

# Do business customers perceive what salespeople believe? Perceptions of salesperson adoption of innovations

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## Abstract

A salesperson's commitment and effort toward an innovation can determine whether the customer agrees to buy it, such that customers' perceptions of such commitment and effort are critical. But these perceptions also might differ fundamentally from the salesperson's self-perceptions of commitment and effort. Therefore, this paper presents a theoretical framework of the relation between salesperson-perceived and customer-perceived commitment and effort, as exhibited by the salesperson while selling an innovation, which represents salesperson adoption. In the framework, job satisfaction factors also exert contingent, moderating effects. The authors gather unique, dyadic data from surveys of salespeople and their (potential) business customers during visits to sell a conventional, incremental innovation, complemented by objective purchase data gathered from company records. Three key insights emerge from this study. First, salespeople's own perceptions of their commitment and effort have only moderate influences on customers' perceptions of salespeople's commitment and effort. Second, customers seem to recognize salesperson effort more readily than salesperson commitment, although salesperson commitment has a higher sales performance impact than salesperson effort. Thus, sales managers should seek to encourage and support both the commitment of salespeople and also perceptions of that commitment among customers. Third, while a higher organizational support or job autonomy strengthens customers' perceptions of salesperson adoption, a higher pay satisfaction diminishes it. Thus, firms might need to find ways to increase the support for the salespeople and their autonomy and to reduce salespeople's satisfaction with their (direct) payments. In total, these findings suggest significant scientific and managerial implications.

## KEYWORDS

commitment and effort, dyadic sample, emotional contagion, innovation adoption, innovation sales performance, job satisfaction factors, salesperson adoption, salesperson and (business) customer perception

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## 1 | INTRODUCTION

Salespeople are critical for leveraging the benefits of firms' innovations, because they make direct contacts with customers, during which they can encourage the adoption of innovations and increase the diffusion of new offerings (Ahearne et al., 2013), particularly in business-to-business (B2B) contexts (Atuahene-Gima, 1997, 1998). Yet many product innovations still fail (Christensen, 2013; Cooper, 2019). A potential cause of such failures might stem from customers' sense that the salespeople themselves are not really convinced about the benefits of the innovation they are selling (Dijksterhuis, 2016; Hohenberg & Homburg, 2016; Wieseke et al., 2008). That is, before customers will adopt the innovation, they might want to see evidence of *salesperson adoption*, such as signals that the salesperson is convinced of the innovation's appeal or emotionally invested in it. In line with insights provided by Atuahene-Gima (1997) and Hultink and Atuahene-Gima (2000), we posit that such salesperson adoption consists of both commitment, which reflects the salesperson's personal conviction and emotional ties to the new product, and effort, or degree of (physiological) activity in encouraging sales of the new product.

Previous studies of salesperson adoption mainly gather self-perceptions, but we posit that a more critical element might be how (potential) customers perceive it (e.g., Fu et al., 2008; Hult et al., 2016). Significant differences often arise between people's perceptions of a stimulus, such as customers' interpretations of the signals sent by the salesperson, and the stimulus itself, such as the salesperson's actual commitment and effort (Chandon et al., 1997; van Dolen et al., 2002). In exploring the relationship between salesperson-perceived and customer-perceived salesperson adoption, across both effort and commitment dimensions, we also predict some moderating effects of specific job satisfaction factors (pay satisfaction, job autonomy, leadership perception, and organizational support) that can determine a salesperson's job performance (Stanton et al., 2002).

To test the framework we thus derive, we gather 64 cases for analysis with a dyadic survey of salespeople and their (potential) business customers, which they visited to sell an actual, incremental B2B innovation the supplier was introducing (cordless screwdriver). This B2B innovation provides some innovative features, is reasonably comprehensible, and has sales appeal, so selling it represents a typical sales context. With these dyadic data, in contrast with studies that depend on one side of the seller-buyer dyad, we can gauge two perspectives on the specific relationships we investigate. The data set accordingly reduces the risk of perceptual biases. By integrating insights from scores of dyads while also focusing on a

### Practitioner points

- Marketing and sales managers must seek ways to enhance both the commitment of salespeople and also perceptions of that commitment among customers.
- Sales managers should focus on job satisfaction contingencies to control the deviations between salesperson-perceived and customer-perceived salesperson adoption.
- Firms might need to provide stimuli that discourage salespeople from remaining satisfied with their (direct) payment.
- Companies must ensure that their sales staff feels appreciated, such as by seeking salespeople's opinions, highlighting the value of their work, or integrating their unique experiences and suggestions into marketing planning processes.
- Firms should offer salespeople substantial freedom in how they do their jobs, such as by establishing flexible work time models, offering work-from-home opportunities, or granting them authority in negotiations with customers.

single, real-world product innovation from one company, our methodology reduces the potential noise and distorting effects that can result from investigations of different product types or firm structures. We also complement the survey data with objective purchase data from company records. With this unique sample, we investigate two central research questions:

- How is the relation between salesperson-perceived and customer-perceived salesperson adoption?
- How do different job satisfaction factors moderate the relations between salesperson-perceived and customer-perceived salesperson adoption?

We derive three major findings. First, we reveal that salespeople's own perceptions of their commitment and effort have only moderate influences on customers' perceptions of salespeople's commitment and effort. Second, our findings suggest that on the one hand, customers seem to recognize salesperson effort more readily than salesperson commitment. On the other hand, the objective purchase data reveal that salesperson commitment has a higher sales performance impact than salesperson effort. Thus, sales managers should seek to encourage and support both the commitment of salespeople and also perceptions of that commitment among customers.

Third, in our framework, we show that job satisfaction factors exert contingent, moderating effects. The transmission of emotions usually is subconscious—such that neither the sender (e.g., salesperson) nor the receiver (e.g., customer) can control or prevent it (Vijayalakshmi & Bhattacharyya, 2012; Zajonc, 1984). Thus, sales managers should control the contextual elements of sales exchanges to encourage emotional radiation effects on customers that produce the desired perceptions of salesperson commitment and effort. Our findings suggest that the relationship between salesperson-perceived and customer-perceived salesperson adoption is contingent on three job satisfaction factors. Job autonomy and organizational support strengthen customers' perceptions of a salesperson's commitment; accordingly, companies need to strengthen these features to ensure that salespeople exhibit commitment, which can drive sales. Yet surprisingly, a salesperson's pay satisfaction negatively moderates the relationship between salesperson-perceived and customer-perceived salesperson adoption. Thus, sales managers might need to shift away from this widely used job satisfaction factor to manage salespeople's effort and commitment to innovative offerings.

## 2 | CONCEPTUAL DEVELOPMENT

In the following sections, we first conceptualize salesperson adoption, then outline our arguments for each element in the conceptual model in Figure 1.

### 2.1 | Salesperson adoption

We conceptualize salesperson adoption as the salesperson's commitment and effort devoted to selling a product innovation, as derived from Atuahene-Gima (1997) and

Hultink and Atuahene-Gima (2000). Because these two dimensions of salesperson adoption are distinct, we address them separately here.

*Commitment* refers to the degree to which the salesperson is personally convinced of the appeal or benefits of a new product. It includes personal acceptance and internalization, as well as an emotional form of determination to make the product a success. Our conceptual framework prioritizes the emotional side of commitment, or affective commitment, which influences behaviors powerfully (Meyer et al., 2002). A committed salesperson is emotionally tied to the product and believes it has personal importance. Thus, a salesperson's commitment reflects the emotions of the salesperson toward the new product, in the sense that an "emotion is a positive or negative feeling that is associated with a particular pattern of physiological activity" (Schachter et al., 2011, p. 310). Customers likely perceive a committed salesperson's presentation of a new product as convinced, enthusiastic, and passionate, such that the arguments appear more arresting, easier to follow, and easier to recall.

*Effort* instead reflects the degree of (physiological) activity to which salespeople are encouraging sales for the new product. Following Schachter et al. (2011), the salesperson displays and demonstrates the emotions he or she has through effort toward the product offered. Effort also has positive effects on sales performance, for both existing (Brown & Leigh, 1996; Zoltners et al., 2001) and new (Fu et al., 2008; Hultink & Atuahene-Gima, 2000) products. Particularly in B2B settings, customers mainly learn about new offerings from salespeople, and the influence of a salesperson's effort is both strong (Atuahene-Gima, 1997) and positive. Thus, customers should be more susceptible to arguments and form more positive attitudes toward new (business) products when salespeople exhibit greater effort.

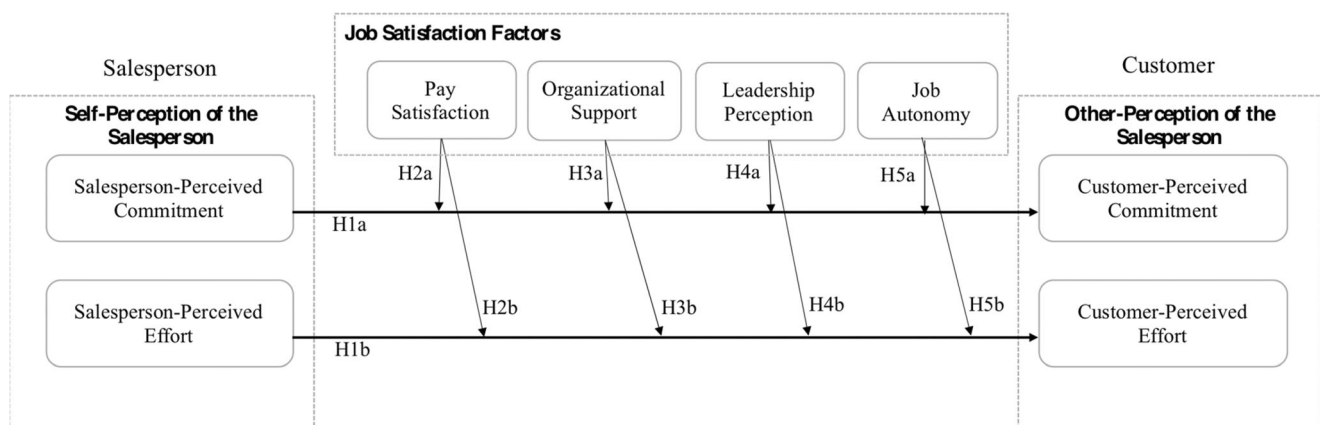


FIGURE 1 Conceptual model

## 2.2 | Main effect: Salesperson-perceived and customer-perceived salesperson adoption

Emotional contagion theory, which is applied in prior studies of sales behavior, customer satisfaction, and services (e.g., Homburg & Stock, 2004; Jeon & Choi, 2012; Pugh, 2001; Stock & Hoyer, 2005; Wang & Groth, 2014), predicts that emotional contagion occurs when “someone (hereafter the receiver) catch[es] the emotion being experienced by another (hereafter the sender), wherein the emotion of the receiver converges with that of the sender” (Howard & Gengler, 2001, p. 189). It arguably results from a two-step mimicry process. In the first step, a person spontaneously imitates another person’s facial expressions and other nonverbal cues. In the second step, the person experiences the corresponding emotions through physiological links. Although the person feels the emotions that result from mimicry, the processes that lead to this emotion are often “subconscious and automatic” (Barsade, 2002, p. 648; Hennig-Thurau et al., 2006).

Emotions experienced by the sender (e.g., salesperson) can thus be transferred to receivers (e.g., customers) through contagion (Homburg & Stock, 2004). If the salesperson smiles, the customer is likely to mimic that expression, which in turn makes the customer feel happy (Howard & Gengler, 2001). That is, emotion displayed by the salesperson affects customers’ emotions (Pugh, 2001; Sutton, 1991; Van Maanen & Kunda, 1989), whether those emotions are positive or negative. This transmission of emotions tends to be subconscious, such that neither the salesperson (sender) nor the customer (receiver) can control or prevent emotion transmission or adoption (Vijayalakshmi & Bhattacharyya, 2012; Zajonc, 1984). The customers’ emotional responses in turn inform their evaluative judgments and perceptions of the salesperson. Forgas (1995) refers to this process as *affect infusion*, because people use their current affective states as evaluative information to make global, evaluative judgments (Pugh, 2001). Pugh (2001, p. 1021) emphasizes this relation by stating that “affect that arises without a conscious cognitive appraisal has been shown to directly affect customer evaluations.” Thus, when a salesperson perceives her or his own level of commitment and effort dedicated to a new product, customers will perceive this commitment/effort of the salesperson similarly.

We take care to reiterate that this emotional transmission does not involve a direct duplication. Self-perceptions and other-perceptions tend to differ, as predicted by interpersonal perception theory, which was developed to study dyadic interactions, including the beliefs or perceptions that interacting people have about each other (e.g., Barnes, 1995; van Dolen et al., 2002). Shannon and Weaver (1949) describe how people encrypt and send messages that must be

deciphered and interpreted by receivers. However, divergence can arise during this communication, whether on the sender’s (e.g., salesperson) as well as the receiver’s (e.g., customer) side. As prior research on customer contact situations reveals, discrepancies are also common between an employee’s self-perception and the perception that customers develop (Chandon et al., 1997; van Dolen et al., 2002), even if the link between these two perceptions remains positive (Chandon et al., 1997).

We therefore integrate emotional contagion and interpersonal perception theories to predict that the self-perceptions developed by the salesperson, as the sender, and the other-perceptions derived by the customer, as the receiver, differ but are positively related.<sup>1</sup> The sender’s self-perception tends to be reflected in her or his commitment and effort (e.g., Alteren & Tudoran, 2016; Kelleher, 2009), or salesperson-perceived degrees of effort and commitment. In parallel, the other-perceptions of receivers are reflected in customer-perceived effort and commitment, which in turn depend on the signals sent (mostly subconsciously) by the salesperson. These signals might include gestures, facial expressions, speech, choice of words, or tone of voice (Andersson et al., 2016; Lin & Lin, 2017), all of which require inferences by the customer, the receiver. Thus, for example, a customer might perceive a salesperson as highly committed or engaged in substantial effort because subtle facial cues indicate a salesperson’s emotional display of enthusiasm (e.g., symmetry of the smile) or exerted effort (e.g., activation of muscle groups around the eyes; Ekman et al., 1988; Ekman & Friesen, 1982). But customers do not pick up on these signals in every interaction, or they might use different cues than the salesperson uses (van Dolen et al., 2002). Thus again, we assume that the customer’s perception and the salesperson’s perception of salesperson adoption differ but correlate. Thus, we predict:

**Hypothesis 1a.** Salesperson-perceived commitment relates positively to customer-perceived commitment.

**Hypothesis 1b.** Salesperson-perceived effort relates positively to customer-perceived effort.

## 2.3 | Moderating role of specific job satisfaction factors

We cannot only consider salespeople acting alone because they are part of an organization. Greenberg

<sup>1</sup>There may be possible differences between the reported and the perceived salesperson adoption on both the salesperson side and the customer side, but this is not the focus of our research.

(2011) defines an organization as a structured social system, consisting of groups and individuals that work together to meet some common goals. In turn, whether alone or in groups, members of the organization influence and are influenced by their work environment. In particular, we posit that customer perceptions of customer contact employees (Ahearne et al., 2010) reflect the emotional states exhibited by those employees, which are dependent on the employees' job satisfaction (Homburg & Stock, 2004). Therefore, we measure relevant factors in work environments, as available in the Abridged Job Descriptive Index (Stanton et al., 2002), the most popular and widely used measure of job satisfaction (Buckley et al., 1992; DeMeuse, 1985; Stanton et al., 2002). The index contains five subscales: pay satisfaction, organizational support, leadership perception, job autonomy, and coworkers. However, as B2B salespeople usually work relatively independently and are responsible for their own results (Daft, 2008), so the coworkers' subscale is less relevant, and we thus exclude it from our study.

Our use of this index resonates with organizational psychology research that predicts that employees subconsciously exhibit their job satisfaction through specific signals or emotional expressions, such as gestures and facial expressions (Rafaeli & Sutton, 1987; van Kleef, 2014). However, the emotional correlates of job satisfaction generally cannot be controlled consciously by employees, as is typical of emotional contagion overall (Homburg & Stock, 2004; Pugh, 2001). Thus, while salespeople perceive their commitment and effort in one way, customers might identify a different, subconsciously driven, displayed emotion. To account for this potential effect, we argue that four job satisfaction factors moderate the predicted main effect by influencing (radiation of) a salesperson's adoption.

By investigating the potential moderating effects of four job satisfaction factors on the main effect separately, we are able to offer suggestions for how sales managers should deal with deviations in customer-perceived salesperson innovation adoptions. Researchers have already highlighted the need to clarify how different facets of job satisfaction affect turnover intentions, as separate, interconnected variables (DeConinck & Stilwell, 2004; Hartmann et al., 2017). For example, due to the unique working conditions that salespeople encounter and the importance of their variable commissions (DeConinck & Stilwell, 2004), sales managers need to deal with both satisfaction with working conditions and pay, as two distinct, interconnected subdimensions, if they hope to reduce turnover (DeConinck & Stilwell, 2004; Williams et al., 2006).

### 2.3.1 | Pay satisfaction

A pay-satisfied employee should feel valued, recognized, and treated fairly (Tekleab et al., 2005; Vandenberghe & Tremblay, 2008). To ensure pay satisfaction, organizations must reward good work carried out by employees with fair payment. However, pay satisfaction depends on more than absolute pay levels and instead reflects four contributory factors (Carragher & Buckley, 1996; Currall et al., 2005): pay level, pay raises, benefits, and the structure and administration used to determine compensation (Vandenberghe & Tremblay, 2008). Thus, for example, an employee may be satisfied with the absolute pay level but not with pay raises over time (Vandenberghe & Tremblay, 2008). In turn, pay satisfaction can influence employee performance and engagement. According to Currall et al. (2005), pay satisfaction among teachers relates positively to school district-level academic performance; salespeople's customer orientation can also be enhanced by pay satisfaction (Thakor & Joshi, 2005). Therefore, an employee who is pay-satisfied is likely to be more committed to the job and also may want to repay the organization's goodwill (fair payment) with more effort in order to achieve a balanced relationship and avoid emotional distress (Wayne et al., 1997).

However, individual differences produce different definitions of fair payment. For example, average salary structures, standard in a particular industry, might only signal that the employer is trying to keep pace with competitors to attract high-quality employees, rather than signaling fairness. But if the company succeeds in establishing an employment relationship in which salespeople feel motivated by their salaries, which they view as a form of support or reward, to engage in greater sales effort and commitment, it is likely to establish a sense of pay satisfaction.

In line with emotional contagion theory, pay satisfaction may become subconsciously visible through direct or indirect indicators, such as the salesperson's body language, voice pitch, and word choice. A salesperson who is highly dissatisfied with his or her pay might exhibit significant emotional tension, which could be sensed by customers (e.g., Singh et al., 1994; van Dolen et al., 2002) and thereby affect their perceptions of the salesperson, commitment, and effort toward the new product. In contrast, salespeople who feel high pay satisfaction likely are perceived as pleased with the new offering, by customers. Despite the emotionally radiated effect on customer perceptions, salespeople's perceptions of their own commitment and effort might not vary with pay satisfaction. That is, a salesperson who is highly satisfied with her or his payment might develop greater commitment and effort (i.e., adoption) but still believe she or he is

exhibiting the same level of adoption. Thus, pay satisfaction should positively moderate the link between salesperson-perceived and customer-perceived commitment and effort, and thus we predict:

**Hypothesis 2.** Pay satisfaction has a positive effect on the relationship between salesperson-perceived and customer-perceived (a) commitment and (b) effort.

### 2.3.2 | Organizational support

When employees receive organizational support, defined as the extent to which the organization values employees' contributions and cares about their well-being (Eisenberger et al., 1986), they exhibit enhanced job motivation and performance. Tremblay et al. (2010) assert that human resource management practices can stimulate employee performance if they function as signs of support and procedural justice. Eisenberger et al. (1990) also detect a relationship between perceived organizational support and conscientious performance of job responsibilities, commitment, and innovation. Such findings reflect equity theory, in that organizational support creates feelings of obligation among employees, who respond by exhibiting greater support for organizational goals (Eisenberger et al., 1986; Wayne et al., 1997). Thus, organizational support leads to job satisfaction but also to organizational commitment, and it creates feelings of obligation among employees. These feelings in turn lead to customer-oriented selling (Flaherty et al., 1999) or turnover intentions (e.g., Bashaw & Grant, 1994; Johnston et al., 1990).

However, not every form of organizational support evokes appreciation, such as when the company only offers support that reflects an industry standard or that ultimately seems more beneficial for the company, such as training courses. Therefore, the employer needs to promote its support offers proactively and highlight specific features that distinguish its support from the support offered by other firms.

Assuming the support evokes commitment, a salesperson who is highly committed to the organization exhibits significant positive emotions and pleasure, which customers likely perceive to some extent (Singh et al., 1994; van Dolen et al., 2002). These emotions subconsciously affect customers' perceptions of the salesperson and her or his commitment and effort toward selling the new product, through emotional contagion. Therefore, if companies engage in appropriate support efforts, salespeople who receive this organizational support might appear more favorable toward the new offering.

Such emotional correlates are typically not consciously controlled by the employee or salesperson (Homburg & Stock, 2004; Pugh, 2001; van Dolen et al., 2002). Thus, customers might perceive higher commitment and effort, but salespeople are still likely to perceive the same or a similar level of commitment and effort. The link between salesperson-perceived and customer-perceived salesperson adoption should thus be positively moderated by organizational support. Thus, we predict:

**Hypothesis 3.** Organizational support has a positive effect on the relationship between salesperson-perceived and customer-perceived (a) commitment and (b) effort.

### 2.3.3 | Leadership perception

Employees develop exchange relationships with their organization but also with immediate superiors (Wayne et al., 1997). Their perceptions of this relationship, or leadership perception, can inform their behaviors and performance, as demonstrated in sales management research (e.g., Ahearne et al., 2013; DeConinck, 2011; Diestel et al., 2014; Morhart et al., 2009; Mulki et al., 2015; Pomirleanu & Mariadoss, 2015; Rajab et al., 2013; Schmitz et al., 2014; Wieseke et al., 2009). The effect of leadership perception on the satisfaction and motivation of employees also can be explained by leader-member exchange theory (Graen et al., 1982), as confirmed in empirical research (DeConinck, 2011; Wayne et al., 1997). The leader-member relationship rests on an equitable social exchange, in which "each party must offer something the other party sees as valuable, and each party must see the exchange as reasonably equitable or fair" (Graen & Scandura, 1987, p. 182). However, not every employee appreciates a good supervisor to the same extent, especially if an employee believes a supervisor is simply pursuing entrepreneurial outcomes by trying to retain good employees who generate sales for the company. However, in general, a supportive leader tends to be appreciated by most employees. Thus, to ensure a balance in their contributions, employees should adopt attitudes and behaviors that match their perceptions of the supervisor's engagement. A salesperson experiencing positive leadership may thus appear more pleased with the new product offering. This emotional correlate is typically not consciously controlled by the employee or salesperson (Homburg & Stock, 2004; Pugh, 2001). In turn, a high leadership perception should positively affect customers' perceptions of the salesperson's commitment and effort, while salespeople still perceive the same or similar levels. Thus, we predict:

**Hypothesis 4.** Leadership perception has a positive effect on the relationship between salesperson-perceived and customer-perceived (a) commitment and (b) effort.

### 2.3.4 | Job autonomy

Finally, job autonomy reflects “the extent to which employees have a major say in scheduling their work, selecting the equipment they will use, and deciding on procedures to be followed” (Hackman & Lawler, 1971, p. 265). In other words, job autonomy captures the salesperson’s freedom to do the job (Wang & Netemeyer, 2002). This postulated moderation effect refers to the work itself and the extent to which salespeople can decide for themselves how to perform their work, including during customer contact situations. Although job autonomy arguably depends on leadership style and the business culture, DeCarlo and Agarwal (1999) empirically show that perceived job autonomy is an important and separate antecedent of job satisfaction. Studies that assign a moderating role to job autonomy in the relationship between benevolent leadership and creativity (Volmer et al., 2012; Wang & Cheng, 2010) use leader-member exchange and social exchange theory as their theoretical foundations. Furthermore, providing job autonomy can be an expression of organizational goodwill, or for salespeople, it might constitute a sort of self-evident job trait. Salespeople require flexible time management approaches to perform their tasks effectively. If the employer can go even further and offer salespeople a wide range of autonomy options, it is likely to create a greater sense of duty among salespeople, who then seek balance in the working relationship. Again, typically subconsciously triggered emotions associated with job autonomy might be transmitted to customers, even while salespeople perceive the same or similar levels (Homburg & Stock, 2004; Pugh, 2001). Thus, high job autonomy should positively moderate the relationship between a customer’s perception and a salesperson’s perception of salesperson adoption, and we predict:

**Hypothesis 5.** Job autonomy has a positive effect on the relationship between salesperson-perceived and customer-perceived (a) commitment and (b) effort.

## 3 | METHOD AND DATA

We collected data from a German supplier of professional electrical tools. The supplier also provided general

support for this study by granting us permission to survey its business customers. The partner company provided the necessary details so that we could match each salesperson with one business customer. Finally, it offered objective purchase data from company records. With this excellent access to real-world data, we received, out of 134 possible, 64 usable dyadic cases (47.76%), which include survey data obtained from salespeople and (potential) business customers they visited to offer a B2B innovation. The German supplier of professional electrical tools employs all the salespeople.

Unlike studies based on insights from only one side of the seller-buyer dyad, dyadic data offer notable benefits in that they provide two perspectives on the specific relationships under investigation. Accordingly, the data set accordingly reduces the risk of perceptual biases. By integrating insights from scores of dyads but focusing on a single, real-world product innovation from one company, our study methodology reduces the potential noise and distorting effects that can arise in studies of various products or firm structures. The sample size we obtained from one company compares favorably with the sample sizes per company offered in other studies with dyadic relationships (e.g., van Dolen et al., 2002). The sample size per industry also compares favorably with other cross-sectional studies (e.g., Homburg & Stock, 2004; Lussier et al., 2017).

The salespeople surveyed had worked for the firm for an average of 6.61 years, and their business relationships with the surveyed customers lasted 5.72 years. The business customer respondents included representatives of craft firms (71%), large-scale industrial firms (16%), public sector organizations (7%), and major installation companies (6%). As an incentive to participate, we offered all participants entry the chance to take part in a raffle.

The surveys of both salespeople and customers focused on a new professional cordless screwdriver that had been introduced a year prior; it represents a conventional, incremental B2B innovation. Incremental innovations are “products that provide new features, benefits, or improvements to the existing technology in the existing market” (Garcia & Calantone, 2002, p. 123). To reduce the risk of the pro-innovation bias that affects many new product adoption studies and creates major problems for diffusion research (Rogers, 2003; Talke & Heidenreich, 2014), we interviewed both business customers that bought the product as well as those that did not.

### 3.1 | Measure development

To develop the questionnaire, we conducted a thorough review of innovation adoption and related research fields,

as well as in-depth interviews and a pretest (Gerbing & Anderson, 1988). The interviews involved two sales directors, two sales managers, two product/innovation managers, and two business customers from six internationally operating German firms, of different sizes and in various industrial sectors. These informants engaged in content evaluations and validated the content; they also suggested some refinements to the scales for clarity and specificity (DeVellis, 2016). Using their input, we adapted the scales to the B2B study context, and to ensure the comprehensibility of the questions for the study participants (craftsmen and salespeople). We pretested this adapted, structured questionnaire with both research experts and top managers, not included in the survey sample. This procedure is similar to the approach from Endres et al. (2020, 2022) or Pesch et al. (2021). We thus developed reflective, multi-item constructs and six-point Likert scales for the variables, with the exception of job autonomy, for which we used a single item (as we explain subsequently).

To measure *commitment* as a facet of salesperson adoption, we used scales based on items from Shore et al. (1995) and Hultink and Atuahene-Gima (2000). The *effort* measure within salesperson adoption is based on items from Fu et al. (2010) and Beuk et al. (2014). Whereas we asked both (potential) business customers and salespeople about the salesperson's commitment and effort, only the salespeople completed the items for the job satisfaction measures. Our measure of *pay satisfaction* is based on Albers and Krafft (2013). For *organizational support*, we have used items that are based on Wayne et al. (1997) and Rajab et al. (2013). *Leadership perception* was measured with two items based on Wayne et al. (1997) and Schmitz et al. (2014).

For *job autonomy*, we chose and adapted the item with the highest factor loading from among the four items used by Wang and Netemeyer (2002). They present two separate studies, with diverging factor loadings. Furthermore, Wang and Netemeyer (2002, p. 222) reported a discriminant validity issue in Study 1 ("only showed a weak level of empirical discriminant validity"), so we chose and adapted the item with the highest factor loading from Study 2 for our study. Noting the ongoing debate about the appropriateness of single- versus multi-item measurement scales (e.g., Bergkvist, 2015, 2016; Bergkvist & Rossiter, 2007; Drolet & Morrison, 2001; Fuchs & Diamantopoulos, 2009), we decided to use a single-item measure for job autonomy, because it fits Badir et al.'s (2020) and Bergkvist and Rossiter's (2007) conditions for being measured with a single item. This construct deals with a specific attribute ("a salesperson's freedom to act") and a specific object ("a salesperson's job tasks"). More details about the measurement items are available in Appendix A.

### 3.2 | Validity and reliability

Table 1 contains the correlations, mean values, standard deviations, and Cronbach's alpha values for our study constructs. The Cronbach's alpha values all exceed 0.70. We also found evidence in support of convergent validity and discriminant validity (Bagozzi & Yi, 2012; Falke et al., 2020; Fornell & Larcker, 1981; Gold et al., 2001). The variance inflation factors we calculated do not offer any indication of multicollinearity (Kleinbaum et al., 1998). Following Cohen et al. (2003), we applied an ordinary least square (OLS) regression bootstrapping procedure in SPSS that produced the same conclusions that we drew from our calculations when  $n = 64$ .

## 4 | RESULTS

In our study, we look at the relationship between perceptions (and the role of boundary conditions) and do not analyze congruence/discrepancy, which means studying "agreement vs. disagreement" (Bernerth et al., 2021, p. 2). To examine these relationships and to address the complex research model (two-way interactions; Cohen et al., 2003), we employed a multiple OLS regression analysis in SPSS 25.0. For the analyses of the moderating effects of job satisfaction, we mean-centered all predictors before creating the interaction terms (Aiken & West, 1991). The results appear in Table 2.

The results for Models 1 of commitment (Model A:  $\beta = 0.216$ ,  $p = 0.015$ ) and effort (Model B:  $\beta = 0.264$ ,  $p = 0.003$ ) indicate support for both predictions in H1. However, as the  $R^2$  values indicate, the main effects only explain 4.7% (commitment) and 7% (effort) of the variance, whereas the job satisfaction effects explain more than 25% and 15%, respectively, of the variance. That is, the predicted moderating factors substantially influence customers' perceptions of a salesperson's commitment and effort. We found significant and strong negative moderation effects related to H2a (Model A:  $\beta = -0.501$ ,  $p = 0.001$ ) and H2b (Model B:  $\beta = -0.229$ ,  $p = 0.083$ ), which indicate that pay satisfaction negatively affects customers' perceptions of a salesperson's adoption. We found support for H3a (Model A:  $\beta = 0.354$ ,  $p = 0.055$ ) and H3b (Model B:  $\beta = 0.262$ ,  $p = 0.057$ ; organizational support interactions) but not for H4a (Model A:  $\beta = 0.104$ ,  $p = 0.135$ ) and H4b (Model B:  $\beta = -0.106$ ,  $p = 0.171$ ; leadership perception interactions). With regard to job autonomy, only the commitment dimension, as predicted in H5a, received support (Model A:  $\beta = 0.241$ ,  $p = 0.047$ ).

In post hoc analyses, we tested for differences in the sales performance impact of customer and salesperson



TABLE 1 Construct means, standard deviations, and correlations

Variables	1	2	3	4	5	6	7	8
1. Customer-perceived commitment	0.92							
2. Customer-perceived effort	0.63**	0.95						
3. Salesperson-perceived commitment	0.28*	0.32**	0.89					
4. Salesperson-perceived effort	0.26*	0.28*	0.87**	0.92				
5. Pay satisfaction	-0.31*	-0.43**	-0.64**	-0.57**	0.79			
6. Organizational support	-0.14	-0.10	-0.13	-0.16	0.42**	0.84		
7. Leadership perception	-0.04	-0.03	0.39**	0.31*	0.08	0.59**	0.76	
8. Job autonomy	0.18	0.13	-0.04	0.04	0.01	0.03	0.25*	1.00
Mean	3.78	2.70	3.51	3.71	3.96	4.88	4.89	4.88
Standard deviation	1.48	1.44	1.29	1.15	1.04	0.71	1.03	0.81

Note: Correlations are below the diagonal. Cronbach's internal consistency reliability coefficients appear on the diagonal.

\* $p < 0.05$  (two-tailed). \*\* $p < 0.01$  (two-tailed).

perceptions of salesperson adoption to shed more light on the relation between them. With an OLS regression in SPSS 25.0, we include objective purchase data that we obtained from the partner company. The results show that the effect of commitment ( $\beta = 0.44$ ,  $p = 0.00$ ) and effort ( $\beta = 0.27$ ,  $p = 0.03$ ) perceived by the customer on purchases is stronger than the effect of the salesperson's self-perceived commitment ( $\beta = 0.27$ ,  $p = 0.03$ ) and effort ( $\beta = 0.18$ ,  $p = 0.15$ ). This difference in terms of the effects of the perceptions of each side of the dyad represents an additional, important insight considering that many studies focus only on salespeople's self-evaluations of their behaviors (e.g., Ahearne et al., 2013; Homburg et al., 2019; Hultink & Atuahene-Gima, 2000).

## 5 | GENERAL DISCUSSION

A salesperson's effort and commitment toward an innovation strongly influence whether the customer decides to buy. How the customer perceives such salesperson adoption might differ fundamentally from the salesperson's self-perception though. Thus, we propose a theoretical framework to explore and understand the links between salesperson-perceived and customer-perceived salesperson adoption. In a robustness test with objective purchase data from company records, we highlight the relatively greater importance of customer perceptions of salesperson adoption. Table 3 contains an overview of the findings.

### 5.1 | Theoretical contributions

Our findings contribute to research into salesperson adoption in innovation contexts. First, salespeople's own

perception of their adoption only has a moderate influence on customers' perceptions. Emotional transmission effects might alter customer perceptions; however, sales managers can additionally leverage contextual factors under their conscious control to direct this deviation. By differentiating two dimensions of salesperson adoption, we also establish that customers perceive a salesperson's perceived effort as stronger than her or his commitment. That is, customer perceptions vary with the dimension of salesperson adoption. Further, our robustness test with objective purchase data suggests a stronger sales performance impact of commitment in comparison to effort. This indicates a higher importance of commitment for the sales success of new products. The moderating effects of the job satisfaction factors are consistently stronger for commitment than for effort. Thus, the moderating effects of these factors might compensate for weaker customer perceptions of commitment.

Second, our analysis of the moderating effects of job satisfaction factors shows that salesperson-perceived commitment and effort, together with their pay satisfaction, diminishes customer-perceived commitment and effort. This finding contrasts with our expectation that pay-satisfied salespeople are perceived as being pleased with the new offering and display increased commitment and effort. Instead, salespeople who are less satisfied with their pay seem to convey higher commitment and effort to customers. We might explain this negative moderating effect through the saturation effect because it pushes back intrinsic motivation; perhaps salespeople who are already satisfied with their pay appear less motivated to sell new products, which likely requires more work than selling familiar, established products. High pay might provide an acknowledgment of good performance in the past, which salespeople might perceive as self-evident or

TABLE 2 OLS regression results

	Dependent variable					
	Customer-perceived commitment (model A)			Customer-perceived effort (model B)		
	Model 1 (main effect only)	Model 2 (direct effects only)	Model 3 (moderation effects)	Model 1 (main effect only)	Model 2 (direct effects only)	Model 3 (moderation effects)
<b>Main effects</b>						
Salesperson-perceived commitment (SC)	0.216**	0.181*	-0.012			
Salesperson-perceived effort (SE)				0.264***	0.081	0.081
<b>Moderators</b>						
Pay satisfaction (PS)		-0.095	0.201		-0.263	-0.144
Organizational support (OS)		-0.041	0.215		-0.099	-0.058
Leadership perception (LP)		-0.170	-0.255		-0.010	-0.008
Job autonomy (JA)		0.210*	-0.147		0.121	0.063
<b>Moderation effects</b>						
SC × PS			-0.501***			
SC × OS			0.354*			
SC × LP			0.104			
SC × JA			0.241**			
SE × PS						-0.229*
SE × OS						0.262*
SE × LP						-0.106
SE × JA						0.042
R <sup>2</sup>	0.047	0.119	0.298	0.07	0.161	0.223
R <sup>2</sup> change		0.072	0.179		0.091	0.062
F change		1.185	3.442**		1.573*	1.077

Note: The significance tests for the hypothesized relations are one-tailed; for the controlled direct moderator effects, they are two-tailed.

\* $p \leq 0.10$ .

\*\* $p \leq 0.05$ .

\*\*\* $p \leq 0.01$ .

routine. Thus, salespeople do not display greater engagement but in contrast, they display less engagement. This, in turn, means that salespeople who feel high pay satisfaction likely are perceived as less pleased with the new offering, by customers. Nevertheless, salespeople still believe that they are exhibiting the same level of adoption, which leads to a negative moderation effect on the relation between salesperson-perceived and customer-perceived commitment and effort.

Third, salesperson-perceived commitment and effort, in combination with higher organizational support,

strengthen customers' perceptions of commitment and effort. Salespeople who perceive stronger organizational support leverage this resource subconsciously to establish higher commitment and effort, as perceived by the customers. These findings extend insights from previous studies (e.g., Eisenberger et al., 1986; Wayne et al., 1997) examining how to manage employees to ensure sales of B2B innovations.

Fourth, the moderating effects of job autonomy are significant with regard to commitment; salespeople with more freedom in scheduling their work or making

TABLE 3 Overview of study findings

	Dependent variables	
	Customer-perceived commitment	Customer-perceived effort
<i>Direct effects</i>		
Salesperson-perceived commitment	+	
Salesperson-perceived effort		++
<i>Moderating effects</i>		
Pay satisfaction	---	-
Job autonomy	+++	++
Leadership perception	n.s.	n.s.
Organizational support	++	n.s.

Note: n.s. = not significant ( $p > 0.10$ ); Direct effects are from Model 1 and moderating effects are from Model 3. +/- reflects a significant ( $p \leq 0.10$ ) positive (+) or negative (-) standardized  $\beta$  value of less than 0.25. ++/-- reflects a significant ( $p \leq 0.10$ ) positive (++) or negative (--) standardized  $\beta$  value in the following range: 0.25–0.35. +++/--- reflects a significant ( $p \leq 0.10$ ) positive (+++) or negative (---) standardized  $\beta$  value of more than 0.35.

decisions about specific sales procedures display a higher commitment to the new product to customers than salespeople with less job autonomy. As a possible explanation for the insignificant result for effort, we posit that job autonomy might only reflect the commitment facet, which refers more to salespeople's intrinsic motivation. Finally, because the interaction effects of leadership perception are not significant, we cannot offer a relevant interpretation of this result.

## 5.2 | Practical implications

Sales managers should focus on job satisfaction contingencies to control the deviations between salesperson-perceived and customer-perceived salesperson adoption. Addressing job satisfaction factors can eventually lead customers to adopt new offerings, implying an increase in sales. In particular, the negative moderating effect of pay satisfaction suggests that firms might need to provide stimuli that discourage salespeople from remaining satisfied with their (direct) payment. For example, more frequent salary adjustments might reduce potential saturation effects that discourage employees from striving for better performance. Another option would be to offer guaranteed bonuses for new product sales, separate from

regular commission payments. Moreover, companies must ensure that their sales staff feels appreciated, such as by seeking salespeople's opinions, highlighting the value of their work, or integrating their unique experiences and suggestions into marketing planning processes (Helm et al., 2020). The positive moderating effect of job autonomy on commitment further suggests that firms should offer salespeople substantial freedom in how they do their jobs, such as by establishing flexible work time models, offering work-from-home opportunities, or granting them authority in negotiations with customers.

Finally, we note that customers' generally weak perceptions of commitment can be enhanced by leveraging these moderating job satisfaction factors. Our study shows that the effect of customer perceived commitment on sales is stronger than that of customer perceived effort but customers do not recognize salespeople's commitment as readily. Thus, sales managers must seek ways to enhance both the commitment of salespeople and also perceptions of that commitment among customers. Such measures appear particularly important for new products that tend to require genuine customer persuasion by salespeople. Notably, we show that job autonomy and organizational support can raise customers' perceptions of salespeople's commitment.

## 5.3 | Limitations and further research

Due to our purposeful focus on innovations, the study findings might not generalize to products in later stages of their life cycle. Salespeople tend to behave differently when selling older products in the firm portfolio; they may be particularly hard to sell if they no longer seem desirable to customers (Rogers, 2003). A meaningful research extension could apply our proposed framework to existing and older products in the portfolio.

In our study, we focused on the relation between customer and salesperson perception and how this relation is moderated by job satisfaction factors; however, we did not analyze if or when the perceptions match and to which extent. Future research might want to investigate the congruence or discrepancy between customer and salesperson perception (and the role of boundary conditions). Researchers might thereby consider the use of polynomial regression with response surface analysis in line with Spanjol et al. (2015) or Bernerth et al. (2021). Furthermore, there may be possible differences between the reported and the perceived salesperson adoption on both the salesperson side and the customer side, but that is not the focus of our research.

With regard to the generalizability of our findings to other contexts, we anticipate that they should hold in

most typical B2B innovation contexts. As the incremental innovation that we tested represents a conventional B2B innovation, offering a few additional innovative features; common B2B innovations are likely subject to similar effects. The findings might even apply to well-established products that still are new to the customer. In this case, similar variations in perceptions of salesperson adoption might arise due to the uncertainty for the customer and associated communication challenges (Sorescu & Spanjol, 2008). However, we call for research that tests our proposed framework in reference to radical rather than incremental innovations. Radical innovations might be harder to sell than incremental innovations because they require more explanation, or they could be easier to sell, if they offer clearly superior value. Thus, the distinction between radical and incremental innovations depends on the type of improvement, relative to existing technology in the market. Relative to our findings, we note that radical innovations often feature novel, dynamic technologies that continue to change, even after being introduced to the market (Sorescu & Spanjol, 2008), such that it is very challenging to communicate about them clearly (Rosa & Spanjol, 2005). The impact of sales-stimulating communications increases when customers perceive a higher degree of innovation (Kuester et al., 2012; Lee & Colarelli O'Connor, 2003). All these aspects likely influence customers' perceptions of salesperson adoption.

As the data pertain to a single firm in Germany, the results could reflect country- or culture-specific influences, particularly with regard to the effects of job satisfaction. For example, cultures that exhibit greater power distance and more respect for authority or less individualism might not reveal similar impacts of job autonomy or organizational support on the relationship between salesperson-perceived and customer-perceived salesperson adoption (Hofstede, 1984; Hultink & Atuahene-Gima, 2000). Additional studies could test for these influences. In addition, during the data collection period, this firm primarily relied on face-to-face sales methods. Customer perceptions might differ when sales meetings take place over video conferencing platforms (e.g., Zoom, Teams, and Webex). We encourage further research into whether the emotional contagion outcomes are similar in these increasingly widely adopted, technology-mediated interactions.

Our single-item measure of job autonomy also might constitute a limitation. We prefer it, to increase comprehensibility among the participants and in line with prior arguments (Bergkvist, 2015, 2016; Bergkvist & Rossiter, 2007; Fuchs & Diamantopoulos, 2009). However, we also acknowledge the ongoing debate regarding whether and when multi- versus single-item measures

are more appropriate. In our case, adapting the scale to increase comprehensibility arguably might have limited participants' understanding of the measure, by prompting them to focus on their freedom to do their job, rather than other potential elements of job autonomy.

Finally, our sample is notable, in that we interviewed both sides of salesperson–customer dyads, and its size compares well with other studies of B2B salespeople's behavior (e.g., Rhoads et al., 1994; Schmitz, 2013). But even this sample may be not sufficient, and we acknowledge that our research is exploratory. Further research could test the proposed relationships in a broader context, with dyadic samples from salespeople and their customers in different industries and different firms to test for potential variations due to firm- or industry-specific structures. Especially organizational culture and sales managers' influence on salespeople could be interesting (Schmitz, 2013; Schmitz et al., 2014), but also possible gender effects in relation to the way the emotions of the sender or the salesperson are interpreted. For example, specific leadership styles could have distinct effects on the relation between a salesperson's beliefs and a customer's perceptions of salesperson adoption.

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## CONFLICT OF INTEREST

The authors have no conflict of interest and have conducted the research in compliance with the journals ethical standards and Committee on Publication Ethics (COPE) international standards for authors.

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## APPENDIX A: MEASURES

*Note:* All items are measured on 6-point agreement Likert scales, where 1 = strongly disagree and 6 = strongly agree, unless otherwise noted. The composite reliability (CR) and average variance extracted (AVE) are provided for the multi-item measures; their factor loadings also appear in brackets after each item.



**Customer-Perceived Commitment** (based on Shore et al. (1995) and Hultink and Atuahene-Gima (2000)) (CR = 0.95; AVE = 0.87)

- The salesperson of *company Y* was strongly convinced of this product. (0.94)
- The salesperson of *company Y* seemed to have strong emotional ties to this product. (0.91)
- The success of *product X* seemed to be of high (personal) importance to the salesperson of *company Y*. (0.95)

**Salesperson-Perceived Commitment** (based on Shore et al. (1995) and Hultink and Atuahene-Gima (2000)) (CR = 0.92; AVE = 0.79)

- I was strongly convinced of the product. (0.90)
- I felt very emotionally connected to the product. (0.86)
- I felt responsible for making the product a success. (0.90)

**Customer-Perceived Effort** (based on Fu et al. (2010) and Beuk et al. (2014)) (CR = 0.97; AVE = 0.91)

- We had the impression that the salesperson invested more time in selling this product than in selling other, comparable products. (0.95)
- The salesperson seemed to sell *product X* more intensely than other, comparable products. (0.96)
- We had the impression that the salesperson put more effort than usual into selling *product X*. (0.96)

**Salesperson-Perceived Effort** (based on Fu et al. (2010) and Beuk et al. (2014)) (CR = 0.96; AVE = 0.89)

- Compared to other products I was responsible for, I spent more time selling this product. (0.96)

- Compared to other products, I sold this product more intensely. (0.95)
- Compared to other products, I put more effort into selling this product. (0.92)

**Pay Satisfaction** (based on Albers and Krafft (2013)) (CR = 0.91; AVE = 0.83)

- With the structure of my salary (share of fixed salary, share of performance-related salary), I am... (1: very unsatisfied, 6: very satisfied). (0.91)
- With the amount of my salary, I am... (1: very unsatisfied, 6: very satisfied). (0.91)

**Organizational Support** (based on Wayne et al. (1997) and Rajab et al. (2013)) (CR = 0.89; AVE = 0.61)

- In my company, I receive help when I have a problem. (0.78)
- My opinion is important to my company. (0.76)
- My company appreciates my services. (0.87)
- My relationship with my colleagues is ... (1: very bad, 6: very good). (0.71)
- All in all, I feel comfortable in my job. (0.79)

**Leadership Perception** (based on Wayne et al. (1997) and Schmitz et al. (2014)) (CR = 0.78; AVE = 0.65)

- Usually, I know where I stand with my supervisor. (0.80)
- My boss motivates me to look for ways to do my job better. (0.80)

**Job Autonomy** (adapted from Wang and Netemeyer (2002))

- I have considerable opportunity to decide for myself how to do my job.