factor for sales performance. Of all the possible leadership models, I selected transformational and other leadership attributes from the full-range leadership model because it is theory based and it has a tremendous amount of empirical evidence support (Avolio, 2011). Furthermore, it directly isolates the influence process in which the leader responds to followers’ needs by enabling them, and by aligning their goals and objectives with the organization (Avolio, 2011). In both sales and leadership, interactive communication, involving a clear purpose for others to align around, helps followers and customers to stay present, be connected and engaged, and fosters collaboration (Bass, 1997). In the next section, I describe how my examination will extend the sales literature.

**Extension of sales research literature.** This study seeks to extend the sales literature in three ways. First, I will examine the salesperson specific leadership characteristics, as was first
recommended and theorized by Bass (1997). Second, I will also examine SToM as a mediator of the relationship between salesperson specific leadership characteristics and sales performance. Third, I will examine sex as a moderator of the relationship between SToM and sales performance. Finally, I will also apply the results to extend sales training and development.

**Transformational and other leadership attributes as predictors of sales performance.**

Selling is a form of influence, as is leadership, and therefore transformational leader behaviors should impact sales performance (Bass, 1997). For example, salespeople who score high in transformational leadership scores, indicating high salesperson specific leadership characteristics, also tend to be high sales performers and vice versa. An exploratory study found promising results in this regard, however it had a small sample (n = 24) and was limited to one company operating in a single industry (Humphreys & Zettel, 2011). The current study seeks to extend the generalizable conclusions by substantially enlarging the sample size, increasing the number of companies represented and by including a multitude of industries. This study will test transformational leadership, as well as other types of leadership dimensions as potential sales drivers or factors of sales performance. Sales drivers, in this study, are the determinants or the factors that predict salesperson performance (Verbeke, Dietz, & Verwaal, 2011). My major emphasis is on transformational leadership (see Table 3) which is defined as a leadership theory that describes the behavior of a leader as one who develops followers, helps them to be more effective, to take ownership and lead, and is “proactive, raising follower awareness for transcendent collective interests, and helping followers achieve extraordinary goals” (Antonakis, Avolio, & Sivasubramaniam, 2003; p. 264). Transformational leadership is further theorized to be composed of the “four i’s” (Avolio et al., 1991), which are first-order factors (see Table 3): idealized influence, intellectual stimulation, inspirational motivation, and individualized
Transformational leadership is part of the full-range leadership model, which has three categories of leadership: passive-avoidant (made up of laissez-faire and management by exception-passive), transactional (made up of management by exception-active and contingent reward), and transformational, made up of idealized influence, intellectual stimulation, inspirational motivation, and individualized consideration (Avolio, 2011). Each of these components will be discussed below in detail. The basic question here is: Does a salesperson’s strength (or weakness) in salesperson specific leadership characteristics predict their sales performance? Finding a statistically significant relationship here would indicate a salesperson’s ability to be transformational (high specific leadership characteristics). Furthermore, a statistically significant relationship would show that the salesperson’s relative strength in personal leadership characteristics influence his/her sales performance. The current literature has not included a study such as this that examines salesperson leadership characteristics as sales drivers. In the next section, I discuss how I will extend the literature by showing how SToM contributes to explaining and predicting a revolution in sales.

**Salesperson theory of mind (ToM) as a mediator.** Theory of mind (ToM) is a label for the ability to match mental conditions to oneself and others and was originally designed to describe chimpanzee behavior (Premack & Woodruff, 1978). Furthermore, this ability is the main way in which we make sense of, or predict, another person's behavior (Peterson, O’Reilly, & Wellman, 2016). Theory of mind is also referred to as “interpersonal mentalizing” (Frith, Morton, & Leslie, 1991; Singer & Fehr 2005), and “social intelligence” (Joliffe & Baron-Cohen, 1999), and is similar with “empathy” (Baron-Cohen, Wheelwright, & Hill, 2001). To assess ToM, I will be using the salesperson theory of mind assessment (SToM) which is defined as (see Table 3) a “scale for measuring salespeople’s interpersonal-mentalizing skills—that is, a salesperson’s ability to ‘read
the minds’ of customers in the sense of first recognizing customer intentionality and processing subtle interpersonal cues and then adjusting volitions accordingly” (Dietvorst et al., 2009; p. 653). This construct will allow me to explore another dimension of the leadership qualities of salespeople as a mediator. This includes the skills that allow salespeople to attend to often overlooked customer behavior that may signal what customers are thinking. A key quality of these interpersonal mentalizing skills includes salesperson perception skills (Dietvorst et al., 2009). Below, I discuss the link between ToM and leadership. I will test SToM as a moderated mediator of the influence transformational leadership has on predicting sales performance. The separate components of SToM are rapport building, detecting nonverbal cues, taking a bird’s-eye view, and shaping the interaction (Dietvorst et al., 2009). By extending ToM to be used as a moderated mediator (through the SToM scale) the sales field literature is expanded by delineating skills from the larger theory of mind (ToM) field, that allow salespeople to interpret non-verbal customer behaviors that might signal what customers are thinking (Dietvorst et al., 2009). In this study, I will first test ToM (through the SToM scale) as a moderated mediator of the relationship between salesperson transformational and other leadership attributes and sales performance. The research question involving ToM (through the SToM scale) is: Does a salesperson’s strength (or weakness) in ToM, as measured by their score from a valid measure (SToM), dependent on sex, help transformational and other leadership attributes predict sales performance? By examining a revolution in sales with a new model that uses transformational and other leadership attributes and SToM, I hope to provide insight as to the sales drivers of a new revolution in sales.

The link between ToM and leadership. A paucity of research has been conducted examining the link between ToM and leadership. Three recent studies by Peterson and her colleagues provide some rudimentary basis of research supporting the link between ToM and
leadership. The first study found that middle school children had a statistically significant correlation between ToM and peer leadership (Peterson, O’Reilly, Wellman, 2016). The second study found that ToM understanding independently predicted peer social skills (Peterson, Slaughter, Moore, & Wellman, 2016). Third, evidence indicates that ToM predicts later social and cognitive outcomes and supportive results for mutual friendship (Fink, Begeer, Peterson, Slaughter, & Rosnay, 2015). The second and third studies are included here because of the connection between social skills and leadership. This study attempts to help fill the gap in the ToM and leadership link.

*Sex as a moderator of the relationship between SToM and sales performance.* There is strong theoretical research that indicates ToM (through the SToM scale) as a mediator, may itself be dependent on a moderator, sex. This is because there is strong evidence that females show superiority over males in mentalizing skills (Deaner, Shepherd, & Platt, 2007; Kirkland, Peterson, Baker, Miller, & Pulos, 2013). This advantage seems to start very early as girls showed more advanced constructivist ToM than boys in high school (Weimer, Dowds, Fabricius, Schwanenflugel, & Suh, 2017). Using sex as a moderator of ToM is fully supported by the ToM literature and it will also extend the sales literature. The research question involving sex as a moderator is: Does the impact of ToM (through the SToM scale), depend on sex, in its mediating of transformational and other leadership attributes predicting sales performance? Finally, I hope to extend the sales literature by applying the results to sales training and development. In this study, I am not testing a training and development exercise, however, I aim to be able to use the results in further research involving salesperson training and development.

*Sales training and development advances through SToM application.* The evidence shows that although ToM develops mainly between 10 and 12 years of age (Weimer et al., 2017),
ToM understanding continues to develop during late childhood and beyond (Peterson, O’Reilly, & Wellman, 2016). Although the developers of the SToM assessment suggest that interpersonal mentalizing is a hardwired brain process that functions spontaneously and mostly unconsciously. They point out that many researchers have proposed that through a brain process called neuroplasticity, life experiences cause a rewiring of the brain. For salespeople, they suggest observational learning, role-playing, and repeated practice as types of training that may enhance interpersonal mentalizing (Dietvorst et al., 2009). In addition, because the ability to be transformational, and other leadership attributes are malleable, these skills can be developed (Avolio, 2011). This research would extend the literature by further expanding potential salesperson training and development methods to include techniques that are linked to transformational and other leadership attribute skill enhancement and interpersonal mentalizing skill development. Because this extension will be an application of the results, it will be further covered in the discussion chapter. The hypotheses are detailed at the end of this literature review. In summary, the hypotheses are centered on transformational and other leadership attributes as sales drivers, mediated by ToM (through the SToM scale), which, in turn, is moderated by sex.

**Conclusion of introduction.** In conclusion of this introduction, I stress the importance of sales to the organization, how a customer revolution is likely triggering the need for a revolution in sales, and the role that personal sales development plays in enhancing the ability of salespersons. The competitive environment is causing a record premium to be placed on selecting, developing, motivating, and retaining top salespeople (Kumar, Sunder, & Leone, 2015). Every indication points to the timeliness of this study. By examining a transformational salesperson model, I will extend the empirical and the practitioner applicability of salesperson research and help explain a revolution in sales. I next cover the literature review of this topic, followed by the theory and the
constructs to be studied. I will follow with the integrated research model and the hypotheses to be tested.

**Literature Review**

The examination of a proposed revolution in sales that responds to a customer revolution is built upon both strong theory and a thorough literature review. In this section, I begin with the review of literature foundational to this study.

**History of sales research.** The history of sales research dates to the formative years of industrial-organizational (I-O) psychology when Walter Van Dyke Bingham formed the bureau of salesman research in response to a request that he develop a training program for sales representatives in the early 1900’s (Landy, 1997). Concurrently, Walter Dill Scott was working at Northwestern University on salesperson selection (Landy, 1997). Scott had previously written the first publication, *The Theory of Advertising* (Scott, 1903), that had applied the principles of psychology to business (Landy, 1997). The two would join forces in 1916 at the newly formed division of applied psychology at Carnegie Institute of Technology and work at the Bureau of Salesman Research (Landy, 1997). From the beginning of I-O psychology’s involvement with sales research, the focus has been on factors or drivers of sales success (Landy, 1997). In the next sections I review sales drivers’ research and the constructs of my study; transformational and other leadership attributes and SToM. The purpose of this review is to first establish the foundation from which I believe I will extend the literature. Secondly, to present the empirical sales research structure in which this study would fit into. And thirdly, the context of the rich history of sales drivers’ research provides a basis of differentiation and comparison. I start with a focus on the sales research delivered from the major studies consistent with Schmidt (1992). Following this I proceed to the literature review of transformational and other leadership attributes and ToM.
Sales drivers research. Because my study involves the examination of sales drivers and a sales model, I will begin with some history of sales drivers’ research. The very first study that examined sales predictors (or drivers of) performance was in 1918 (Oschrin). This research examined 18 saleswomen in a retail setting and focused on sales ability traits. Because of the limited sample size, her results were not generalizable on a stand-alone basis, however this study was incorporated as one of 116 in the first major review of sales drivers by Churchill et al., (1985). Churchill reviewed the literature over a 75-year period from 1907 to 1982 to gather the 116 studies. They used the categorization model of Walker, Churchill, and Ford (1977) in their analysis. I purposefully began with this study as it is considered a “watershed” type of study. One of the main reasons why it is so highly regarded is that it shifted the thinking about sales drivers from mainly trait-based to more “influenceable” (state like or malleable) sales drivers (Churchill et al., 1985). This is the same focus (influenceable sales drivers) that I have in this study. Their results showed that personal factors (such as age or education) accounted for the highest observed variation in performance across studies (Churchill et al., 1985). See Table 1 for a complete list and a comparison with other studies. Churchill et al. (1985) also examined three potential moderators (see Table 2): customer type, product type, and type of dependent measure used, finding that product type showed significance. About the same time there were three other early studies that examined other validity studies of overall job performance, providing conflicting results. In the first validity study of overall job performance (Hunter & Hunter, 1984), cognitive tests showed to be promising predictors of salesperson performance (mean validity $r = .61$). This finding would not be supportive of my emphasis on malleable rather than trait-like factors. In the second study (Schmitt, Gooding, Noe, & Kirsch, 1984), cognitive tests had an average validity coefficient ($r = .248$), which was clearly not as strong a finding as the Hunter and Hunter (1984) study. There were
mixed results with personality predictors also. In the Schmitt, et al. (1984) study they found poor results ($r = .15$) but a higher correlation was found in another study (Ghiselli & Barthol, 1953), a cumulative review, ($r = .36$). In this study, I will use personality as a covariate because considerable prior research shows that personality influences salesperson performance, therefore I will control for it in examining the factors on which I focus. These early studies provide a foundation in which I build from in that they tended to have mixed results with trait-based sales drivers such as cognitive ability and stronger results with malleable sales drivers such as skill. The second major study on drivers of sales performance focused on personality drivers and covered the period from 1918 to 1996 with 129 studies (Vinchur, Schippmann, Switzer, & Roth, 1998). They found that extraversion and conscientiousness predicted sales success (Vinchur, et al., 1998).

The third major study on drivers of sale performance covered the period from 1979-2005 with 155 studies (see Table 1) that examined customer orientation (CO) and adaptive sales behavior (ASB) as sales drivers (Franke & Park, 2006). The researchers found that ASB predicted all three ratings of performance (self-rated, manager rated, and objective), whereas CO increased only self-rated performance (Franke & Park, 2006). Further empirical evidence in this regard came from 1982 to 2013 that found that adaptive selling mediates the relationships of selling orientation and customer orientation on sales performance (Goad & Jaramillo, 2014). These two are very interesting because they involve malleable sales drivers (ABS & CO) and because they are supported by some statistically significant results in empirical sales drivers’ research. The fourth major study on drivers of sale performance covered the period from 1982-2008 with 268 studies.

Table 1

|------------------|----------------|----------------------|-----------------|
Verbeke et al. (2011) examined a transformational salesperson model and found five statistically significant sub-categories (see Table 1) with sales performance (in order of average adjusted $r$): selling knowledge, adaptiveness, role ambiguity (negative), cognitive aptitude, and work engagement. They also tested the following moderators: measurement methods, research context, and sales type and found significance with all of them (see Table 2). This research is interesting in that it is the most current and comprehensive. They are also the first to consider leadership, although this is supervisory leadership, which is extrinsic, rather than the intrinsic salesperson transformational, and other leadership attributes, that I will be examining. My focus is on the salesperson / customer relationship not the sales manager / salesperson relationship. The next major study in sales drivers’
research was the Barrick, Mount, and Judge (2001) study which summarized the work of 15 other

Table 2

Moderators of sales drivers per research study

<table>
<thead>
<tr>
<th>Research Study</th>
<th>Customer Type</th>
<th>Product Type</th>
<th>Dependent Metric</th>
<th>Experience</th>
<th>Sex</th>
<th>Measures</th>
<th>Publication Year</th>
<th>Publication Source</th>
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<tbody>
<tr>
<td>Churchill (1985)</td>
<td>(n = 116)</td>
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<tr>
<td>Vinchur (1998)</td>
<td>(n = 129)</td>
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<td>Design prevented analysis</td>
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<td>Franke &amp; Park (2006)</td>
<td>(n = 155)</td>
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<td>Verbeke (2011)</td>
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</table>

(S) Statistically significant moderator of the driver--sales performance relationship. (NS) Non-Statistically significant moderator of the driver--sales performance relationship. # Weak evidence of moderating effects on ASB, CO, and other factors (Franke & Park, 2006).

major sales studies and found that conscientiousness is a valid predictor across various performance measures in all occupations studied. Another sales driver that has garnered some attention is organizational commitment. In a major study on the subject, Brown and Peterson (1993) found that organizational commitment tended to be a consequence rather than a predictor of salesperson job satisfaction. Emotional intelligence (EI) has been empirically studied in sales research studies, finding that it statistically significantly predicts organizational commitment and turnover intentions and all three types of EI statistically significantly predict job satisfaction, mediated by state affect and job performance, (Miao, Humphrey, & Qian, 2016b). A leaders' EI positively relates to subordinates' job satisfaction and a subordinates' EI is positively correlated with leaders' EI and mediates the relationship between leaders' EI and subordinates' job satisfaction (Miao, Humphrey, & Qian, 2016a). Mixed EI has been found to be statistically significantly correlated with supervisor-rated job performance, but not when they controlled for covariates such as self-efficacy, self-rated performance, personality, and general mental ability (Joseph, Jin,
Newman, & O'Boyle, 2015). Finally, a statistically significant relationship was found between ratings of both EI and leadership behaviors when the ratings were from the same source (Harms & Credé, 2010). The EI research was useful because there are foundational similarities between transformational leadership individualized consideration and EI. In summary, there are some interesting key points in the sales drivers’ major studies. First, the Churchill et al. (1985) research shifted the sales performance focus from personal traits to “influenceable” (p. 117) drivers of sales performance. This shift provides a strong foundation for this study and a focus on sales drivers that are malleable rather than traits, such as personality and cognitive abilities. Second, the Verbeke et al. (2011) research, in finding selling-related knowledge as the highest rated driver, draws on, what they label the absorptive learning capacity of the salesperson, in three key areas: 1) “know-why” – product (or service) knowledge, 2) “know-how” – how the product (or service) provides a potential solution, and 3) “know-who” focusing on key decision-makers and influential buyers (Stremersch & Van Dyck 2009; Verbeke, Belschak, Bakker, & Dietz, 2008). This result leads them to question whether salespeople are functioning as knowledge brokers in a knowledge-intensive economy (Verbeke et al., 2011). This may be an example of the revolution in sales consummating the customer revolution. The knowledge-intensive economy is a descriptor of the customer revolution and it provides insight into the basis of a revolution in sales. Once again, this result provides more foundation for the pursuit of sales drivers that can be developed. Another result that they highlight is the second largest predictor in their study; the degree of adaptiveness (see Table 1) which is a dynamic variable directly in the context of the sales transaction (Verbeke et al., 2011). This result addressed an admitted limitation in the Churchill et al. (1985) study. This review provided a further rationale for extending the sales drivers research literature by examining a transformational salesperson model that has a moderated mediator (SToM by sex). Below, I
discuss how this model is unique in the sales literature with the introduction of SToM in a transformational salesperson model. This model, through SToM, also has potential applications in salesperson adaptability, which will be further explored in the discussion section. The next section reviews the research constructs.

**Research constructs.** The research constructs for my study are detailed in Table 3. In this section I review each of the research constructs in this study. I begin with transformational and other leadership attributes.

**Transformational and other leadership attributes.** Transformational leadership theory and the full-range leadership model is best explained by looking at its components. It is represented by a model that has two axes: one that reflects activity (active versus passive) and the second that shows effectiveness (ineffective versus effective). This full-range leadership model also has three categories of leadership: passive-avoidant (made up of laissez-faire and management by exception-passive), transactional (made up of management by exception-active and contingent reward), and transformational, made up of idealized influence, intellectual stimulation, and individualized consideration.

Table 3

**Proposed Research Constructs**

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variables</th>
<th>Covariates</th>
<th>Mod/Med</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales Performance</td>
<td>Transformational Leadership</td>
<td>Personality</td>
<td>SToM (Med)</td>
</tr>
<tr>
<td></td>
<td>idealized influence</td>
<td>Experience</td>
<td>Sex (Mod)</td>
</tr>
<tr>
<td></td>
<td>intellectual stimulation</td>
<td>Age</td>
<td></td>
</tr>
<tr>
<td></td>
<td>inspirational motivation</td>
<td></td>
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<tr>
<td></td>
<td>individualized consideration</td>
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<tr>
<td></td>
<td>Transactional Leadership</td>
<td></td>
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<tr>
<td></td>
<td>management by exception-active</td>
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<td></td>
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<tr>
<td></td>
<td>contingent reward</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Passive-Avoidant Leadership</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>laissez-faire</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>management by exception-passive</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Salesperson Theory-of-Mind (SToM)</td>
<td></td>
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</tr>
</tbody>
</table>
stimulation, inspirational motivation, and individualized consideration (Avolio, 2011). Transformational leadership is defined as a leadership theory that describes the behavior of a leader as one who develops followers, helps them to be more effective, to take ownership and lead, and is “proactive, raising follower awareness for transcendent collective interests, and helping followers achieve extraordinary goals” (Antonakis et al., 2003; p. 264). Transactional leadership is defined as “an exchange process based on the fulfillment of contractual obligations and is typically represented as setting objectives and monitoring and controlling outcomes” (Antonakis et al., 2003; p. 265). It is made up of management by exception-active (monitors mistakes, focused on standards fulfilled) and contingent reward (rewards achievements, contractual obligation). The final part of the theory relates to passive-avoidant leadership behavior. This is made up of management by exception-passive (fight fires, only intervenes in mistakes), and laissez-faire (avoids involvement, abdicates authority) (Antonakis et al., 2003). Recent research suggests that respondents typically do not differentiate between management by exception-passive and laissez-faire when describing their leaders. As such, I will focus on one of them for the sake of parsimony (Hinkin & Schriesheim, 2008). Transformational leadership theory has its early roots in work done by Burns (1978) who said, “the transforming leader looks for potential motives in followers, seeks to satisfy higher needs, and engages the full potential of the follower” (p. 4). The relationship between the leader and the follower is such that they “raise one another to a higher level of motivation and morality” (p. 20). In Burn’s theory, a leader has a tendency of either being a transformational leader (focused on transforming followers) or a transactional leader (focused on transactions with followers) but not both at the same time. Transformational leadership theory was further developed and tested by Bass (1985). He believed that, contrary to Burns, leaders could be in both categories (transformational and transactional) at the same time and that there were no
distinct forms of leadership. The full-range leadership theory has three main types of leadership (transformational, transactional, and laissez-faire), which are represented by eight distinct factors. The transformational leadership theory was further developed with the addition of Avolio and the introduction of the Multifactor Leadership Questionnaire (MLQ) as an assessment to measure transformational leadership (Bass & Avolio, 1995). The MLQ has undergone several revisions in attempts to improve the utility of the measure and its psychometric properties. The form used for this study, the MLQ-5X short form will be discussed in the Method section. The transformational leadership framework has been widely studied to the point that now it has become the dominant framework in the leadership field (Barling, Christie, & Hoption, 2011). For example, in the U.S. Army both transformational, and transactional-contingent reward leadership ratings, positively predicted performance (Bass, Avolio, Jung, & Berson, 2003). One influential study (Judge & Piccolo, 2004) found statistically significant overall validity for transformational leadership, contingent reward and laissez-faire. The sales literature is well documented with the impact that leadership has on sales performance

Table 4

Construct Definitions

<table>
<thead>
<tr>
<th>Variable</th>
<th>Type</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales Performance</td>
<td>DV</td>
<td>The self-rated performance outcome resulting from sales.</td>
</tr>
<tr>
<td>Transformational Leadership</td>
<td>IV</td>
<td>*A leadership theory: a leader who is “proactive, raise[ing] follower awareness for transcendent collective interests, and help[ing] followers achieve extraordinary goals”</td>
</tr>
<tr>
<td>Idealized influence</td>
<td>IV</td>
<td>**Builds trust and acts with integrity and confidence.</td>
</tr>
<tr>
<td>Intellectual stimulation</td>
<td>IV</td>
<td>**Encourages innovative and creative thinking.</td>
</tr>
<tr>
<td>Inspirational motivation</td>
<td>IV</td>
<td>**Communicates vision and ambitious goals, projects optimism, and inspires others.</td>
</tr>
</tbody>
</table>
Individualized consideration IV ** Advising, supporting, and coaching others.

Transactional Leadership IV * “An exchange process based on the fulfillment of contractual obligations … setting objectives and monitoring and controlling outcomes.”

Management by exception-Active IV ****“Active leaders monitor follower behavior, anticipate problems, and take corrective actions before the behavior creates serious difficulties.”

Contingent reward IV ***“The leader clarifies expectations and establishes the rewards for meeting these expectations.”

Management by exception-Passive Laissez-faire IV “Fight fires, only intervenes in mistakes.”

SToM M # “scale for measuring salespeople’s interpersonal mentalizing skills—that is, a salesperson’s ability to ‘read the minds’ of customers.”

Sex V Declared sex.


(Agnihotri et al., 2014; Chakrabarty, Oubre, & Brown, 2008; Dubinsky, 1999; Ingram, LaForge, Locander, MacKenzie, & Podsakoff, 2005). However, to differentiate this research from the current study, the sales research referenced here is focused on the relationship between leaders, such as sales managers, and salespersons. In the current study, the focus is on the relationship between the salesperson and the customer and examines the personal transformational and other leadership characteristics of salespeople. Previous research has also shown that transformational leadership is impactful on overall performance (Bass et al., 2003; García-Morales, Lloréns-Montes, & Verdú-Jover, 2008; Wang, Oh, Courtright, & Colbert, 2011), impacting entrepreneurial orientation (Öncer, 2013), helping salespersons learn from their failures (Boichuk, et al., 2014), enhancing emotional intelligence (Shannahah, Bush, & Shannahhan, 2013), positively impacting
salesperson discretionary effort (Dubinsky & Skinner, 2002), promoting salesperson moral judgment (Schwepker & Good, 2010), enhancing overall sales performance (Dubinsky, Yammarino, & Jolson, 1995; MacKenzie, Podsakoff, & Rich, 2001; Smith, Andras, & Rosenbloom, 2012), playing a role in sex differences relative to sales performance (Dionne, Yammarino, Comer, Dubinsky, & Jolson, 1996), boosting organizational citizenship behaviors (Ölcer, Florescu, & Nastase, 2014), building trust in the organization (Schwepker & Good, 2013; Zhu, Newman, Miao, & Hooke, 2013), helping with complex tasks (Dóci & Hofmans, 2015), and reducing turnover intention (Dimaculangan & Aguilung, 2012). One criticism I found of the construct was the belief that transformational leadership is really a political leadership theory and therefore less relevant for leadership in a managerial setting (Andersen, 2015). However, the evidence supporting its use in a managerial setting far outweighs the criticism. The use of this construct in this study is to determine if it has incremental validity as a sales driver in evaluating sales performance. The basis of this application, as mentioned above, is to demonstrate how transformational and other leadership components can apply to sales (Bass, 1997). This would add to the sales research literature by highlighting a sales driver in the context of a new model. This new model is not a replacement to any of the existing sales models (such as Churchill et al., 1987), but rather an attempt to explain variations in salesperson performance that has not previously been accounted for. Next, I cover the ToM construct.

Theory-of-mind (ToM). ToM is a label for the ability to match mental conditions to oneself and others and was originally designed to describe chimpanzee behavior (Premack & Woodruff, 1978). Furthermore, this ability is the main way in which we make sense of or predict another person's behavior (Peterson, O'Reilly, & Wellman, 2016). Theory of mind is also referred to as “interpersonal mentalizing” (Frith, et al., 1991; Singer & Fehr 2005), and “social intelligence”
(Jolliffe & Baron-Cohen, 1999), and is similar with “empathy” (Baron-Cohen, Wheelwright, & Hill, 2001). ToM is a salesperson’s “ability to engage in interactions with customers based on how well they consider the intentions and other mental states and events of customers” (Dietvorst et al., 2009; p. 654). In the next sections I explore ToM theory followed by the ToM construct.

The theory supporting ToM. The theory that supports ToM follows recent developments in neuroscience called “interpersonal mentalizing” (Singer & Fehr 2005). More formally, interpersonal mentalizing refers to the “activity of inferring another person’s beliefs, desires, risk preferences, intentions, and other mental states or events, as well as the ability to process subtle cues and adjust volitions accordingly” (Dietvorst et al., 2009; p. 654). The development of SToM and the use of interpersonal mentalizing in a sales setting fits squarely with previous calls for improved measures. For example, Sujan (1999) suggested that improved measures are needed that indicate a salesperson’s ability to interpret facial expressions and the ability to pick up on nonverbal cues. The developers of the SToM believe that it indirectly operationalizes interpersonal mentalizing concepts in a selling context and that it serves as a valid assessment because salespeople must comprehend the customer’s mental states and processes (Dietvorst et al., 2009). The dimensions of mentalizing that is critical for salesperson effectiveness is comprehending the beliefs of the customer about their world (Singer & Fehr 2005).

The applicability of ToM with transformational and other leadership attributes. The applicability of ToM linked to transformational and other leadership attributes begins with ToM and leadership overall. A paucity of research has been conducted examining the link between ToM and leadership. Three recent studies by Peterson and her colleagues provide some initial basis of research supporting the link between ToM and leadership. The first study found that middle school children had a statistically significant correlation between ToM and peer leadership (Peterson,
O’Reilly, Wellman, 2016). The second study found that ToM understanding independently predicted peer social skills (Peterson, Slaughter, Moore, & Wellman, 2016). Third, evidence indicates that ToM predicts later social and cognitive outcomes and supportive results for mutual friendship (Fink, Begeer, Peterson, Slaughter, & Rosnay, 2015). The second and third studies are included here because of the connection between social skills and leadership.

The applicability of sex as a moderator between ToM and sales performance. There is strong theoretical research that indicates that ToM (through the SToM scale) as a mediator may itself be dependent on a moderator, sex. This is because there is strong evidence that females show superiority over males in mentalizing skills (Deane et al., 2007; Kirkland et al., 2013). This advantage seems to start very early as girls showed more advanced constructivist ToM than boys in high school (Weimer et al., 2017). Using sex as a moderator of ToM is fully supported by the ToM literature. With this theoretical background, I will now move on to the ToM construct.

The ToM construct. The ToM construct will be measured by SToM and often called interpersonal mentalizing. The four sub dimensions of STom are: rapport building, detecting nonverbal cues, taking a bird’s-eye view, and shaping the interactions (Dietvorst et al., 2009). The utility of the SToM is reflected by Sujan (1999) who said that salespeople need to be able to identify customer needs at the underlying level. This is a salesperson’s ability to pick up on nonverbal cues. One recent study from Brazil examined the impact of salesperson interpersonal mentalizing skills on sales performance and found that attachment anxiety and subjective happiness had an influence on interpersonal mentalizing skills which ultimately impacted sales performance (Agnihotri, Vieira, Senra, & Gabler, 2016). There is one other study that has researched interpersonal mentalizing as a construct in a sales setting. Using a random sample of independent insurance agents, the researchers found that the four dimensions of interpersonal
mentalizing have different roles for the effectiveness of selling behaviors: 1) taking a bird's-eye view was a moderator, 2) shaping the interaction was a mediator of the relationship between selling behaviors and performance, 3) and, building rapport improved sales performance only if they could detect customer nonverbal cues (Chakrabarty, Widing, & Brown, 2014). Two of the constructs that have been linked to the SToM measure are customer orientation and adaptive sales behavior (Dietvorst et al., 2009) which will be covered in the discussion section.

**Theoretical underpinnings.** The theoretical underpinnings of this project start with the specification of the salesperson role that is of interest here.

**Salesperson role.** Salespeople perform a multitude of roles or tasks in their positions. Dubinsky (1980/81), among others, has developed the seven steps of selling. These include (Moncrief & Marshall, 2005):

1. prospecting -- the method by which salespeople search for new customers and potential customers;
2. preapproach – includes all post prospecting activities prior to the actual visit with a prospect or customer;
3. approach – usually takes the first minute or minutes of a sale. It consists of the strategies and tactics employed by salespeople when gaining an audience and establishing initial rapport with the customer;
4. presentation – the main body of the sales call and should occur after the salesperson has predetermined the needs of the customer;
5. overcoming objections – customer questions and hesitancies about the product or company;
6. close – the successful completion of the sales presentation culminating in a commitment to buy the good or service; and
7. follow-up -- much work begins after the sale to make sure the customer is happy with the product/service and that everything that was promised is being delivered (p.15).
The focus on this study is on the following sales steps: approach, presentation, overcoming objections, and the close. Although the research may apply to all sales steps specifically it is focused on the direct salesperson / customer interaction, which I will discuss below.

**Salesperson model/taxonomy.** I place this study into the salesperson model/taxonomy developed by Walker/Churchill and colleagues (Churchill et al., 1985; Walker et al., 1977). I decided on this taxonomy because it 1) focuses on the psychological mechanisms leading to sales performance, and 2) it takes the perspective of the salesperson (self-reports) rather than relying on managers reports or objective reports. The taxonomy includes motivation, sales aptitude, skill level, role perceptions, personal factors/variables, and organizational and environmental factors (see Table 5). This study involves mainly skill level with salesperson specific leadership characteristics (transformational and other leadership attributes) and SToM as the key variables.

**Salesperson/customer interaction.** The salesperson / customer interaction is the foundation of sales and is analogous to the leader / follower interaction. Salesperson interactions with customers are critical for building value and loyalty with the customer. In a similar manner, leadership interactions are critical for organizations to achieve their goals. The positive relationship between transformational leadership and performance has been established by several studies (Judge & Piccolo, 2004; Lowe, Kroeck, & Sivasubramaniam, 1996; Patterson, Fuller, Kester, & Stringer, 1995). Specifically, I draw on transformational leadership (and other leadership attributes) as a comparative model, relying on the similarity of the leader / follower interaction to the salesperson / customer interaction as was first identified by Bass (1997). In general, transformational leadership, and other leadership attributes, is an interactionism model.

Interactionism is a bridge between personality psychology and social psychology because in personality the emphasis is on ‘person’ factors (e.g. individual differences, traits,
dispositions), while in social psychology the concern is the impact of the situation on behavior (and in particular, the impact of the experimental situation; Reynolds et al., 2010; p. 459).

Transformational leadership is defined as a leadership theory that explains how leader behaviors inspire followers to achieve extraordinary outcomes, and can lead to high levels of follower performance, satisfaction, as well as high levels of commitment to the group and the organization (Avolio, 2011). It further describes the behavior of a leader as one who is “proactive, raises follower awareness for transcendent collective interests, and helps followers achieve extraordinary goals” (Antonakis et al., 2003; p. 264). Transformational leadership is further theorized to be composed of the “four i’s” (Avolio et al., 1991), which are first-order factors (see Table 4): idealized influence (builds trust and acts with integrity, confidence), intellectual stimulation (encourages innovative and creative thinking), inspirational motivation (communicates vision and ambitious goals, projects optimism, and inspires others), and individualized consideration (advising, supporting, & coaching others). At the heart of this theoretical link is the question: Would transformational leaders make effective salespeople? To answer this question, I need to examine the factors or components of transformational leadership. This is the “four i’s” mentioned above. I will now explore each of these subcomponents as they relate to sales. My aim here is to find an applicable basis in sales research and in sales theory through reviewing the transformational leadership theory. The leadership concepts expand how we think about social influence which is instrumental in the sales process. I will start with idealized influence.

**Idealized influence.** Transformational leaders behave in ways of idealized influence becoming role models for their followers by advocating a cause or mission in an admirable or respected manner (Avolio, 2011). One of the characteristics that surfaces often in describing the
idealized influence of transformational leaders is that they are trustworthy (Avolio et al., 1991). Research by Bono and Judge (2004) found a connection between transformational leadership, building trust, and job performance. In the most current model of sales, a relationship strategy is required for success and this relies on trustworthiness among other qualities (Manning et al., 2015). Sales research and theory support the notion that transformational leadership idealized influence is similarly impactful in sales as it is in leadership (Bass, 1997; Bono & Judge, 2004). Influence and influence tactics have been shown to be statistically significant in sales (Chakrabarty, Brown, & Widing, 2011; Higgins, Judge, & Ferris, 2003; Plouffe, Bolander, & Cote (2014).

Table 5  

Walker / Churchill Salesperson Taxonomy

<table>
<thead>
<tr>
<th>Factor/Variable</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivation</td>
<td>*The amount of effort the salesman desires to expend on each of the activities or tasks associated with his job, such as calling on potential new accounts, planning sales presentations, and filling out reports</td>
</tr>
<tr>
<td>Sales aptitude</td>
<td>**The salesman's intelligence and his perceptions of his own ability as a salesman. The aptitude category … reflects a number of personality characteristics as well as some other general ability characteristics</td>
</tr>
<tr>
<td>Skill level</td>
<td>***Ability to perform</td>
</tr>
<tr>
<td>Role perceptions</td>
<td>^The role attached to the position of salesman in any firm represents the set of activities or behaviors to be performed by any person occupying that position</td>
</tr>
<tr>
<td>Personal factors/variables</td>
<td>^^Personal variables are intra-individual factors that might be related to salespeople's performance but which are not part of the aptitude, skill level, motivation, and role perceptions components. Past studies have included such factors as the salesperson's age, height, sex, weight, ethnicity, appearance, education, marital status, number of dependents, club memberships, and other similar characteristics</td>
</tr>
</tbody>
</table>
| Organizational/             | }
environmental factors #Conditions external to the salesperson such as characteristics of the company (selection techniques, training methods, supervision, and climate), the economy, social conditions, and compensation packages


Transformational leadership idealized influence, is supported by sales research and theory and thus I will continue from the foundation that it is also impactful in sales. I will now move on to intellectual stimulation.

**Intellectual stimulation.** The second “i” of transformational leadership is intellectual stimulation. The transformational leader encourages innovative and creative thinking (Avolio et al., 1991). They do this by suggesting a new approach or perspective, critiquing assumptions, and taking a fresh look at challenges (Avolio, 2011). This includes soliciting new ideas and new approaches from followers. Transformational leaders tend to foster a climate for innovation that promotes employee creativity (Jaiswal & Dhar, 2015; Jaiswal & Dhar, 2017). For sales, intellectual stimulation is equally important in its support of creativity (Pullins, Strutton, & Pentina, 2012) and in motivating the development of new sales ideas and sales solutions to challenges. One example is how sales managers can influence salesperson creativity and subsequently salesperson performance (Agnihotri, Krush, & Trainor, 2014). There appears to be a link between thinking styles and sales performance and highlighted by the importance of creativity (Groza, Locander, & Howlett, 2016). Another connection between transformational leadership intellectual stimulation and sales is through consultative selling. Consultative selling is defined as “the process of helping customers reach their strategic goals by using the products, services, and expertise of the sales organization” (Ingram et al., 2015; p. 15). The intellectual stimulation comes from three roles 1) orchestrator (gathering expertise from the entire sales organization), 2) business consultant
(salesperson becomes an expert) that gives advice and educates the customer, and 3) long-term ally (long-term relationship) of the customer (Hanan, 2011). As with the first “i,” there is evidence and theory that transformational leadership intellectual stimulation and the innovation and creativity that it fosters is as statistically significant in the sales field as it is in transformational leadership. In the next section, I will cover the third “i,” inspirational motivation.

**Inspirational motivation.** Transformational leaders exemplify inspirational motivation by communicating vision and ambitious goals, projecting optimism and enthusiasm, and inspiring others with meaning and challenge to the task at hand (Avolio et al., 1991). This is the third “i” of the theory. Burns (1978) defined inspirational motivation as “the transforming leader looks for potential motives in followers, seeks to satisfy higher needs, and engages the full potential of the follower” (p. 4). The relationship between the leader and the follower is such that they “raise one another to a higher level of motivation and morality” (p. 20). The analogous example in sales occurs when the salesperson inspires and motivates the customer. The link between customer inspiration/motivation and purchasing was explored in the development of a new construct and measure on customer inspiration recently (Böttger, Rudolph, Evanschitzky, & Pfrang, 2017). Furthermore, they found that customer inspiration is correlated with loyalty and satisfaction and is a motivating aspect that acts as a trigger within customers to adopt a new consumption practice. Research in the construction industry found that motivating customers creates relational value (Sahi, Sehgal, & Sharma, 2017). In sales, the customer's motivation affects the sales relationship (Rowe, Chullen, & Kirchoff, 2016). The role of transformational leadership inspirational motivation appears to be statistically significant in the sales field, from both a theory and a research perspective, in an analogous fashion as it is with the transformational leadership field. Finally, I cover the fourth “i,” individualized consideration, in the next section.
**Individualized consideration.** Transformational leaders possess individualized consideration and are attentive to the personal development of their followers through teaching, mentorship, counseling, and awareness (Avolio, 2011). This also involves advising, supporting, & coaching others (Avolio et al., 1991). Applying the theory in the sales area, would call for salespeople to have individualized consideration relative to their relationship with their customers. Bass (1997) theorized that as leaders are attentive to their followers, so to would salespeople need to be attentive to their customers. This construct has considerable content validity with a statistically significant factor in sales: customer orientation (Terho, Eggert, Haas, & Ulaga, 2015). Another construct used in sales research that has similar meaning is emotional intelligence (EI). EI is defined as “the capacity for recognizing our own feelings and those of others, for motivating ourselves, and for managing emotions well in ourselves and in our relationships” (Manning et al., 2015; p. 504). Sales research tends to indicate that EI is positively correlated with sales success in salespeople and is a better predictor of sales success compared to cognitive measures of intelligence (Goleman, 2006). The role of individualized consideration in sales (although it may be labeled differently) is widely theorized and researched. As Bass (1997) predicted, there is considerable support for applying transformational individualized consideration to the sales function.

**Sales research applicability of transformational and other leadership attributes.** In summary, research and theory support the notion that a transformational leader is likely to be successful in sales. Each of the “four i’s” is theoretically applicable, as Bass (1997) hypothesized many years ago, and each has a separate research basis in the sales field. In addition, there is a link between ToM and leadership (Peterson, O’Reilly, Wellman, 2016). Finally, there is strong evidence that females show superiority over males in mentalizing skills (Kirkland et al., 2013).
Therefore, a theoretical foundation exists to generate the basic question: Does a salesperson’s strength (or weakness) in salesperson specific leadership characteristics predict their sales performance? Finding a statistically significant relationship here would indicate a salesperson’s ability to be transformational (high specific leadership characteristics). This question is interesting in the sales field for several reasons. If a salesperson’s scores are high and these scores positively correlate with high sales performance (and vice versa with low scores and low performance) she/he likely has the ability, to be transformational (Avolio, 2016). Another reason why this is interesting is that transformational leadership, and the “four i’s” are malleable (Avolio, 2011). A basis also exists to generate the second and third questions. Does a salesperson’s strength (or weakness) in ToM, as measured by their score from a valid measure (SToM), dependent on sex, help transformational leadership predict their sales performance? And, does the impact of ToM (through the SToM scale), dependent on sex, in it’s mediating of transformational leadership predicting sales performance? Specifically, my focus in this project is to test a model that emphasizes how salespeople can develop skills and participate in what I am labelling a revolution in sales. The reason for this focus is that trait-based factors, such as personality and cognitive ability, may assist organizations in salesperson recruitment and selection, but they accomplish very little in salesperson development (Shannahan, Shannahan, & Bush, 2013). Personality traits are “relatively enduring styles of thinking, feeling, and acting” (McCrae & Costa, 1997; p. 509) and are not usually the focus of salesperson development. The foundation for adult development typically uses an approach that says that approximately 30% can be accounted for by genetic factors and approximately 70% is due to the environment and the interaction of the environment with the genetic factors (Arvey, Rotundo, Johnson, Zhang, & McGue, 2006; Arvey, Zhang,
Avolio, & Krueger, 2007; Ilies, Gerhardt, & Huy, 2004). In the next section I discuss the interactions on which I will focus.

**The focus of this study.** The current sales environment and the dramatic changes in the economy have highlighted the customer revolution (Manning et al., 2015). As a response to the customer revolution, I am examining a potential revolution in sales. I define the revolution in sales as a paradigm shift in effective sales drivers utilizing transformational leadership attributes and SToM. The nature of this revolution in sales calls for an examination of novel predictors based on transformational and other leadership attributes and interpersonal-mentalizing skills (as measured by SToM). Furthermore, I believe a transformational salesperson model that utilizes ToM to help explain changes in sales performance is worthy of testing. This approach, instead of being trait-based, is based on malleable skills. The shift from a trait-based to state-based approach is highlighted by the influential study from Churchill, et al. (1985), when they shifted the thinking in sales research from a trait-based focus to a more “influenceable” (non-trait-based) sales drivers focus (see Table 1). Further support of developmental sales drivers was found when a statistically significant relationship was demonstrated between leadership propensity and a salesperson’s organizational role and the prediction of sales performance (Flaherty, Mowen, Brown, & Marshall, 2009). Finally, the relationship between salesperson personality traits and situational influences, which equate to observable coachable behavior, predicts sales performance (Shannahan, Shannahan, & Bush, 2013). The main relationship that I am focused on is between the salesperson and the customer. This relationship may be mediated by interpersonal-mentalizing skills (with SToM) which is moderated by sex. I will proceed by investigating transformational leadership. In this investigation, I will examine the influence these factors have on sales performance, as drivers of sales performance and their interactions. In this study, I will concentrate on the salesperson. I
am taking the approach that the reason for evaluating salesperson performance is to improve the performance of salespeople (Ingram et al., 2015). Next I cover my literature review summary.

**Literature review summary.** There does not appear to be a study that examines transformational leadership and ToM together, nor is there a study that examined ToM as a mediator. This review of the literature offers a strong rationale for a study that will extend the sales drivers empirical research. The proposed study will extend the research in two key areas: 1) By examining the salesperson specific leadership characteristics, such as transformational leadership (and all the components of the model), I will be able to determine if the tendency of a salesperson’s strength (or weakness) in transformational leadership (and other sub-dimensions), as measured by their score from a valid leadership measure, predicts their sales performance. In the review, I found where salespeople benefitted by being managed or supervised by transformational leaders’ performance (Agnihotri et al., 2014; Chakrabarty et al., 2008; Bass et al., 2003; Boichuk et al., 2014; Dubinsky, 1999; Ingram et al., 2005; Wang et al., 2011), but none of the large-scale studies examined the potential of transformational and other leadership attributes within the salespeople themselves as Bass (1997) recommended. 2) In the second area, the testing of ToM and SToM (Dietvorst et al., 2009) as a measure of moderated mediation impacting sales performance. For example, a salesperson’s relative strength as a transformational leader predicts their sales performance through the moderated mediator ToM (and sex). I found very little research involving SToM and none on point.

**Integrated Research Model**

My integrated research model involves a moderated mediator model. The hypotheses referenced in the model will be detailed in the next section.
The moderated mediator model. The moderated mediator model (see Figure 1) is a second-stage moderation model where the moderator functions on the b-path of the model (Hayes, 2013). In this model, I will examine one dependent variable: sales performance. I will also examine one independent variable: transformational leadership (as well as other leadership components). The mediator is ToM (as measured with SToM). SToM is made up of (rapport building, detecting nonverbal cues, taking a bird’s-eye view, and shaping the interaction). The moderator of the mediator is sex. Covariates are: age, experience, and personality. This model is supported by theory that suggests that ToM (measured with SToM) involves skills that allow salespeople to mentalize nuanced non-verbal customer behaviors that might signal what customers are thinking (Dietvorst et al., 2009). This skill is related in a positive manner to individualized consideration, as well as other transformational leadership components (Terho et al., 2015). This model predicts

Figure 1. Integrated Research Model. Conceptual diagram of the moderated mediator model. H = Hypotheses.

that changes in transformational and other leadership attributes lead to changes in sales performance through a mediator, ToM (measured by SToM), which is dependent on a moderator (sex). The reason for the moderator is that there is strong evidence that females show superiority
over males in mentalizing skills (Deaner et al., 2007; Kirkland et al., 2013). Therefore, the mediator ToM itself may be moderated. In conclusion, the model uses a moderated mediator and is expected to have conditional indirect effects, direct effects, and total effects.

**Functions and dynamics of the research model.** The first vital function of the research model is that salespeople are driven to sales performance by certain factors or drivers that may explain a revolution in sales. For approximately the first 50 years, researchers and field practitioners in the sales domain focused on traits and more specifically, personality traits (Miner, 1962). In this mode of thinking, certain people, because of their personality and other traits, are more inclined to succeed in sales than those who do not possess such traits. This mode of thinking started to change when Churchill et al. (1985) published their major study about sales drivers and what they called “influenceable” predictors. The first set of predictors in the model could be labeled influenceable. Transformational and other leadership attributes, which I described in detail earlier, are malleable (Avolio, 2011). To take an earlier point as an example, Bass (1997) stressed that both transformational leaders and successful salespeople have influence (transformational leaders over their followers and successful salespeople over their consumers). For example, if I find that changes in transformational and other leadership qualities, such as influence (or intellectual stimulation, inspirational motivation, and individualized consideration) predict changes in sales performance, the door is open for further research (longitudinal in nature): Can salespeople, through various development efforts, increase their sales performance by improving their level of transformational and other leadership attributes such as idealized influence, (or intellectual stimulation, inspirational motivation, and individualized consideration)? These same dynamics power the model. For each of the influenceable predictors (transformational leadership components, and the mediator: ToM), the key question is: are they predictors of sales
performance? If so, the salesperson can focus her/his time as a salesperson developing these influenceable predictors knowing that it should result in helping increase sales performance. Another dynamic of the model is the testing of the possible important impact that sex as a moderator may have on the overall model. For example, one of the components of transformational leaders is individualized consideration. This construct, as was previously mentioned, has considerable content validity with customer orientation (Terho et al., 2015) which is very similar to ToM. It could be that individualized consideration predicts sales performance when the salesperson has a high level of ToM. Another possibility, is that female salespeople may demonstrate high ToM, compared to males, so that sex moderates the positive relationship between ToM and sales performance. In the moderated mediator model, female sales-people who are high in interpersonal mentalizing (SToM) have strong positive correlation between their relative strength in transformational and other leadership attributes and sales performance. This model predicts that transformational and other leadership attribute scores predict sales performance most effectively (and statistically significantly) for female salespeople that score high in interpersonal mentalizing (SToM). The model further predicts that three other salespeople types would not score as high in the transformational, and other leadership attributes, and sales performance relationship. These are: 1) female salespeople who score low in interpersonal mentalizing (SToM), 2) male salespeople who score low in interpersonal mentalizing (SToM), and 3) male salespeople who score high in interpersonal mentalizing (SToM). In the next section, I detail the hypotheses that I hope to answer in this study.

Hypotheses

In the first set of hypotheses I draw upon the theoretical foundation of transformational and other leadership attributes and upon Bass’ 1997 suggestion of the relationship between the
transformational leader behavior and sales performance. The sub-dimension behaviors associated with transformational leadership, transactional leadership, and laissez-faire behavior itself, will demonstrate a statistically significant relationship with salesperson performance. It is expected that of the factors and sub-factors, all will have a positive relationship except management by exception-passive and laissez-faire. The model will treat personality as a covariate (along with age and experience).

Previous research has indicated that the dimensions of transformational leadership may be empirically separable (Avolio, Bass, & Jung, 1999). Taking the components separately, I expect that transformational leadership, as well as its four components, idealized influence, intellectual stimulation, inspirational motivation, and individualized consideration, and transactional leadership, as well as its two components management by exception-active, and contingent reward are all positively correlated with sales performance (Bass, 1997). As such, increases in any of the eight independent variables will be associated with increases in sales performance. For example, participants that scored relatively high in transformational and other leadership attributes would be correlated positively with relatively high sales performance and vice versa (see Figure 2). I expect the opposite to hold for the passive-avoidant components such as laissez-faire (see Figure 3) and management by exception-passive (Avolio, 2011). For example, participants who scored high in laissez-faire or management by exception-passive, tend to be correlated with lower relative sales performance and vice versa. Therefore, to investigate these expectations, the following hypotheses will be examined.

H1: Hypothesis 1: Transformational Leadership (as measured by the Multifactor Leadership Questionnaire (MLQ-5X) predicts sales performance (positively correlated).
H1a: Hypothesis 1a: Idealized influence (as measured by the Multifactor Leadership Questionnaire (MLQ-5X) predicts sales performance (positively correlated).

H1b: Hypothesis 1b: Inspirational Motivation (as measured by the Multifactor Leadership Questionnaire (MLQ-5X) predicts sales performance (positively correlated).

H1c: Hypothesis 1c: Intellectual Stimulation (as measured by the Multifactor Leadership Questionnaire (MLQ-5X) predicts sales performance (positively correlated).

H1d: Hypothesis 1d: Individualized Consideration (as measured by the Multifactor Leadership Questionnaire (MLQ-5X) predicts sales performance (positively correlated).

H1e: Hypothesis 1: Transformational Leadership (as measured by the Multifactor Leadership Questionnaire (MLQ-5X) predicts theory of mind, as measured by salesperson theory of mind scale (positively correlated).

Figure 2. Hypothesized Relationship, Positive Correlation, Between Transformational Leadership (and various components) and Sales Performance.

H2: Hypothesis 2: Transactional Leadership (as measured by the Multifactor Leadership Questionnaire (MLQ-5X) predicts sales performance (positively correlated).

H2a: Hypothesis 2a: Contingent Reward leadership (as measured by the Multifactor Leadership Questionnaire (MLQ-5X) predicts sales performance (positively correlated).
H2b: Hypothesis 2b: Management by exception-active leadership (as measured by the Multifactor Leadership Questionnaire (MLQ-5X) predicts sales performance (positively correlated).

H2c: Hypothesis 2c: Management by exception-passive leadership (as measured by the Multifactor Leadership Questionnaire (MLQ-5X) predicts sales performance (negatively correlated).

H3: Hypothesis 3: Laissez-faire leadership (as measured by the Multifactor Leadership Questionnaire (MLQ-5X) predicts sales performance (negatively correlated).

![Graph showing hypothesized relationship between Laissez-faire leadership and sales performance.](image)

*Figure 3. Hypothesized Relationship, Negative Correlation, Between Management by Exception-Passive or Laissez-Faire Leadership and Sales Performance.*

In this next section of hypotheses, I draw upon the theoretical foundation of theory of mind and examine SToM. This measure is discussed in detail in the method section and has unique features and strong validity. As was discussed earlier in the literature review, SToM has been used as a measure for adaptive selling, and customer orientation, and yet may measure a construct related to interpersonal mentalizing separate from these other constructs. I expect that SToM and all four of its sub-dimensions (rapport building, detecting nonverbal cues, taking a bird’s-eye view,
and shaping the interaction) will mediate the relationship between transformational and other leadership attributes and sales performance (see Figure 4).

**H4: Hypothesis 4:** Theory-of-Mind (as measured by SToM) mediates the relationship between transformational and other leadership attributes (as measured by the Multifactor Leadership Questionnaire (MLQ-5X) and sales performance (positively correlated).

**H4a: Hypothesis 4a:** Rapport building mediates the relationship between transformational and other leadership attributes and sales performance (positively correlated).

**H4b: Hypothesis 4b:** Detecting nonverbal cues mediates the relationship between transformational and other leadership attributes and sales performance (positively correlated).

**H4c: Hypothesis 4c:** Taking a bird’s-eye view mediates the relationship between transformational and other leadership attributes and sales performance (positively correlated).

*Figure 4.* Hypothesized Relationship, Positive Correlation as a statistically significant mediator Between Salesperson Theory-of-Mind and Sales Performance.
H4d: Hypothesis 4d: Shaping the interaction mediates the relationship between transformational and other leadership attributes and sales performance (positively correlated).

In this next section of hypotheses, I test sex as a moderator of the mediator SToM. Earlier, I discussed that Kirkland et al. (2013) found in a meta-analysis, that females show statistically significant superiority over males on interpersonal mentalizing. The positive relationship between ToM (as measured by SToM) and sales performance depends upon sex. For example, female salespeople, more so than males, will experience ToM as a mediator of the predictors for the outcome, sales performance. Because females tend to be stronger in interpersonal mentalizing, they will exhibit higher scores on the SToM. This is hypothesized to predict higher sales performance (see Figure 5).

H5: Hypothesis 5: Sex moderates the relationship between ToM (as measured by SToM) and sales performance (females > males).

![Figure 5](image_url). Hypothesized Relationship, Positive Correlation, Between Theory-of-Mind and Sales Performance Moderated by Sex
In summary, the five hypotheses examine the potential for new sales drivers by testing transformational salesperson leader qualities (to demonstrate how transformational leadership components can apply to sales), and by expanding the model of what factors drive sales performance and how. In addition, the hypotheses identify ToM, as a mediator between transformational and other leadership attributes and sales performance, moderated by sex. The purpose of this study is to examine a sales model that in the context of the customer revolution provides a foundation for a sales revolution. Specifically, I will examine a transformational salesperson model using a moderated mediator ToM, and thereby further sales research and salesperson development through the testing of novel sales performance drivers and extending the sales literature by delivering applicable principles for salesperson development and ultimately to enhance the foundation and/or models of sales performance. In the next chapter, I will cover the method of the study.
CHAPTER II

Method

“As selling becomes ever more complex, the role of the sales force as a source of competitive advantage grows” (Kumar et al., 2015; p. 68).

In this chapter, I cover the participants, the sampling methods, followed by a discussion of each of the two measures, the two moderators and the three covariates. In the next section, I will cover the procedures and the analysis. This chapter is followed by three appendices. I will begin next with participants and sampling methods.

Participants and Sampling Methods

Participants. Participants for the study included salespersons recruited through Amazon Mechanical Turk. All participants were given the same introduction to the survey (see the IRB in Appendix C). The introduction contained a link from Dr. Joey A. Collins https://collins-alliance.onehub.com/customer-driver-survey, that directed respondents to the survey on Survey Monkey. I recruited survey participants from the Amazon Mechanical Turk (MT) platform a marketplace service offered by Amazon that gives users access to a diverse sample of participants. MT is an open online marketplace where you can post tasks that people can choose to complete for a small amount of money. MT pays participants to take surveys. In this case, participants recruited through MT received $3.00 for completing the survey. MT participants tend to be full-time workers (Mason & Suri, 2012) and report that they engage in MT work for enjoyment (Buhrmester, Kwang & Gosling, 2011). To prevent participants from taking the survey more than once, I disqualified surveys taken multiple times using the same IP Address or Mechanical Turk ID. The MT parameters were limited to participants in the sales field in the United States and Canada, and who agreed to the informed consent language at the beginning of the survey (see the
IRB in Appendix C). The participants were asked what is the principal industry of their organization. This variable was examined as to its significance and contributing influence.

**Sampling.** To identify how many participants, I needed, I conducted a power analysis using G*Power to determine the sample size corresponding to an alpha level of .05, power of .95, a medium effect size of .15 for multiple regression analyses with up to 4 predictors. The results of this analysis indicated that a minimum of 124 participants were needed. Once I decided to test moderated mediator, the required sample size increased to approximately 450 (Aguinis, 2004).

**Measures**

**Dependent variable measure.** The dependent variable is sales performance. The self-rating item that was examined was: Please rate your overall [sales] performance in comparison to all other sales representatives in your company doing a similar job. This item is anchored by the assessments of 1 = “top 10%” through 8 = “80% and below”. This study does not allow for the collection of objective sales performance and since one emphasis included the diversity of industries and the diversity of organizations, the study relies instead on self-reported sales performance from participants. Although objective sales performance data tend to be preferred because of the clear link between objective sales performance and the organization’s financial success (Plouffe, Hulland, & Wachner, 2009), one argument for subjective sales performance data (including self-rated) is that it tends to include a wider range of salesperson activities (such as organizational citizen behaviors) that enhance the organization’s financial success (Rich et al., 1999). These behaviors would clearly not be included in objective sales performance. A precedent for using self-reported sales performance data includes the Churchill, et al., (1985) meta-analysis in which 53.3% of the reported correlations measured performance using subjective evaluations obtained from managers, peers, or self-reports (Rich et al., 1999).
Independent variable and other measures. I employed the following criteria in examining and deciding on the measures for the independent variables of the study. First, the measure must exhibit strong psychometric properties. Standards by which I examined scale measures included, comparative fit index (CFI) > .95 and root mean square error of approximation (RMSEA) < .07 (Hu & Bentler, 1999). Second, the measure must have strong construct validity. This is the “the degree to which test scores can be interpreted as reflecting a particular psychological construct” (Furr & Bacharach, 2014; p. 201). Third the measure is to be parsimonious. Since my intent was to use the measure along with other scales, to avoid participant fatigue, there should be a minimum of items (less than 50). Fourth, the measure must align with the definition of the construct. Fifth, the measure must show promise of tapping into the underlying, rather than superficial, motive level, hopefully to reveal foundational dimensions of the construct. Three key measures are incorporated into the integrated research model for this study. The measures help scale the potential independent variables: transformational leadership, transactional leadership, laissez-faire, idealized influence, intellectual stimulation, inspirational motivation, individualized consideration, contingent reward, management by exception-active, management by exception-passive, and the mediator scale salesperson theory-of-mind (SToM) and its components. One of the measures, the mini-IPIP (Donnellan, Oswald, & Baird, 2006), will be used as a covariate and includes: extraversion, conscientiousness, emotional stability, openness, and agreeableness. The moderator is: sex. The covariates are: age, experience, and, as mentioned earlier, personality. One caution that is appropriate here is that objective and subjective performance measures were not used interchangeably in my results (Bommer, Johnson, Rich, Podsakoff, & MacKenzie, 1995) and, to set expectations, sales performance studies in marketing
typically report about 10-20% explained variance (Plouffe et al., 2009). I will begin with the first key measure for the independent variable in the study.

**The revised multifactor leadership questionnaire (MLQ-5x, Short Form).** The Multifactor Leadership Questionnaire (MLQ)-5x Short Form (Avolio, Bass, & Jung, 1999), is a comprehensive survey of 45 items which measures a full range of leadership styles (Antonakis et al., 2003). There are four items for each of the nine leadership scales except the first one, idealized influence, which has eight (idealized influence, intellectual stimulation, inspirational motivation, individualized consideration, contingent reward, management by exception-active, management by exception-passive, and laissez-faire). There are also three items for each of three leadership outcome scales. The MLQ-5x Short Form has strong validity and reliability and has been used extensively in research and commercial applications worldwide (Avolio et al., 1991). It has a strong record of predicting leader performance across a broad range of organizations at different organizational levels and in different national cultures (Antonakis et al., 2003). Overall, using the MLQ-5x Short Form, leadership style has been found to be statistically significantly related to indicators of subjective performance and objectively, 14% of profit variance is due to transformational leadership, above transactional leadership (Rowold & Heinitz, 2007). The factor structure of the revised MLQ 5x Short Form was been examined through confirmatory factor analysis (Avolio et al., 1999). Researchers used nine models, each with a different factor structure, to determine the best-fitting model for the MLQ 5x Short Form. They found that the MLQ 5x Short Form survey performed best with three correlated higher-order factors and six lower order factors (Avolio et al., 1999). Another study examined the empirical properties of the MLQ 5x short form transactional leadership and laissez-faire measures and recommended in some situations that MLQ 5x short form subscale measures should be used as separate and independent measures, which I
will follow (Hinkin & Schriesheim, 2008). Statistically significant fit statistics include, $\chi^2$ (df = 108, n = 1240) = 473.27; CFI=.963; RMSEA=.056 (see Table 6). The current version of the is a valid and reliable instrument (Antonakis et al., 2003). As I covered earlier in the literature review, I focused on just one of the passive-avoidant scales (laissez-faire) for the sake of parsimony (Hinkin & Schriesheim, 2008). The MLQ (5x Short Form) successfully matches up to the criteria set forth in examining and deciding on the measures for the study. First, the measure must exhibit strong psychometric properties. Standards by which I examined the scale measures include, CFI > .95 and RMSEA < .07. This first standard was satisfied. The second, the measure must have strong construct validity. This standard was satisfied as confirmed by the evidence above. Third the measure is to be parsimonious. With the revised MLQ-5X short form there is only 45 items, so this is satisfied. Fourth, the measure must align with the definition of the construct. This standard is also satisfied.

Table 6

<table>
<thead>
<tr>
<th>Model</th>
<th>N</th>
<th>$\chi^2$</th>
<th>df</th>
<th>CFI</th>
<th>RMSEA</th>
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<td>108</td>
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<td>359.30</td>
<td>160</td>
<td>.88</td>
<td>.07</td>
</tr>
</tbody>
</table>

*Context = stable business. N = Sample size; $\chi^2$ = Chi-Square; df = degrees of freedom; CFI = comparative fit index; RMSEA = root mean square error of approximation.

as evidenced by psychometric testing. Fifth, the measure must show promise of tapping into the underlying, rather than superficial, motive level, hopefully to reveal foundational dimensions of the construct. This was also satisfied with the empirical evidence. The next measure I examined is the SToM as the mediator measure for ToM.
Salesperson theory-of-mind measure (SToM) as a mediator. I will discuss theory of mind (ToM) as a foundation and subsequently move on to SToM. Due to parsimony and poor psychometric results (Kirkland et al., 2013), I chose not to use the more established ToM measure referred to as the “eyes test” (Baron-Cohen, Jolliffe, Mortimore, & Robertson, 1997). I recognize that there is some debate about the method by which the “eyes test” has been evaluated psychometrically in the past (Olderbak et al., 2015; Preti, Vellante, & Petretto, 2017), however, I took the more conservative route by resorting to the measure with much higher psychometric results; the SToM. “Theory of mind” (ToM) is a label for the ability to match mental conditions to oneself and others and was originally designed to describe chimpanzee behavior (Premack & Woodruff, 1978) and this ability is the main way in which we make sense of or predict another person’s behavior. Theory of mind is also referred to as “mentalizing” (Frith et al., 1991), and “social intelligence” (Jolliffe & Baron-Cohen, 1999) and is similar with “empathy”. (Baron-Cohen et al., 2001). Two of the critical dimensions are facial perception and emotional recognition (Baron-Cohen et al., 2001). Dietvorst et al. (2009) used a construct from neuroscience called interpersonal mentalizing (Singer & Fehr 2005), which is akin to customer orientation, as I discussed above, as a basis for developing their sales force–specific SToM scale. The authors began the scale development process first identifying 33 items through a content analysis. Next, they deleted redundant items as well as items with low intercorrelations. This brought their item number down to 14. At this point, they conducted an exploratory factor analysis (EFA) using a promax rotation. This resulted in the elimination of one item due to cross-loadings and produced four factors. The explained variance was 48% and the Kaiser–Meyer–Olkin = .86. The four factors are: “(1) ability to take initiative in sales and build rapport in conversations (α = .69), (2) ability to notice subtle cues during sales encounters (α = .76), (3) ability to take a bird’s-eye view and supply
missing information (i.e., achieve closure) during sales encounters (α = .66), and (4) ability to shape/influence interactions with customers in a positive way (α = .79)” (Dietvorst et al., 2009; p. 656). The resulting SToM is a four factor 13 item measure.

In the next phase, the authors used several different confirmatory factor analyses (CFAs) to examine validity, two of which will be covered here. To examine convergent validity of the SToM, the authors (Dietvorst et al., 2009) conducted a first order CFA. The resulting factor loadings were high, ranging from .54 to .97. The resulting model fit indices were also acceptable (Chi-square: $X^2_{(14)} = 17.51, p = .23$; RMSEA = .05; NNFI = .99; CFI = .99; SRMR = .04). The correlations among factors (.43 to .71) showed discriminant validity. The second CFA they conducted was a second order version with first order factors remaining the same as above and SToM itself used as a second order factor. This resulted in an even better model ($X^2_{(16)} = 17.85, p = .33$; RMSEA = .03; NNFI = .99; CFI = 1.00; SRMR = .04). The factor loadings were also very acceptable (second-order .61 to .88, and first-order loadings range from .54 to .97). The results confirm the unique contribution of each of the four factors of a single second-order, latent variable, the salesperson theory-of-mind (SToM), which is an abstract concept of thinking using interpersonal mentalizing. I used the criteria discussed above in examining the measure, SToM. First, the measure must exhibit strong psychometric properties. I believe the measure had strong psychometric properties with RMSEA = .05 and CFI = .99 (see Table 6). Second, the measure must have strong construct validity. I rated this measure as acceptable in construct validity. Third the measure is to be parsimonious. With only 13 items, this measure is parsimonious. Fourth, the measure must align with the definition that I discussed earlier. I rated SToM as aligning with the definition. Fifth, the measure must show promise of tapping into the underlying, rather than superficial, motive level, hopefully to reveal foundational dimensions. For this criterion, I strongly
believe SToM has an edge as has been demonstrated by its biological and neurological validity analysis. In the next section, I examine the moderators of the study.

**Moderator measurement.** I tested sex as a moderator in the study to ToM. The male/female sex selection was made by the participants in the demographic section of the survey.

**Covariate measures.** I controlled for the following variables: age, experience, and personality. These variables may explain some variance in the model, however, they are not the focus of this study, so I treated them as covariates. Each of these were collected in the demographic section of the survey except the personality data, which I cover below.

To measure personality, I used the mini-IPIP a short-form 20-item scale based on the international personality item profile (IPIP) that is a five-factor personality model (Goldberg, 1990). The measure has 4 items for each Big-5 trait. A series of five validity studies (Donnellan, Oswald, Baird & Lucas, 2006) indicated the psychometrical acceptance of the mini-IPIP. They report an acceptable fit of the model ($\chi^2 = 359.30$, $df = 160$, $p < .05$; $\chi^2/df = 2.25$; CFI = 0.88; RMSEA = 0.07, $p$ close fit < .05). (Donnellan et al., 2006). They also reported that the series of five studies produced results that indicated that the Mini-IPIP scales had respectable internal consistencies ($\alpha > .60$) and in most cases, they were well above .60 (Donnellan et al., 2006). For the measure selection standards, first, the measure must exhibit strong psychometric properties. I believe this measure has medium psychometric properties. However, the researchers were very confident, saying “our bottom line is that the 20-item Mini-IPIP is nearly as good as the longer 50-item IPIP-FFM parent instrument in terms of both reliability and validity” (Donnellan et al., 2006; p. 202). Second, the measure must have strong construct validity. I rated this measure as strong in construct validity due to their statement, “the Mini-IPIP scales tapped nearly the same Big Five facet content as the IPIP-FFM scales as demonstrated in Study 2. That is, when we correlated the
Mini-IPIP and the IPIP-FFM scales with a separate IPIP measure assessing the facets of the Big Five, we obtained a very similar pattern of associations” (Donnellan et al., 2006; p. 201). Third the measure is to be parsimonious. With only 20 items, this measure is parsimonious. Fourth, the measure must align with the definition that I discussed earlier. I rated the mini IPIP as aligning with the definition. Fifth, the measure must show promise of tapping into the underlying, rather than superficial, motive level, hopefully to reveal foundational dimensions. For this criterion, I believe the mini-IPIP is a great fit because it accomplishes what the larger IPIP-FFM does with 60% less items. I will now move on to the procedure and analysis.

Procedure and Analyses

Study design. The study design is a quantitative hypotheses test using a cross-sectional approach, evaluating 5 different study questions. A cross-sectional approach is appropriate in this context. In APA journals, approximately 39% used cross-sectional data to conduct mediation tests (Maxwell & Cole, 2007). The dependent variable is sales performance. There are two related self-reporting measures that will be examined: 1) Please rate your overall performance in comparison to all other sales representatives in your company doing a similar job, and 2) Please rate your sales volume in comparison to all other sales representatives in your company doing a similar job. The scale is: top 10%, top 20%, top 30%, top 40%, top 50%, top 60%, top 70%, and 80% and below. The study examined potential sales drivers that predict sales performance, either directly, or on a moderated mediation basis. The independent variable is: transformational leadership and its related components. The mediator is: ToM and its four components. The moderator to be tested is: sex. Control variables are: age, years of sales experience, and personality (including its five components). In the next section, I will cover the data analysis portion of the procedures.
**Data analysis.** The data analysis will begin with a visual inspection of the data using SPSS 25 graphs and scatterplots assessing for suitability in terms of normality and outliers. If I find non-normal data, I will run a curvilinear regression. To confirm the assumption of homogeneity of residual variances, I will make sure there is no “fan shape” spread of the shape of the residuals which could possibly indicate heteroscedasticity (Field, 2013). I will also inspect URL addresses and mechanical turk numbers for potential duplicate entries. Any duplicate entries will be deleted.

**Data screening.** With the data that I obtained from mechanical turk, I sought to screen and check for quality, including screening for multiple repeated IP addresses, and IP locations outside of the US.

**Missing data analysis.** The original data set was analyzed for missing data in cases, variables, and in cells. Specifically, data was analyzed and managed for missingness with the multiple imputation tools in SPSS 25. A visual inspection of missing value patterns will be inspected to determine the significance as described by Enders (2001). In addition, I determined if the missing data are missing completely at random (MCAR). In other words, I believe that the reason data are missing is not related to the missing values themselves or any other variable that is related to the outcome (Little, 1988). The important thing to examine is not just the missingness, but why are the data missing. I wanted to consider if the participant’s data show a pattern of missingness. This could indicate fatigue or some other confound that I did not account for in my analysis. Cases will be included in the multiple imputation if no more than 24% of data are missing (24% or more if n>500, and 16% or more if n>100) and the number of deleted cases will be reported (Olinsky, Chen, & Harlow, 2003). The fully conditional specification (MCMC) procedure will be used for the imputation. Maximum case draws were specified at 50 and a maximum parameter draw at two. I used SPSS to conduct multiple imputation. For cells that have missing
data, SPSS through a Monte-Carlo like simulation and iterations, I produced a data set with the missing values fitted in.

**Moderated mediation analysis.** Moderated mediation analysis in this project will have three paths (see Figure 1): the a-path is the relationship between the IV transformational leadership (and all components) and ToM as a mediator, the b-path is a moderated relationship between ToM, dependent on sex, and the DV sales performance, and the c-path is the direct relationship between the IV transformational leadership (and all components) and the DV sales performance. Together, the a and b paths are considered indirect paths (Hayes, 2013).

**Hierarchical multiple regression.** The model examined the Transformational leadership predictors with the covariates listed above and salesperson theory-of-mind as the mediator, moderated by sex. The model used a hierarchical multiple regression with all the predictors entered and allowing the computer to decide the order. I examined the descriptive statistics and the Levene’s test to evaluate the assumption that the population variances are equal. I do not want this to be statistically significant. If it is statistically significant I cannot use the equal variances assumption (Field, 2013). Another statistical concern that I examined is the possible multicollinearity with the transformational leadership predictors and the covariates. This would be the condition where the predictor is statistically significantly and highly correlated with the covariates. Multicollinearity can cause misleading results (Keith, 2006). My multiple regression model took the form of (see equation 1):

\[
Y_j = i_1 + b_1X_{1j} + b_{1a}X_{1aj} + b_{1b}X_{1bj} + b_{1c}X_{1cj} + b_{1d}X_{1dj} + b_{2}X_2j + b_{2a}X_{2aj} + b_{2b}X_{2bj} \\
- b_3X_3j - b_4X_4j + b_5X_5j + b_6X_6j + b_7X_7j + b_8X_8j + e_j
\]  

(1)

where, $Y_j =$ Sales Performance

\[i_1 = \text{the multiple regression model constant}\]
\( X_{1j} = j\)'s measurement of the predictor Transformational Leadership

\( b_1 = \) regression coefficient of the predictor Transformational Leadership

\( X_{1aj} = j\)'s measurement of the Idealized Influence predictor

\( b_{1a} = \) regression coefficient of the predictor Idealized Influence

\( X_{1bj} = j\)'s measurement of the Intellectual Stimulation predictor

\( b_{1b} = \) regression coefficient of the Intellectual Stimulation predictor

\( X_{1cj} = j\)'s measurement of the Inspirational Motivation predictor

\( b_{1c} = \) regression coefficient of the predictor Inspirational Motivation

\( X_{1dj} = j\)'s measurement of the predictor Individualized Consideration

\( b_{1d} = \) regression coefficient of the predictor Individualized Consideration

\( X_{2j} = j\)'s measurement of the predictor Transactional Leadership

\( b_2 = \) regression coefficient of the predictor Transactional Leadership

\( X_{2aj} = j\)'s measurement of the predictor management-by-exception active.

\( b_{2a} = \) regression coefficient of the predictor management-by-exception active.

\( X_{2bj} = j\)'s measurement of the predictor contingent reward.

\( b_{2b} = \) regression coefficient of the predictor contingent reward.

\( X_{3j} = j\)'s measurement of the predictor management-by-exception passive.

\( b_3 = \) regression coefficient of the predictor management-by-exception passive.

\( X_{4j} = j\)'s measurement of the predictor Laissez-faire Leadership

\( b_4 = \) regression coefficient of the predictor Laissez-faire Leadership

\( X_{5j} = j\)'s measurement of the covariate Age

\( b_5 = \) regression coefficient of the covariate Age

\( X_{6j} = j\)'s measurement of the covariate Experience
\[ b_6 = \text{regression coefficient of the covariate Experience} \]
\[ X_{ij} = j's \text{ measurement of the covariate Personality} \]
\[ b_7 = \text{regression coefficient of the covariate Personality} \]
\[ e_i = \text{error residual.} \]

I will now move on to the moderated mediation analysis.

**Moderated mediation analysis using PROCESS.** The integrated research model, a moderated mediation (MODMED) model, is also called a second-stage moderation model (Hayes, 2013). For further analysis, used the SPSS supplemental program called PROCESS (Hayes, 2013). This program is designed to test for moderators and mediators among other conditions. These represent conditional effects (Field, 2013). The main effect of the independent variable on the dependent variable is conditional or dependent upon the values of another predictor the moderated mediator. “A moderation produces a joint (multiplicative) effect of two predictors on the outcome” (Kendall, 2015). I followed recommendations by Hayes (2013) suggesting a step-by-step approach. I tested parts of the model and confirm them before moving on to the moderated mediator model. The mediator (ToM) answers the question: How does transformational and other leadership attributes predict sales performance? The model in the moderated mediation analysis will involve a categorical moderator (sex) and the continuous predictors transformational and other leadership attributes and a continuous mediator ToM (see figure 5). Furthermore, ToM is moderated by sex as was discussed earlier. I began by visually inspecting the simple scatterplots in SPSS with the moderator set as a marker. Since I will be using PROCESS (Hayes, 2013), I did not need to find the mean of the continuous predictor variables, or to use the mean to center the predictor variables, or to creating interaction terms, since PROCESS performs these steps automatically. In PROCESS, model 14 was selected, sales performance was entered as the
dependent variable, transformational and other leadership attributes were entered as the independent variables, SToM as the mediator, sex as the moderator, and age, experience, and personality as covariates. Because I used a categorical moderator in the model, I examined for Type 2 heteroscedasticity to check if I met the assumption of homoscedasticity, which is a consistent variance of errors around the regression line at various levels of the independent variable (Keith, 2006). If residuals have a certain pattern in one group (of the categorical moderator) they should have the same pattern in the other group. For example, “if they are close to the best-fitting line in subgroup 1, they should also be close to the best-fitting line in subgroup 2. If they are diffused from the line in subgroup 1, they should be diffused from the line to the same extent in subgroup 2” (Kendall, 2015). To examine for Type 2 heteroscedasticity, (and correct for, if necessary) I used ALT MMR (Aguinis, 2004). The PROCESS model involved will be model 14 (Hayes, 2013). I also chose the option of using heteroscedasticity-consistent inferences through a standard error estimator (HC3) from Hayes and Cai (2007). Hypotheses will be tested using bootstrapped 95% confidence intervals via PROCESS. The moderated mediator model contains a two-way interaction term (see equation 3). The equations for the moderated mediator model begin with:

\[ M = i_1 + aX + e_M \]  
\[ Y = i_2 + c'X + b_1M + b_2V + b_3MV + e_Y \]

where, \( M \) = The mediator ToM (SToM)

\( i_1 \) = the mediator model constant

\( a \) = regression coefficient of the predictors transformational and other leadership attributes (X)

\( e_M \) = error residual of the estimator M.

\( Y \) = Sales Performance
\( \beta = \) the multiple regression model constant

\( X = \) the predictors: transformational and other leadership attributes

\( c'1 = \) regression coefficient of the direct effect (c-path) of the predictors transformational and other leadership attributes of Sales Performance (Y).

\( M = \) Mediator Theory of Mind (SToM)

\( b1 = \) regression coefficient (b-path) of the mediator Theory of Mind

\( V = \) Sex as a moderator

\( b2 = \) regression coefficient (b-path) of the Sex moderator

\( MV = \) the interaction between ToM (SToM) and Sex

\( b3 = \) regression coefficient (b-path) of the interaction between ToM (SToM) and Sex

\( e_Y = \) error residual of the estimator Y.

In this moderated mediation model, the effect of the mediator ToM (SToM) on sales performance is a function of the moderator, sex. So, equation 3 can be written as equation 4.

\[
Y = \beta + c'X + (b1 + b2V)M + b2V + e_Y \quad (4)
\]

The effect of the mediator ToM (SToM) on sales performance is a conditional effect and a function of the moderator sex (V). The result can be written as equation 5, which is the conditional indirect effect of transformational and other leadership attributes (X) on sales performance (Y) through ToM (M) as the mediator (Hayes, 2013).

\[
a_{M\rightarrow Y} = a (b1 + b3V) \quad (5)
\]

Equation 5 represents the process by which the quantification of the conditional indirect effect occurs through differences in transformational and other leadership attributes (X) map on to differences in sales performance (Y) indirectly through the mediator ToM (M) depending on
sex (V) as a moderator (Hayes, 2013). For the moderated mediation to occur, I need the indirect effect of transformational leadership (X) to be statistically significant as a function of sex (V). Which is to say that the mediation of transformational leadership’s (X’s) effect on sales performance (Y) by the mediator ToM (M) is moderated by sex (V). I will now move on to the hypotheses testing.

**Hypothesis testing.** The results of the SPSS models will be given in the model summary table, the ANOVA table, and the coefficients table. For each hypothesis, the results will be examined as to their significance. Testing will be conducted using ($\alpha = .05$). For the significance of the model, I considered $r$, $R^2$, adjusted $R^2$, and the $F$-statistic. For the significance of each predictor, I considered change in $R^2$, ($\Delta R^2$) and the b-weights. The moderation is statistically significant when one or more interaction term b weights/β’s is statistically significant, meaning the simple slopes are different (Kendall, 2015). One additional analysis that I conducted, as suggested by my committee, was to examine the significance of industry type as an independent variable and as a moderator of the effect of transformational and other leadership attributes predicting sales performance.

**Common method variance.** Common method variance occurs in research when the measurement method itself has biasing effects creating spurious variance that creates interference of the construct variance (Podsakoff, MacKenzie, & Podsakoff, 2012). This problem has been well documented and various solutions have been presented (Lindell & Whitney, 2001). I performed a Harman’s single factor test in SPSS 25 to assess common method variance. This test is often used to estimate the variance due to a single common method factor (Podsakoff, MacKenzie, & Podsakoff, 2003). To conduct this test, I used exploratory factor analysis to see how much variance across all items could be attributed to a single unrotated factor solution. I used principal
components analysis as the extraction method. In the next chapter, I cover the results of my study which is followed by the discussion chapter.
CHAPTER III

Results

“Selling in all its dimensions – whether pushing Buicks on a car lot or pitching ideas in a meeting – has changed more in the last ten years than it did over the previous hundred” (Pink, 2012; p. 2).

---Daniel H. Pink, To Sell is Human

Data Collection

The data for the study was collected via a request that was offered through Amazon’s mechanical turk platform. The request took approximately 4 hours until the sample size was fulfilled. It was limited to participants in the United States who agreed to the informed consent, were at least 18 years of age, and considered themselves employed in a sales profession. Participants received a $3.00 payment for their time. In the next section, I begin the analysis with a missing data examination.

Missing Data

The survey request on Amazon Mechanical Turk was presented to 754 participants with 532 completing the survey for a 71% response rate. There were 28 entries deleted because they had more than 24% missing data (Olinsky et al., 2003). There were also 29 entries deleted because of duplicate addresses. Two were deleted because of questionable responses. This left a final sample size of 473. Data were analyzed and managed for missingness with the multiple imputation tools in SPSS 25. Sixty seven percent of the variables (93) and 26% of the cases (123) had some missing data; 99.7% of the values in the model had complete data. A visual inspection of missing value patterns indicated the general, or haphazard pattern as described by Enders (2001). Little’s MCAR test produced: $\chi^2 = 7850.6, df = 7734, \alpha = .174$. Therefore, the MCAR was not statistically significant and so I can proceed with the understanding that the missing data were missing completely at random (MCAR). In other words, I believe that the reason data are missing is not
related to the missing values themselves or any other variable that is related to the outcome. The auxiliary variables of gender and age were used as predictors only.

**Data Analysis**

The fully conditional specification (MCMC) procedure was used for multiple imputation in SPSS version 25. Maximum case draws were specified at 50 and a maximum parameter draw at two. A total of 27 missing values were filled through the multiple imputation tool. Scale scores were calculated for transformational leadership and salesperson theory of mind. Finally, the dependent variable, sales performance, and twenty items in the Mini-IPIP had to be recoded for reverse scoring.

**Reliability and normality.** Reliability was assessed using Cronbach’s Alpha (α; see Table 7) which is a measure or the overall scale reliability (Field, 2013). Generally, α > .7 probably indicates adequate reliability (Field, 2013). By referencing the bold values in Table 7, we see that α > .7 in the relevant focus variables. For normality, because my sample size (N = 473) was greater than 200, I utilized a visual inspection of histograms with imposed normal distributions (Field, 2013). This process revealed adequate normality. Next, I cover my

Table 7

*Descriptive Statistics, Bivariate Correlations, and Focus Variable Reliabilities*

<table>
<thead>
<tr>
<th>Focus Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Items</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age</td>
<td>35.2</td>
<td>9.8</td>
<td>1</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Sex</td>
<td>.61</td>
<td>.49</td>
<td>1</td>
<td>.164**</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Experience</td>
<td>8.12</td>
<td>7.2</td>
<td>1</td>
<td>.519**</td>
<td>.048</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. TransfLeader</td>
<td>75.24</td>
<td>11.48</td>
<td>20</td>
<td>.154**</td>
<td>.071</td>
<td>.244**</td>
<td>.921</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. SToM</td>
<td>65.29</td>
<td>6.73</td>
<td>13</td>
<td>.183**</td>
<td>.013</td>
<td>.153**</td>
<td>.544**</td>
<td>.726</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Personality</td>
<td>13.02</td>
<td>3.95</td>
<td>4</td>
<td>.110*</td>
<td>-.002</td>
<td>.216**</td>
<td>.284**</td>
<td>.213**</td>
<td>.846</td>
<td></td>
</tr>
<tr>
<td>7. Sales Perform</td>
<td>5.7</td>
<td>1.8</td>
<td>1</td>
<td>.055</td>
<td>-.003</td>
<td>.106*</td>
<td>.189**</td>
<td>.105</td>
<td>.17</td>
<td>.910</td>
</tr>
</tbody>
</table>

Note. (N = 473). Sex was coded where 0 = female. Bold values on the diagonal represent Cronbach’s Alpha. **p < .01; *p < .05.
Common method variance. Common method variance occurs in research when the measurement method itself has biasing effects creating spurious variance that creates interference of the construct variance (Podsakoff et al., 2012). This problem has been well documented and various solutions have been presented (Lindell & Whitney, 2001). I performed a Harman’s single factor test in SPSS 25 to assess common method variance. This test is often used to estimate the variance due to a single common method factor (Podsakoff et al., 2003). To conduct this test, I used exploratory factor analysis to see how much variance across all items could be attributed to a single unrotated factor solution. I used principal components analysis as the extraction method. The results showed that the single method factor accounted for 25.73% of variance among all items. This result is considerably less than the 50% cutoff that would indicate a serious threat to the study’s internal validity if uncorrected. In the next section I cover the demographic and industry characteristics of the study participants.

Demographic and Industry Characteristics of Study Participants

I expected a greater number of male participants since the sales industry seems to be dominated by males. For example, in financial services about two thirds of all sales people are males (Madden, 2012). My expectations were realized, but not quite as strong as I thought, in that there were 61% males. I also expected a relatively younger representation, which also transpired as 74.8% were in their twenties or thirties. Other collected data include sales experience, education and household income. Age and sales experience are used in the analysis as covariates. Table 8 contains the demographic information. One of the aims of the

Table 8
### Respondent’s Profile

<table>
<thead>
<tr>
<th>Respondents’ characteristics</th>
<th>Number</th>
<th>Percentage of sample</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>289</td>
<td>61</td>
</tr>
<tr>
<td>Female</td>
<td>184</td>
<td>39</td>
</tr>
<tr>
<td>Total</td>
<td>473</td>
<td>100</td>
</tr>
<tr>
<td><strong>Age (in years)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-19</td>
<td>1</td>
<td>.2</td>
</tr>
<tr>
<td>20-29</td>
<td>192</td>
<td>40.6</td>
</tr>
<tr>
<td>30-39</td>
<td>162</td>
<td>34.2</td>
</tr>
<tr>
<td>40-49</td>
<td>67</td>
<td>14.2</td>
</tr>
<tr>
<td>50-59</td>
<td>37</td>
<td>7.8</td>
</tr>
<tr>
<td>60+</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td><strong>Sales Experience (in years)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-4</td>
<td>149</td>
<td>31.5</td>
</tr>
<tr>
<td>5-10</td>
<td>209</td>
<td>44.2</td>
</tr>
<tr>
<td>10-20</td>
<td>94</td>
<td>19.9</td>
</tr>
<tr>
<td>20-30</td>
<td>17</td>
<td>3.6</td>
</tr>
<tr>
<td>30+</td>
<td>4</td>
<td>.8</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; High School</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>High School</td>
<td>45</td>
<td>9.5</td>
</tr>
<tr>
<td>Some College</td>
<td>113</td>
<td>23.9</td>
</tr>
<tr>
<td>Associates</td>
<td>67</td>
<td>14.2</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>194</td>
<td>41</td>
</tr>
<tr>
<td>Some Post Graduate</td>
<td>10</td>
<td>2.1</td>
</tr>
<tr>
<td>Master’s Degree</td>
<td>39</td>
<td>8.2</td>
</tr>
<tr>
<td>PhD, Law, MD, other</td>
<td>5</td>
<td>1.1</td>
</tr>
<tr>
<td><strong>Household Income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$0-$24,999</td>
<td>62</td>
<td>13.1</td>
</tr>
<tr>
<td>$25,000-$49,999</td>
<td>162</td>
<td>34.2</td>
</tr>
<tr>
<td>$50,000-$74,999</td>
<td>146</td>
<td>30.9</td>
</tr>
<tr>
<td>$75,000-$99,999</td>
<td>52</td>
<td>11.0</td>
</tr>
<tr>
<td>$100,000-$124,999</td>
<td>31</td>
<td>6.6</td>
</tr>
<tr>
<td>$125,000-$149,999</td>
<td>8</td>
<td>1.7</td>
</tr>
<tr>
<td>$150,000-$174,999</td>
<td>7</td>
<td>1.5</td>
</tr>
<tr>
<td>$175,000-$199,999</td>
<td>2</td>
<td>.4</td>
</tr>
<tr>
<td>$200,000 and up</td>
<td>3</td>
<td>.6</td>
</tr>
</tbody>
</table>
demographic dimensions of the study was to include a variety of industry representations. Table 9 contains the industry affiliations.

The largest industry is consumer goods and services at 38.9%. Sixteen different industries are represented. In addition, I examined, as suggested by my committee, the significance of industry type as an independent variable and as a moderator of the effect of transformational leadership predicting sales performance. As an independent variable industry affiliation was not statistically significant in predicting sales performance ($b = -0.008, t = -0.178, \alpha = 0.859$). Industry affiliation was also not statistically significant as a moderator of the effect of transformational leadership predicting sales performance ($b = -0.002, t = -0.221, \alpha = 0.8254$).

Table 9

<table>
<thead>
<tr>
<th>Industry</th>
<th>Number</th>
<th>Percentage of sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerospace &amp; Defense</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td>Agriculture</td>
<td>7</td>
<td>1.5</td>
</tr>
<tr>
<td>Automotive</td>
<td>37</td>
<td>7.8</td>
</tr>
<tr>
<td>Chemicals</td>
<td>4</td>
<td>0.9</td>
</tr>
<tr>
<td>Construction</td>
<td>15</td>
<td>3.2</td>
</tr>
<tr>
<td>Consumer Goods &amp; Services</td>
<td>184</td>
<td>38.9</td>
</tr>
<tr>
<td>Energy Industry</td>
<td>7</td>
<td>1.5</td>
</tr>
<tr>
<td>Financial Services</td>
<td>45</td>
<td>9.5</td>
</tr>
<tr>
<td>Health Care, Pharmaceuticals, &amp; Biotechnology</td>
<td>32</td>
<td>6.8</td>
</tr>
<tr>
<td>Housing &amp; Real Estate</td>
<td>20</td>
<td>4.2</td>
</tr>
<tr>
<td>Information Technology (IT)</td>
<td>52</td>
<td>11</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>16</td>
<td>3.4</td>
</tr>
<tr>
<td>Media</td>
<td>29</td>
<td>6</td>
</tr>
<tr>
<td>Mining &amp; Drilling</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td>Other-Technology</td>
<td>16</td>
<td>3.4</td>
</tr>
<tr>
<td>Business Services</td>
<td>7</td>
<td>1.5</td>
</tr>
<tr>
<td>Total</td>
<td>473</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 10 contains the demographic statistics of the participants and the measures. It shows that the mean age to be 35.2 years, the mean amount of experience to be 8.12 years, and the mean household income to be $64,000. The dependent variable had a mean of 5.7 and a standard
deviation of 1.8, or 18%. The mean of 5.7 translates into an interpretation that the average participant reported their sales performance as being in the top 34% of all salespeople performing similar roles as themselves for their respective companies. Sales performance was self-reported on a scale from 1 (top 10%) to 8. At this point, I am now ready to move on to the analysis of my integrated research model.

Table 10.

Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales Performance</td>
<td>5.7 (Top 34%)</td>
<td>1.8 (18%)</td>
</tr>
<tr>
<td>Transformational Leader</td>
<td>75.24</td>
<td>11.48</td>
</tr>
<tr>
<td>Idealized Influence (A&amp;B)</td>
<td>29.63</td>
<td>4.98</td>
</tr>
<tr>
<td>Inspirational Motivation</td>
<td>15.65</td>
<td>2.84</td>
</tr>
<tr>
<td>Intellectual Stimulation</td>
<td>14.87</td>
<td>2.62</td>
</tr>
<tr>
<td>Individualized Consideration</td>
<td>15.09</td>
<td>2.67</td>
</tr>
<tr>
<td>Transactional Leader</td>
<td>27.91</td>
<td>4.82</td>
</tr>
<tr>
<td>Contingent Reward</td>
<td>14.99</td>
<td>2.65</td>
</tr>
<tr>
<td>MBE-Active</td>
<td>12.93</td>
<td>3.27</td>
</tr>
<tr>
<td>Passive Avoidant</td>
<td>15.48</td>
<td>5.82</td>
</tr>
<tr>
<td>Laissez-Faire</td>
<td>7.09</td>
<td>3.11</td>
</tr>
<tr>
<td>MBE-Passive</td>
<td>8.39</td>
<td>3.23</td>
</tr>
<tr>
<td>SToM</td>
<td>65.29</td>
<td>6.73</td>
</tr>
<tr>
<td>RB</td>
<td>13.98</td>
<td>1.8</td>
</tr>
<tr>
<td>DNC</td>
<td>10.58</td>
<td>2.87</td>
</tr>
<tr>
<td>TBEV</td>
<td>23.04</td>
<td>3.24</td>
</tr>
<tr>
<td>SI</td>
<td>17.70</td>
<td>2.70</td>
</tr>
<tr>
<td>Personality</td>
<td>13.02</td>
<td>3.95</td>
</tr>
<tr>
<td>Age (years old)</td>
<td>35.2</td>
<td>9.8</td>
</tr>
<tr>
<td>Experience (years)</td>
<td>8.12</td>
<td>7.2</td>
</tr>
<tr>
<td>Household Income</td>
<td>$64,000</td>
<td>$18,500</td>
</tr>
</tbody>
</table>

Note. MBE = Management-by-exception. Dependent variable = Sales Performance (1-8 scale).

Testing the Moderated Mediation Model

To test my proposed integrated research model (see Figure 1 and Figure 6) and the five hypotheses, I used the PROCESS macro in SPSS V25 to estimate and probe interactions and conditional direct and indirect effects in my moderated mediation model (Hayes, 2013). My integrated research
model is depicted conceptually in Figure 1 and in a statistical diagram in Figure 6. In the operation of PROCESS for my analysis, I used 10,000 bootstrap samples to create bias-corrected 95% confidence intervals. To interpret bootstrapped (95%) confidence intervals, I show the low range (Lower) and high range (Upper) where the “true” value should occur. Therefore, according to Hayes (2013), if the bootstrapped (95%) confidence intervals contain zero the effect is not considered to be statistically significant. This technique is employed in Table 15 where I report on my examination of the moderated mediation effect. I also specified mean-centered products. To meet the assumption of homoscedasticity, which is a consistent variance of errors around the regression line at various levels of the independent variable (Keith, 2006), I checked to make sure there was no “fan shape” spread of the shape of the residuals which could possibly indicate heteroscedasticity (Field, 2013). I also chose the option of using heteroscedasticity-consistent inferences through a standard error estimator (HC3) from Hayes and Cai (2007). Because the analysis with sex as the moderator, included different group sample sizes, I tested the homogeneity of variance assumption using the Levene’s test (Field, 2013). The result was not statistically significant ($F (1, 471) = .000, p = .984$) meaning that the homogeneity of variance assumption was not violated. I begin by illustrating a summary of the statistically significant predictors in the model in Table 11. Through the analysis I will discuss each of these as they occur in the model. I will proceed with the analysis in a path-by-path approach through the model. However, before I begin the analysis, a review of the hypotheses is in order. The first three sets of hypotheses, except in one case, deal with the c-path and the direct effects of the independent variable(s) transformational leadership (and the various sub-components) predicting sales performance (Y). The one exception is hypothesis H1e, which is an a-path effect with transformational leadership predicting ToM (SToM). The fourth hypothesis is ToM (SToM and sub-components) as a mediator on the b-path.
Finally, the fifth hypothesis deals with the moderated mediator effect on the b-path. For the moderated mediation to occur, I need the indirect effect of transformational leadership (X) to be statistically significant as a function of sex (V). Which is to say that the mediation of transformational leadership’s (X’s) effect on sales performance (Y) by the mediator ToM (M) is moderated by sex (V). Each of the hypotheses is summarized here:

H1(+): Hypothesis 1: Transformational Leadership predicts sales performance.

H1a(+): Hypothesis 1a: Idealized influence predicts sales performance.

H1b(+): Hypothesis 1b: Inspirational Motivation predicts sales performance.

H1c(+): Hypothesis 1c: Intellectual Stimulation predicts sales performance.

H1d(+): Hypothesis 1d: Individualized Consideration predicts sales performance.

H1e(+): Hypothesis 1: Transformational Leadership predicts theory of mind.


### Table 11

**Predictors of Sales Performance**

<table>
<thead>
<tr>
<th>Predictor</th>
<th>$b$</th>
<th>$t$</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational Leader</td>
<td>.024**</td>
<td>2.63</td>
<td>.0088</td>
</tr>
<tr>
<td>Idealized Influence (A&amp;B)</td>
<td>.043*</td>
<td>2.22</td>
<td>.027</td>
</tr>
<tr>
<td>Inspirational Motivation</td>
<td>.073*</td>
<td>2.07</td>
<td>.039</td>
</tr>
<tr>
<td>Intellectual Stimulation</td>
<td>.03</td>
<td>.721</td>
<td>.471</td>
</tr>
<tr>
<td>Individualized Consideration</td>
<td>.133**</td>
<td>3.75</td>
<td>.0002</td>
</tr>
<tr>
<td>Transactional Leader</td>
<td>.016</td>
<td>.768</td>
<td>.443</td>
</tr>
<tr>
<td>Contingent Reward</td>
<td>.102**</td>
<td>2.65</td>
<td>.0084</td>
</tr>
<tr>
<td>MBE-Active</td>
<td>-.025</td>
<td>-.89</td>
<td>.374</td>
</tr>
<tr>
<td>MBE-Passive</td>
<td>-.053</td>
<td>-1.86</td>
<td>.064</td>
</tr>
<tr>
<td>Laissez-Faire</td>
<td>-.061*</td>
<td>-2.07</td>
<td>.039</td>
</tr>
<tr>
<td>SToM</td>
<td>-.005</td>
<td>-.2834</td>
<td>.777</td>
</tr>
<tr>
<td>Age</td>
<td>.003</td>
<td>.034</td>
<td>.973</td>
</tr>
<tr>
<td>Experience</td>
<td>.108</td>
<td>.895</td>
<td>.371</td>
</tr>
<tr>
<td>Personality</td>
<td>.055*</td>
<td>2.44</td>
<td>.015</td>
</tr>
</tbody>
</table>

*Note. MBE = Management-by-exception. **p < .01; *p < .05.*
H2a(+): Hypothesis 2a: Contingent Reward leadership predicts sales performance.
H2c(-): Hypothesis 2c: Management by exception-passive predicts sales performance.
H3(-): Hypothesis 3: Laissez-faire predicts sales performance.
H4: Hypothesis 4: Theory-of-Mind (SToM) mediates the relationship between transformational leadership and sales performance.
H4a: Hypothesis 4a: Rapport building mediates the relationship between transformational leadership and sales performance.
H4b: Hypothesis 4b: Detecting nonverbal cues mediates the relationship between transformational leadership and sales performance.
H4c: Hypothesis 4c: Taking a bird’s-eye view mediates the relationship between transformational leadership and sales performance.
H4d: Hypothesis 4d: Shaping the interaction mediates the relationship between transformational leadership and sales performance.
H5: Hypothesis 5: Sex moderates the relationship between ToM (SToM) and sales performance (females > males).

Each of the hypotheses is mapped with the results, in Table 12. Overall, using the cut-offs of **p < .01; * p < .05 transformational leadership (TL) was a statistically significant predictor of sales performance as a direct effect. One of the sub-components, individualized consideration (IC) was also highly statistically significant. Another sub-component, intellectual stimulation (IS) was close to being statistically significant (p = .067). Contingent reward (CR; a sub-component of transactional leadership) was also highly statistically significant as a predictor of sales performance, also along the c-path. Along the a-path, transformational leadership (TL) was a
statistically significant predictor of ToM (SToM). See Table 12 for complete results of each hypothesis. I will proceed by covering the three paths in the model.

Table 12

Hypotheses, model path and results

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Path</th>
<th>Expectation</th>
<th>Supported</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: TL &gt; SP</td>
<td>c</td>
<td>+ correlation</td>
<td>yes</td>
<td>.009**</td>
</tr>
<tr>
<td>H1a: II &gt; SP</td>
<td>c</td>
<td>+ correlation</td>
<td>yes</td>
<td>.027*</td>
</tr>
<tr>
<td>H1b: IM &gt; SP</td>
<td>c</td>
<td>+ correlation</td>
<td>yes</td>
<td>.039</td>
</tr>
<tr>
<td>H1c: IS &gt; SP</td>
<td>c</td>
<td>+ correlation</td>
<td>no</td>
<td>.471</td>
</tr>
<tr>
<td>H1d: IC &gt; SP</td>
<td>c</td>
<td>+ correlation</td>
<td>no</td>
<td>.001**</td>
</tr>
<tr>
<td>H1e: TL &gt; SToM</td>
<td>a</td>
<td>+ correlation</td>
<td>yes</td>
<td>.000**</td>
</tr>
<tr>
<td>H2: TRANSL &gt; SP</td>
<td>c</td>
<td>+ correlation</td>
<td>no</td>
<td>.443</td>
</tr>
<tr>
<td>H2a: CR &gt; SP</td>
<td>c</td>
<td>+ correlation</td>
<td>yes</td>
<td>.000**</td>
</tr>
<tr>
<td>H2b: MBE-A &gt; SP</td>
<td>c</td>
<td>+ correlation</td>
<td>no</td>
<td>.374</td>
</tr>
<tr>
<td>H2c: MBE-P &gt; SP</td>
<td>c</td>
<td>- correlation</td>
<td>no</td>
<td>.064</td>
</tr>
<tr>
<td>H3: LF &gt; SP</td>
<td>c</td>
<td>- correlation</td>
<td>yes</td>
<td>.039*</td>
</tr>
<tr>
<td>H4: SToM mediates TL &gt; SP</td>
<td>b</td>
<td>+ correlation</td>
<td>no</td>
<td>.738</td>
</tr>
<tr>
<td>H4a: RB mediates TL &gt; SP</td>
<td>b</td>
<td>+ correlation</td>
<td>no</td>
<td>.563</td>
</tr>
<tr>
<td>H4b: DNC mediates TL &gt; SP</td>
<td>b</td>
<td>+ correlation</td>
<td>no</td>
<td>.638</td>
</tr>
<tr>
<td>H4c: TBEV mediates TL &gt; SP</td>
<td>b</td>
<td>+ correlation</td>
<td>no</td>
<td>.679</td>
</tr>
<tr>
<td>H4d: SI mediates TL &gt; SP</td>
<td>b</td>
<td>+ correlation</td>
<td>no</td>
<td>.463</td>
</tr>
<tr>
<td>H5: Sex moderates SToM &gt;SP</td>
<td>b</td>
<td>+ female</td>
<td>no</td>
<td>.281</td>
</tr>
</tbody>
</table>


The a-path. The a-path \((a_i)\) contains the direct effect of transformational leadership predicting ToM, as measured with SToM (see Table13. The model on this path was statistically significant \((R = .56, R^2 = .31, F = 42.7, p = .0000)\). This path had the highest model effect size \((R^2 = .31)\). Transformational leadership was found to be a statistically significant predictor of ToM (as measured by SToM) supporting hypothesis H1e \((a_i = .3045, t = 10.8, p = .0000)\) which is the only hypothesis concerning the a-path of the model. I will further analyze the hypotheses in the
discussion chapter. In addition, this path also had a statistically significant covariate; age ($a_i = .768$, $t = 2.88$, $p = .0042$).

Table 13

Results from a Regression Analysis Examining the a-path of the Model: Transformational Leadership Predicting the mediator ToM (SToM)

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>SE</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-25.82**</td>
<td>2.12</td>
<td>-12.19</td>
<td>.0000</td>
</tr>
<tr>
<td>TL ($Xe$)</td>
<td>.3045**</td>
<td>.0282</td>
<td>10.8</td>
<td>.0000</td>
</tr>
<tr>
<td>Age ($C_1$)</td>
<td>.768**</td>
<td>.267</td>
<td>2.88</td>
<td>.0042</td>
</tr>
<tr>
<td>Experience ($C_2$)</td>
<td>-.389</td>
<td>.349</td>
<td>-1.12</td>
<td>.265</td>
</tr>
<tr>
<td>Personality ($C_3$)</td>
<td>.11</td>
<td>.069</td>
<td>1.55</td>
<td>.122</td>
</tr>
</tbody>
</table>

$R = .56$, $R^2 = .31$, $F(4, 468) = 42.7$, $p = .0000$

Note. ($N = 473$). TL = Transformational Leadership. Covariates include age, experience, and personality. ** $p < .01$; * $p < .05$

The b-path. There are three effects of the b-path, which I will label $b_1$, $b_2$, and $b_3$. The first effect along the b-path, $b_1$, contains the effect between the mediator ToM (SToM), and the dependent variable, sales performance ($Y$) holding constant the independent variable transformational leadership ($X$) and with no impact from the moderator. The $b_1$ effect of the b-path was not statistically significant ($p = .777$; see Table 14). The second effect along the b-path is $b_2$, is the regression coefficient for sex, estimating the effect of differences related to male and female salespeople on sales performance holding transformational leadership ($X$) and ToM (SToM) constant. This would answer the question; among salespeople with the same
transformational leadership (X) scores and the same ToM (SToM) scores, are females superior to males in sales performance? The results of $b_2$ were not statistically significant ($p = .738$; Table 14

**Results from a Regression Analysis Examining the b-path of the Model: Total Effects of ToM (SToM) on Sales Performance Moderated by Sex**

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>SE</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>2.99**</td>
<td>.72</td>
<td>4.15</td>
<td>.000</td>
</tr>
<tr>
<td>TL ($c'$)</td>
<td>.024**</td>
<td>.009</td>
<td>2.63</td>
<td>.009</td>
</tr>
<tr>
<td>SToM ($b_1$)</td>
<td>-.005</td>
<td>.017</td>
<td>-.28</td>
<td>.777</td>
</tr>
<tr>
<td>Sex ($b_2$)</td>
<td>-.057</td>
<td>.17</td>
<td>-3.35</td>
<td>.738</td>
</tr>
<tr>
<td>SToM*Sex ($b_3$)</td>
<td>-.031</td>
<td>.026</td>
<td>-1.08</td>
<td>.281</td>
</tr>
<tr>
<td>Age ($C_1$)</td>
<td>.0032</td>
<td>.096</td>
<td>.34</td>
<td>.973</td>
</tr>
<tr>
<td>Experience ($C_2$)</td>
<td>.108</td>
<td>.120</td>
<td>.895</td>
<td>.371</td>
</tr>
<tr>
<td>Personality ($C_3$)</td>
<td>.055*</td>
<td>.022</td>
<td>2.44</td>
<td>.015</td>
</tr>
</tbody>
</table>

Note. ($N = 473$). TL = Transformational Leadership. SToM = Salesperson Theory of Mind. Mean-centering was used to compute interactive terms. Covariates include age, experience, and personality. ** $p < .01$; * $p < .05$. 

![Diagram of mediation and moderation model](attachment:media.png)

$b_1 = -.005, t = -.28, p = .777$

$b_2 = -.06, t = -.34, p = .738$

$b_3 = -.031, t = -1.08, p = .281$

$R = .20, R^2 = .041, F(6, 466) = 3.28, p = .004$
see Table 14). The third effect along the b-path is \( b_3 \). This regression coefficient measures the multiplicative effect of the mediator, ToM (SToM) multiplied by the moderator, sex. This includes the conditional effects of the mediator at each level of the moderator, male and female (see Tables 14 and 15). The \( b_3 \) effect was not statistically significant (\( p = .281 \); see Table 14). The conditional effects of the mediator at each level of the moderator, male and female (see Table 15) and their respective 95% confidence intervals. Both of the 95% confidence intervals contained zero.

Table 15

<table>
<thead>
<tr>
<th>Sex</th>
<th>Effect</th>
<th>SE</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>.0022</td>
<td>.0054</td>
<td>-.0082 to .0128</td>
</tr>
<tr>
<td>Female</td>
<td>-.0072</td>
<td>.0078</td>
<td>-.0219 to .0086</td>
</tr>
</tbody>
</table>

Note. (\( N = 473 \)). Values for the moderator are Male and Female. Effect represents the unstandardized conditional effects of ToM on Sales Performance at the specified level of the moderator.

indicating non-significance. Because of the non-statistically significant results of the b-path coefficients, \( b_1, b_2, \) and \( b_3 \), the following hypotheses are not supported: H4, H4a, H4b, H4c, H4d, and H5. This list represents the complete group of hypotheses concerning the b-path. I will further analyze the hypotheses in the discussion chapter. The b-path model had a weak effect size (\( R^2 = .041 \)).

The c’-path. The c-path (\( c' \)) contains the direct effect of the predictors on the outcome sales performance. This differs from a (\( c \)) that represents the total effect of the predictors on the outcome sales performance. The total effects of the model showed a weak, although statistically significant, effect size (\( R^2 = .055 \)). In the c’-path, transformational leadership, as well as the sub-dimensions of the construct (idealized influence, intellectual stimulation, inspirational motivation,
and individualized consideration), and other leadership attributes such as transactional leadership, contingent reward, management-by-exception active, management-by-exception passive, and laissez-faire predicting sales performance. Along the c-path several predictors were statistically significant (see Table 12 and Table 16). At a significance level of \( p < .01 \), transformational leadership, individualized consideration, and contingent reward were all statistically significant predictors of sales performance. At a significance level of \( p < .05 \), idealized influence, inspirational motivation, and laissez-faire were all statistically significant predictors of sales performance. The

### Table 16

**Results from a Regression Analysis Examining the c-path of the Model: Transformational Leadership (and other variables) Predicting Sales Performance**

<table>
<thead>
<tr>
<th>Variable</th>
<th>( B )</th>
<th>( SE )</th>
<th>( t )</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>2.99**</td>
<td>.72</td>
<td>4.15</td>
<td>.0000</td>
</tr>
<tr>
<td>TL (( X ))</td>
<td>.024**</td>
<td>.009</td>
<td>2.63</td>
<td>.0088</td>
</tr>
<tr>
<td>II</td>
<td>.043*</td>
<td>.02</td>
<td>2.22</td>
<td>.027</td>
</tr>
<tr>
<td>IM</td>
<td>.073*</td>
<td>.035</td>
<td>2.07</td>
<td>.039</td>
</tr>
<tr>
<td>IS</td>
<td>.03</td>
<td>.04</td>
<td>.721</td>
<td>.471</td>
</tr>
<tr>
<td>IC</td>
<td>.133**</td>
<td>.038</td>
<td>3.75</td>
<td>.0002</td>
</tr>
<tr>
<td>CR</td>
<td>.102**</td>
<td>.038</td>
<td>2.65</td>
<td>.0084</td>
</tr>
<tr>
<td>MBE-A</td>
<td>-.025</td>
<td>.028</td>
<td>-.89</td>
<td>.374</td>
</tr>
<tr>
<td>MBE-P</td>
<td>-.053</td>
<td>.029</td>
<td>-1.86</td>
<td>.064</td>
</tr>
<tr>
<td>LF</td>
<td>-.061*</td>
<td>.03</td>
<td>-2.07</td>
<td>.039</td>
</tr>
<tr>
<td>TRANSL</td>
<td>.016</td>
<td>.021</td>
<td>.768</td>
<td>.443</td>
</tr>
<tr>
<td>Age (( C_1 ))</td>
<td>.003</td>
<td>.096</td>
<td>.034</td>
<td>.973</td>
</tr>
<tr>
<td>Experience (( C_2 ))</td>
<td>.108</td>
<td>.12</td>
<td>.895</td>
<td>.371</td>
</tr>
<tr>
<td>Personality (( C_3 ))</td>
<td>.055*</td>
<td>.023</td>
<td>2.44</td>
<td>.015</td>
</tr>
</tbody>
</table>

\( c' = .024, t = 2.63, p = .0088 \)

Total Effects of the Model: \( R = .235, R^2 = .055, F(7, 465) = 3.99, p = .0003 \)

**Note.** \( (N = 473) \). TL = Transformational Leadership. II = Idealized Influence. IM = Inspirational Motivation. IS = Intellectual Stimulation. IC = Individualized Consideration. CR= Contingent Reward. MBE-A= Management-by-exception active. MBE-P= Management-by-exception passive. LF = Laissez-Faire. TRANSL = Transactional Leadership. Covariates include age, experience, and personality. ** \( p < .01 \); * \( p < .05 \).
personality covariate was also statistically significant ($c' = .055, t = 2.44, p = .015$). Because of the statistically significant predictors on the c-path, the hypotheses were supported: H1, H1a, H1b, H1d, H2a, and H3. The following hypotheses were not supported: H1c, H2, H2b, and H2c (see Table 12).

**Total effects of the integrated research model.** Total effects of the integrated research model include the quantification of the conditional indirect effect which occurs through differences in transformational leadership (X) mapped onto differences in sales performance (Y) indirectly through the mediator SToM (M) depending on sex (V) as a moderator (Hayes, 2013). For the moderated mediation to occur, I needed the indirect effect of transformational leadership (X) to be statistically significant as a function of sex (V). Which is to say that the mediation of transformational leadership’s (X’s) effect on sales performance (Y) by the mediator ToM (M) is moderated by sex (V). Because the b-path coefficients ($b_1$, $b_2$, and $b_3$) lacked significance, the model’s conditional indirect effects (moderated mediation) and the related hypotheses were not supported (see Table 12 and Figure 7). The total effects are illustrated in Figure 7 with the statistically significant a-path and c-path. The total effects are also represented by the best fitting ordinary least squares (OLS) regression models shown in equations 6, 7, and 8. The predicted mediation in equation 6 shows the statistically significant constant, statistically significant predictor (transformational leadership) and a statistically significant covariate (age). The predicted sales performance model is represented by equation 7. It shows the statistically significant constant, statistically significant predictor (transformational leadership) and a statistically significant covariate (personality). The mediator’s effect (SToM) on sales performance is conditional on sex and takes the form of equation 8 but is not statistically significant.

$$M^*= -25.82** + .3045**TL + .1073P + .768**A - .39E$$ (6)
\[ \hat{Y} = 2.99^{**} + 0.024^{**} TL - 0.005 ST - 0.057 S - 0.031 (SToM*Sex) + 0.053 P + 0.0032 A + 0.1076 E \] (7)

\[ \theta_{M \rightarrow Y} = a(b_1 + b_3 V) = -.005 - .031 (Sex) \] (8)

Where,
- \( M^\wedge = \text{Predicted Mediation} \)
- \( TL = \text{Transformational Leadership} \)
- \( P = \text{Personality Covariate} \)
- \( A = \text{Age Covariate} \)
- \( E = \text{Experience Covariate} \)
- \( \hat{Y} = \text{Predicted Sales Performance} \)
- \( ST = \text{Salesperson Theory of Mind Mediator} \)
- \( S = \text{Sex: Male/Female Moderator} \)

Finally, the total effects of the model (see Table 16) are statistically significant relative to the model summary values \( R = .235, R^2 = .055, F(7, 465) = 3.99, p = .0003 \). Caution is recommended in interpreting these results due to the weak model effect sizes mentioned above. This study is suggestive for sales theory and for sales practice. In the next chapter, I provide the discussion.
CHAPTER IV
Discussion

“The ability to move people now depends on power’s inverse: understanding another person’s perspective, getting inside his head, and seeing the world through his eyes” (Pink, 2012; p. 70).

--Daniel H. Pink, To Sell is Human

Summary of Findings

The purpose of this study was to examine a sales model that in the context of a customer revolution provided a foundation for a revolution in sales. Specifically, I examined the performance effects of a salesperson’s transformational leadership attributes through a moderated mediator model. The mediator was salesperson theory-of-mind (SToM) which is moderated by sex. My approach involved leveraging the leadership field and ToM as analysis tools and the basis for a model for predicting and explaining a revolution in sales. This study aimed to extend the sales literature by delivering applicable principles for salesperson development and training, and to enhance the foundation and model of sales by incorporating salesperson transformational leadership attributes, SToM, and testing a novel integrated research model. This study is suggestive for sales theory and for sales practice. In this chapter I discuss the major findings, the hypotheses, possible explanations, implications for practice and theory, limitations, future research directions, and my conclusions.

Transformational leadership. The first major finding of the study is the relationship \(c'=.024, t=2.63, p=.0088\) between the predictor, transformational leadership (as well as a number of the other leadership attributes), and the outcome sales performance. It was statistically significant at the \(p < .01\) level. I will discuss the sub-components below. Since the purpose of this study included the examination of the performance effects of a salesperson’s transformational leadership attributes using a moderated mediator theory-of-mind by sex, it is noteworthy that the
first finding be the statistically significant prediction of sales performance by transformational leadership. Throughout this study I have emphasized the need for a revolution in sales, harnessed to align with the customer revolution. This finding opens the search for key individual factors, sales drivers, which are related to a salesperson’s success and to the transformational leadership field. By way of review (Table 4), I used the definition of transformational leadership as “a leader who is “proactive, raise[ing] follower awareness for transcendent collective interests, and help[ing] followers achieve extraordinary goals” (Antonakis et al., 2003; p. 264). It may be that the sales revolution is calling for transformational salespeople who are proactive, raise customer awareness to see solutions, and by doing so these salespeople help customers achieve extraordinary goals.

Another finding involving transformational leadership is that it was found to be a predictor of ToM (measured by SToM) on the a-path of the model. It was tested at \( a = .3045, t = 10.8, p = .0000 \) at the \( p < .01 \) level. Although the study found these predictors statistically significant, caution must be exercised in the interpretation of results due to the low effect sizes. The b-path of the model was the lowest in effect size \( (R^2 = .041) \). The c’-path was also relatively weak in effect size \( (R^2 = .055) \). This also opens several practical and theoretical implications that I will discuss later. There are several other predictors that were statistically significant on the c-path of the model.

**Idealized influence.** Idealized influence \( (c’ = .043, t = 2.22, p = .027) \), is one of the four sub-components of transformational leadership. It was statistically significant at the \( p < .05 \) level. This is a very critical finding to this study. One of the cornerstone theories that motivated this research came from Bass (1997), who suggested that because sales is an influence process involving the alignment of the customer’s goals and objectives with the organization’s solutions, it is like transformational leadership, which is also an influence process in which the leader responds to followers’ needs by aligning goals and objectives of individuals with the organization.
Idealized influence is an attribute that builds trust and acts with integrity and confidence (Avolio et al., 1991). The effective influence that successful salespeople have over their customers must come because of the building of trust. Avolio (2011) says that people who demonstrate idealized influence sacrifice personal gain to the benefit of others. In the sales industry, this is often called having a customer orientation. In the future research section, I will discuss customer orientation in more detail. When Avolio (2011) has asked his workshop participants what constitutes idealized influence, some of the responses include, “taking risks, creating in followers a sense of empowerment, showing dedication to the cause, creating a sense of joint mission, dealing with crises, using radical solutions, and engendering faith in others” (p. 71). Therefore, this attribute is so vital to successful salespeople.

**Inspirational motivation.** Inspirational motivation ($c^* = .073$, $t = 2.07$, $p = .039$), is another one of the four sub-components of transformational leadership. It was also statistically significant at the ($p < .05$) level. I defined inspirational motivation earlier (Table 4) as an attribute describing one who communicates vision and ambitious goals. One who projects optimism, and inspires others (Avolio et al., 1991). When Avolio (2011) asked his workshop participants what constitutes inspirational motivation, some of the responses included, “providing meaning and challenge, painting an optimistic future, and thinking ahead” (p. 71). For a transformational salesperson, inspirational motivation helps them to communicate vision and optimism to their customers, which inspires the customers to overcome challenges and achieve their goals.

**Individualized consideration.** Individualized consideration ($c^* = .133$, $t = 3.75$, $p = .0002$), is another one of the four sub-components of transformational leadership. It was also highly statistically significant at the ($p < .01$) level. In fact, it was the most statistically significant predictor in the study. I defined individualized consideration earlier (Table 4) as advising,
supporting, and coaching others (Avolio et al., 1991). Furthermore, they tend to be attentive to the personal development of their followers through teaching, mentorship, counseling, and awareness (Avolio, 2011). Applying the attribute to the sales area, would call for salespeople to have individualized consideration relative to their relationship with their customers. Bass (1997) theorized that as leaders are attentive to their followers, so to would salespeople need to be attentive to their customers. This construct has considerable content validity with a statistically significant factor in sales: customer orientation (Terho et al., 2015). In the future research section, I will discuss customer orientation in more detail. Another construct used in sales research that has similar meaning is emotional intelligence (EI). EI is defined as “the capacity for recognizing our own feelings and those of others, for motivating ourselves, and for managing emotions well in ourselves and in our relationships” (Manning et al., 2015; p. 504). Sales research tends to indicate that EI is positively correlated with sales success in salespeople and is a better predictor of sales success compared to cognitive measures of intelligence (Goleman, 2006).

**Contingent reward.** Contingent reward ($c' = .102, t = 2.65, p = .0084$), is not one of the four sub-components of transformational leadership, however it is considered foundational in the leadership literature for building trust (Avolio, 2011). It was also highly statistically significant at the ($p < .01$) level. I defined contingent reward (Table 4) as “the leader clarifies expectations and establishes the rewards for meeting these expectations” (Judge & Piccolo 2004; p.756). This attribute is part of the transactional leadership make-up. Although transactional leadership by itself was not statistically significant, contingent reward was an exception. Avolio (2011) says that constructive transactions set up by those who are strong in contingent reward have been found to be reasonably effective. However contingent reward is not generally as statistically significant as the transformational leadership components in motivating others to high standards of excellence,
performance, and development (Avolio, 2011). In my study the only transformational leadership component to score higher than contingent reward was individualized consideration. According to Bass (1985), in contingent reward, the leader and the follower agree as to the tasks or job performance required and the reward for success. The system seems to work because most workers (61%) desire a closer link between their pay and their performance (Yankelovich & Immerwahr, 1983; as cited in Bass, 1985). Since salespeople tend to be performance and goal oriented (Manning et al., 2015), it is consistent that they would score high on contingent reward. I will also discuss this finding in the implications for practice section.

**Laissez-faire leadership.** Laissez-faire leadership ($c’ = -.061, t = -2.07, p = .039$), is also not one of the four sub-components of transformational leadership. It was statistically significant at the ($p < .05$) level at a negative correlation. This is interesting because it is exactly what was hypothesized. The laissez-faire leadership hypothesis, H3, states that salesperson’s scores would have a negative correlation between laissez-faire leader attributes and sales performance. This is easy to conclude when you look at the definition. Laissez-faire leadership (see Table 4) was defined as a leader who “avoids involvement, abdicates authority” (Antonakis et al., 2003; p. 264). The term laissez-faire literally means hands-off. From what I have found so far in this study this is exactly the opposite of what we would expect to see in a transformational salesperson; and so, this is a consistent finding. In the next section, I discuss the supported hypotheses.

**Support for Hypotheses**

The study focused on five major hypotheses with three of the five having several sub-components. The first set of hypotheses delivered most of the statistically significant findings because they dealt with direct predictors of sales performance and in one case a prediction of ToM. The results supported H1 (transformational leadership), H1a (idealized influence), H1b
(inspirational motivation), H1d (individualized consideration), all predicting sales performance and H1e (transformational leadership) predicting theory of mind. This represents the finding of statistically significant sales drivers that are considered to be malleable, as I discussed earlier in the study. It appears these sales drivers are a foundation for a transformational salesperson model. The one hypothesis that was not statistically significant, H1c (intellectual stimulation) is defined as (Table 4) an attribute that is associated with encouraging innovative and creative thinking (Avolio et al., 1991). The fact that participants scored high in contingent reward seems to be consistent with lower scores on intellectual stimulation. For example, salespeople who are focused on the objective and motivated by clearly communicated rewards, may not be as drawn to creative and innovative thinking.

In the second set of hypotheses, only H2a (contingent reward) statistically significantly predicted sales performance. As I discussed above, salespeople tend to be performance and goal oriented (Manning et al., 2015), and thus it is consistent that they would score high on contingent reward. There were three hypotheses that were not supported; H2 (transactional leadership), H2b (Management by exception-active), and H2c (Management by exception-passive). These three tend to be associated with less effective leadership compared to transformational leadership and contingent reward. I am not surprised by these three not being supported because they are not generally thought of as being compatible with salespeople achieving high standards of excellence and superior performance.

The third hypothesis was a stand-alone; H3 (laissez-faire leadership) was statistically significant as being negatively correlated with changes in sales performance. This was expected. The support of the results confirmed both the theory and sales practices that laissez-faire leadership
represents the opposite of those who succeed in sales. This could be treated as a reverse-scored type of survey item.

For the fourth group of hypotheses, I will discuss them as a group; H4 (Theory-of-Mind-SToM, and four sub-components) were not supported as a mediator of the relationship between transformational leadership and sales performance. I tested ToM (SToM) as a direct predictor of sales performance and again it was not statistically significant \((p = .161)\). This might explain the lack of empirical studies using ToM and SToM in the sales field. Finally, the fifth hypothesis; H5 (Sex moderates the relationship between ToM--SToM and sales performance: females > males) was widely supported from a theory perspective and had the research. There strong evidence that females show superiority over males in (Deaner et al., 2007; Kirkland et al., 2013). However, these studies were not sales studies. One very plausible explanation is that the sales field is a unique environment such that females are not able to exercise their advantage in mentalizing skills.

**Implications for Practice**

The implications of this study for the sales field cover several interesting applications and explanations. The first implication is for salesperson selection.

**Salesperson selection.** One very important implication of this study is the potential application of using the MLQ-5X short-form (Bass & Avolio, 1995) in the selection process for salespeople. The MLQ was shown to be effective in assessing participants from various industries, different functions, and diverse professional roles (Moss, 2018). It was also suggested that human resource managers could benefit from utilizing the MLQ to (Moss, 2018) assist them in the selection process by standardizing leadership selection. If it can be used to standardize leadership selection, due to the results of this study, it should be a great resource to standardize salesperson selection.
Salesperson training and development. A transformational salesperson model focused on the development of transformational leadership attributes, such as idealized influence, inspirational motivation, and especially individualized consideration will shift the sales training paradigm to more malleable skills. The shift from a trait-based to state-based approach is highlighted by the influential study from Churchill, et al. (1985), when they shifted the thinking in sales research from a trait-based focus to a more “influenceable” (malleable) sales drivers focus (see Table 1). Further support of developmental sales drivers was found when a statistically significant relationship was demonstrated between leadership propensity and a salesperson’s organizational role and the prediction of sales performance (Flaherty et al., 2009). The relationship between salesperson personality traits and situational influences, which equate to observable coachable behavior, predicts sales performance (Shannahan, Shannahan, & Bush, 2013). This study further supports the sales coaching profession by providing identifiable sales drivers as a focus for development. When salespeople focus on skill development they increase their sales performance (VandeWalle, Brown, Cron, & Slocum, 1999).

Sales coaches and trainers, sales managers, and sales self-developers can use the results of this study to build a sales training or sales coaching program that has empirical support. Organizations can use these results in selecting salespeople and in training sales managers. Non-sales professionals can use these results to improve their transformational leadership attributes to increase their effectiveness in sales-like behavior such as giving presentations.

Implications for Theory

This study is important for sales theory. The study contributes to the pioneering work of Bass (1997) who originally made the theoretical connection between transformational leadership attributes and effective sales performance. This study confirms the original hypothesis and extends
the theory. Bass focused on idealized influence by applying leadership influence in an analogous manner to the influence that salespeople have over customers. This study found idealized influence to be a statistically significant predictor, but also extends the theory with inspirational motivation and individualized consideration as statistically significant predictors. Finally, the theory is extended with the statistically significant results involving the predictors contingent reward leadership and laissez-faire leadership. Therefore, this study extends sales theory.

Limitations

Like other studies, there are several limitations associated with this project. One of the sources of the limitations related to the method and inferences that can be made from this study is the cross-sectional design of the research and the data collection method. Another potential source is the analysis itself. Finally, the measures and the inferences may be a source of limitations.

Common method variance. Common method variance occurs in research when the measurement method itself has biasing effects creating spurious variance that creates interference of the construct variance (Podsakoff et al., 2012). This problem has been well documented and various solutions have been presented (Lindell & Whitney, 2001). Below, I discuss the Harman’s test, however the test does not help to control for common method variance and has numerous limitations itself (Podsakoff et al., 2003). Rather, to help mitigate common method variance I followed these steps. First, recommendations for survey design, such as disguising the independent variable were followed. Transformation leadership (the independent variable) as a scale included the summation of 20 items out of the 45 in the MLQ-5X short form (Bass & Avolio, 1995). This had the effect of creating psychological distance between transformational leadership as a predictor and sales performance as an outcome (Idaszak & Drasgow, 1987). Second, I also included scales that were not used in the analysis the eyes test, various demographic items, and
four of the five mini IPIP scales (Donnellan et al., 2006). Third, I employed different response methods for the constructs such as varying the scale, including sub-items under a major item, including pictures (eyes test), and varying the number of items per page. Again, all of this created psychological distance by making it harder for participants to game the survey by trying to predict what I was looking for (Podsakoff et al., 2003). To test of common method variance, I used the Harman test (Anderson & Bateman, 1997). a single factor test in SPSS 25 to assess common method variance. This test is often used to estimate the variance due to a single common method factor as a diagnostic technique (Podsakoff et al., 2003). To conduct this test, I used exploratory factor analysis to see how much variance across all items could be attributed to a single unrotated factor solution. I used principal components analysis as the extraction method. The results showed that the single method factor accounted for 25.73% of variance among all items, and the method effects were mostly limited to a single factor. This result is considerably less than the 50% cutoff that would indicate a serious threat to the study’s internal validity if uncorrected. There are limitations to this test. It does not control for or identify common method variance effect sources and it is an insensitive test (Podsakoff et al., 2003). However, I concluded that method bias did not pose a statistically significant threat to the inferential analysis. If needed, I possibly could have used statistical remedies to control for common method variance when testing my hypotheses.

Dependent variable measure. The study used a self-rated item for the sales performance dependent variable. Recent sales research tends to show that this may be disputable because of the “performance effect” where low performers exaggerate, and high-performers underestimate their actual performance (Jaramillo, Carrillat, & Locander, 2003; Plouffe, et al., 2009). In the further research section, I discuss this limitation and possible solutions as to different study designs.
Level and type of analysis. For the analysis, I used SPSS V25 and PROCESS. Perhaps this study could have been improved by using structural equation modeling (SEM) with AMOS. Using SEM, I would have been able to test for the potential of latent variables. One example, is the research question related to how much is trust a latent variable in transformational leadership sales drivers such as idealized influence, inspirational motivation, and individualized consideration? Ingram et al. (2015) have established a sales model that they label trust-based selling.

Statistical inference and generalizability limitations. Although the study found several predictors statistically significant, caution must be exercised in the interpretation of results due to the low effect sizes. The b-path of the model was the lowest in effect size ($R^2 = .041$). The c’-path was also relatively weak in effect size ($R^2 = .055$). In addition, the statistically significant predictors in this study are all subject to internal validity limitations (Shadish, Cook, & Campbell, 2002). It is not clear the direction of prediction based on the correlation. For example, do changes in transformational leadership predict changes in sales performance or is it the situation where people who happen to be performing high in sales predict changes in transformational leadership? This issue can only really be dealt with through the study design. By using a randomized experimental design, causation and the direction of prediction can be established. There are also limitations related to the generalizability of the inferences, called external validity (Shadish et al., 2002). Although the mechanical turk data collection tend to be more reflective of the US population than many other sampling techniques (Buhrmester et al., 2011), the sample survey respondents tend to be younger (in this study the average age was 35.2 years), with more education (in this study 52.4% had at least a BA degree), and more female (in this study 39% were female), and more politically liberal (Paolacci, Chandler, & Ipeirotis, 2010). Interpretation of the results
must be carefully handled due to the characteristics of the sample and other characteristics mentioned above.

**Further Research and Directions**

During this research project, I imagined various potential future research extensions and studies. I have chosen to limit my discussion to the five I deem most relevant and applicable. The first two originate from limitations of this study, using an objective measure of sales performance, and employing a study design that is longitudinal, experimental, and/or an intervention. The other three are possible extensions of this study. First, the connection between customer orientation, transformational leadership attributes, SToM and sales performance. Second, the possible examination of the link between ToM and transformational leadership. Third, the link between transformational leadership, psychological resourcefulness, and sales performance.

**Objective sales performance data.** The sales research literature could benefit from a study that was similarly diverse in industries and companies, but that included objective sales performance data (Jaramillo et al., 2003; Plouffe et al., 2009). This study used self-reported sales performance data. The design of this study did not allow for the collection of objective sales performance and since one emphasis included the diversity of industries and the diversity of organizations, the study relied instead on self-reported sales performance from participants. Objective sales performance data tend to be preferred because of the clear link between objective sales performance and the organization’s financial success (Plouffe et al., 2009).

**Longitudinal and experimental study designs.** The sales literature is lacking in a longitudinal study that examines the development of transformational leadership attributes to become a transformational salesperson. For example, a longitudinal study of salesperson development found that when salespeople focus on skill development they increase their sales
performance (VandeWalle et al., 1999). I see the need for expanded emphasis on longitudinal studies and studies that use experimental designs and interventions. There is a paucity of experimental studies in the sales field that investigate sales drivers relative to the customer revolution.

The connection between customer orientation, transformational leadership attributes, SToM and sales performance. Two of the statistically significant predictors of the sub-components of transformational leadership are idealized influence \((c' = .043, t = 2.22, p = .027)\) and individualized consideration \((c' = .133, t = 3.75, p = .0002)\). Applying the attributes to the sales area, would call for salespeople to have idealized influence and individualized consideration relative to their relationship with their customers. Bass (1997) theorized that as leaders are attentive to their followers, so to would salespeople need to be attentive to their customers. This construct has considerable content validity with a statistically significant factor in sales: customer orientation (Terho et al., 2015). Customer orientation is defined by Homburg et al., 2011) "as the degree to which a salesperson identifies and meets customer needs and interests in the different stages of a sales encounter" (p. 56). It can be thought of as the situation when the “salesperson co-creates the outcome that fits best with the customer’s vision, within the context of the customer’s setting” (Dixon & Tanner, 2012; p. 12). Customer orientation, as a sales driver, has appeared in the above major sales research studies and I think it deserves further discussion. The reason is that it has a statistically significant amount of research backing as a sales driver, including two major meta-analyses and it is a malleable skill (Pelham & Kravitz, 2008). Most researchers trace the foundation of customer orientation back to the selling-orientation / customer-orientation (SOCO) model and theory formulated over 30 years ago by Saxe and Weitz (1982). The relationship between salesperson customer orientation and outcomes has been assumed to be linear
The typical frame of reference has been the more the better. Two examples are 1) the relationship between salesperson customer orientation and their satisfaction with their personal performance tended to be linear (Keillor, Parker & Pettijohn, 1999), and 2) in a similar fashion, the relationship between salesperson customer orientation and retail job performance also tended to be linear (Boles, Babin, Brashear & Brooks, 2001). This assumption was challenged by Homburg et al. (2011) when they found an inverted-U, or curvilinear, relationship between salesperson customer orientation and sales performance. Schwepker (2003) suggests that further research is needed to assess the dimensions underlying salesperson customer orientation. For example, he points out that there are some questions as to whether customer satisfaction is a component or an outcome of salesperson customer orientation. As such, customer orientation is a potential theoretical link between SToM and transformational leadership. Another potential link is with transformational leadership, psychological ownership, and sales performance. For example, the development of psychological ownership (Bullock, 2015); has been shown to indirectly increase sales performance (Brown, Pierce, & Crossley, 2014). Since job autonomy is highly esteemed by salespeople (Verbeke et al., 2011), future research opportunities exist in examining the potential link of transformational leadership, psychological ownership, and sales performance. In summary, there are several future research opportunities related to customer orientation, transformational leadership, SToM, psychological ownership and sales performance.

**SToM and transformational leadership.** In the literature review process, I became aware of the lack of research involving ToM and leadership, in general, and specifically transformational leadership (Peterson, O’Reilly, Wellman, 2016). I can imagine several potential research opportunities that examine ToM and transformational leadership. Because this study found that transformational leadership statistically significantly predicts ToM (SToM), one line of research
would be experimental intervention type designs that examined the enhancement of ToM through transformational leadership attribute development.

The link between transformational leadership, psychological resourcefulness, and sales performance. Recent research has examined the relationships among psychological resourcefulness, customer-oriented behaviors, and sales performance. Because psychological resourcefulness may be critical to salesperson performance and customer relationship effectiveness (Lussier & Hartmann, 2016) future research should examine the link between transformational leadership, psychological resourcefulness, and sales performance.

Conclusion

A customer revolution caused by the popularity of internet commerce, the reliance on social media, and the globalization of the economy, calls for a revolution in sales driven by transformational salespeople. The time has come for the sales industry to consider new models and paradigms of sales drivers. This study examined potential sales drivers and a proposed moderated mediation model of sales. The study relied upon a foundation of transformational leadership attributes and ToM. Although the conditional indirect effects of the model were not statistically significant, transformational leadership was found to be a statistically significant predictor of sales performance. Sub-components of transformational leadership that were also statistically significant included individualized consideration, idealized influence, and inspirational motivation. Other statistically significant predictors were contingent reward leadership and laissez-faire leadership (negatively correlated). The study also found that transformational leadership predicts ToM. This study is important for sales theory and for sales practice. The study contributes to the pioneering work of Bass (1997) who originally made the theoretical connection between transformational leadership attributes and effective sales performance. By confirming the
original hypothesis and extending the theory with contingent reward leadership and laissez-faire leadership, this study extends sales theory. In addition, the study contributes to sales practice by identifying statistically significant sales drivers that are malleable or in the vernacular of Churchill et al., (1985) “influencable.” This study is suggestive for sales theory and for sales practice. Sales coaches and trainers, sales managers, and sales self-developers can use the results of this study to build a sales training or sales coaching program that has empirical support. Organizations can use these results in selecting salespeople and in training sales managers. Non-sales professionals can use these results to improve their transformational leadership attributes to increase their effectiveness in sales-like behavior such as giving presentations. A revolution in sales that is driven by transformational salespeople begins with identifying the key sales drivers. This study accomplishes just that.
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