



A meta-analytic review of emotional exhaustion in a sales context

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ABSTRACT

Despite 20 years of empirical study on salesperson burnout, involving dozens of articles, researchers have yet to reach consensus on a common knowledge base. As a result, momentum has waned in recent years without clear guidance on a path forward. Through meta-analytic review, this study seeks to clarify what is known in a sales setting about burnout's central component, emotional exhaustion. The findings will be juxtaposed with findings from similar meta-analytic reviews performed on emotional exhaustion in other work settings. Through this process, research gaps will emerge that can help guide more programmatic research in the future; the results will provide managers with clearer guidance on mitigating burnout.

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A sales career is typically one that involves a significant level of stress. Labeled a *boundary spanner*, this organizational employee “engages in job-related interactions with a person who is considered part of the environment, who is not a member of the organization” (Robertson 1995, 75). Boundary spanners operate widely within the marketing discipline, including the roles of salespeople, customer service representatives, and retail employees, to name a few (Edmondson and Boyer 2013). They are susceptible to high levels of stress because managing relationships across boundaries often entails dealing with stakeholders that may have different objectives and conflicting priorities. As such, salespeople are often required to meet increasing customer demands with constrained organizational resources (Hollet-Haudebert, Mulki, and Fournier 2011). Because of this, stress is one of the most heavily researched constructs in the sales literature (e.g. Shepherd, Tashchian, and Ridnour 2011).

One of the outcomes of this prolonged stress is job-related burnout, which is made up of three dimensions, including emotional exhaustion, depersonalization, and personal accomplishment (Maslach and Jackson 1981). The primary manifestation of burnout is *emotional exhaustion*, which represents a state of depletion in which one is overextended to the point of having nothing left to give (Maslach and Jackson 1981). The second dimension, *depersonalization*, often serves as a coping mechanism for stress in which workers disengage and exhibit cynicism toward others. *Personal accomplishment* serves as the third dimension and represents a sense among workers that they are able to achieve their goals. Said another way, personal accomplishment contributes to burnout when it is lacking as workers become dejected and lose confidence in their abilities to perform adequately (Maslach and Jackson 1981).

In this meta-analysis, emotional exhaustion is the focal construct because it is generally viewed as the central manifestation of burnout (Cieslak et al. 2014; Kenworthy et al. 2014; Koeske and Koeske 1989). Similar to other professions, burnout research in sales has exhibited mixed findings. Although meta-analyses have been conducted on emotional exhaustion for a variety of other helping occupations (i.e. physicians, mental health professionals, teachers), there has not been a single meta-analysis involving marketing employees, despite dozens of studies on emotional exhaustion conducted over the past 20 years. This study seeks to provide a synthesis of past research involving emotional exhaustion specifically within the business-to-business sales profession to more clearly articulate what has been established. Results from similar meta-analytic reviews conducted on emotional exhaustion in other disciplines cannot be simply borrowed from because there are indications that burnout may manifest differently within a sales setting (Lewin and Sager 2007; Rutherford, Shepherd, and Tashchian 2015). In fact, there are key differences between sales and other helping professions on a range of factors, including possible career goals, personal motivations, the nature of client communications, and even sources of stress (Lewin and Sager 2007). Furthermore, research has shown that emotional exhaustion is the first element in the onset of burnout for those working within the helping professions while it is the last element of burnout for those within the sales profession (Lewin and Sager 2007).

Similarly, studies have found that the departure of a sales person can cost an organization between 25% and 200% of the salesperson's annual compensation (Pinkovitz, Moskal, and Green 1997; Lewin and Sager 2010). Such costs result from (1) decreasing the business that comes from the

departed salesperson, (2) hiring and training a replacement, and (3) losing business during the learning curve for the new salesperson (Russ and McNeilly 1995). To minimize the associated impact on the organization's bottom line, it is important to understand the managerial implications of emotional exhaustion and how to minimize its occurrence in sales employees. The goal of this meta-analysis is to not only provide this information but also suggest promising avenues for future research.

Literature review

The term *job burnout* was first coined in the 1970s by Herbert Freudenberger. As a psychologist, he used the term to describe a condition he witnessed among colleagues involving persistent negativity, exhaustion, and diminished job interest (Freudenberger 1974; Shepherd, Tashchian, and Ridnour 2011). In the workplace, burnout has come to represent a unique syndrome that is distinguishable from depression and other forms of stress and fatigue (Cordes and Dougherty 1993; Maslach and Leiter 2008). With the advent of the Maslach Burnout Inventory (MBI) in 1981, the condition could be empirically measured along the three dimensions of emotional exhaustion, depersonalization, and personal accomplishment (Maslach and Jackson 1981). Initial research primarily focused on work settings involving what is loosely classified as the helping professions, occupations such as teaching, nursing, and social work. The field branched out significantly after a seminal review conducted by Cordes and Dougherty (1993), in which the authors indicated that many additional work positions involving interactions with clients are likely to be vulnerable to burnout. In one of the first marketing-related studies of burnout, Singh, Goolsby, and Rhoads (1994) found that customer-service workers exhibited higher levels of burnout than did workers in many of the occupations traditionally scrutinized for the condition. Thus, burnout research among salespeople began to proliferate in the late 1990s.

Meanwhile, in other professions, burnout research became so prevalent that systematic reviews began to emerge. From early on, there has been considerable debate as to whether the secondary burnout dimensions of depersonalization and personal accomplishment are part of the syndrome itself or are theoretically related to emotional exhaustion but not encompassed within burnout (Koeske and Koeske 1989). While this debate remains largely unresolved, there is general consensus that emotional exhaustion represents the core essence of burnout (Cieslak et al. 2014; Kenworthy et al. 2014; Koeske and Koeske 1989). As such, a summary of meta-analytic reviews involving emotional exhaustion is offered in Table 1. These studies were largely conducted in the social sciences focusing on the helping professions. Given mixed findings along the way, these quantitatively based research reviews have contributed by synthesizing previous research and providing a common platform of understanding. For example, consensus has developed around the notion that "age" impacts emotional exhaustion such that older people having more work

experience are generally more effective at navigating job stress (Brewer and Shapard 2004; Lim et al. 2010). Similarly, the meta-analytic reviews reveal that women exhibit higher levels of emotional exhaustion compared to men (Kenworthy et al. 2014), but the effects when taken collectively are not nearly as large as individual studies would seem to suggest (Purvanova and Muros 2010). Affective elements such as role conflict and stress generally exhibit stronger associations with emotional exhaustion than with other burnout dimensions (Alarcon, Eschleman, and Bowling 2009). In addition, all else being equal, job demands such as role conflict and stress have more detrimental effects on emotional exhaustion than offsetting positive effects stemming from job resources such as coworker and supervisor support (Lee and Ashforth 1996).

Meta-analyses have revealed that, among potential outcomes of emotional exhaustion in the helping professions, exhaustion is more closely linked to affective outcomes such as job satisfaction than to job performance (Lee et al. 2011). Overinvolved workers tend to experience higher levels of exhaustion without degradation of performance, at least in the short term, because this same overinvolvement serves as a proxy for diligence (Lee et al. 2011). In addition, emotional exhaustion's consistently strong association with absenteeism has been interpreted as a pattern in which workers temporarily withdraw to cope with their job-induced stress (Swider and Zimmerman 2010). These advances in knowledge within the helping professions would not be possible without the corresponding meta-analytic reviews that have aggregated the findings of previous research.

As mentioned previously, in the sales literature, there has not been a single meta-analysis on emotional exhaustion involving marketing employees. This is important because it has been established that burnout manifests differently within a sales context in comparison to the helping professions (Lewin and Sager 2007; Rutherford, Shepherd, and Tashchian 2015). The Maslach (1982) model indicates that emotional exhaustion is the first element in the onset of burnout for those working within the helping professions (Lewin and Sager, 2007). Meanwhile, for those who join careers within the sales profession, emotional exhaustion has been found to be the last element of burnout (Lewin and Sager, 2007). These differences even extend to the nature of interactions such that in helping professions, the care providers primarily have control in the client communications while in sales, the clients tend to have primary control. Therefore, findings from meta-analytic reviews conducted on emotional exhaustion within other professions cannot be assumed to fully translate to sales.

Further still, even when studied exclusively within sales, there have been several inconsistencies in the results related to emotional exhaustion. For example, emotional exhaustion was directly linked to both turnover intentions and propensity to leave in a few studies (e.g. Boles, Johnston, and Hair 1997; Jaramillo, Mulki, and Boles 2011) but not in others (e.g. Rutherford et al. 2009). The same inconsistencies were found with other constructs such as role ambiguity. Because of this, it is important to conduct a meta-analysis so that the true relationship among the constructs can be determined.

Table 1. Summaries of meta-analytic reviews involving emotional exhaustion (EE).

Authors	Publication	Scope	Variables	Findings
Cieslak et al. (2014)	<i>Psychological Services</i>	Professionals working with trauma survivors (41 samples)	Secondary traumatic stress (STS)	Working professionals such as psychiatrists who have been exposed indirectly to traumatic material do significantly have higher levels of burnout, including emotional exhaustion. The strength of the relationships depends on how STS and burnout were measured along with the country of the study.
Kenworthy et al. (2014)	<i>Journal of Applied Social Psychology</i>	Various occupations covered by the social sciences; had to contain a measure of emotional dissonance for inclusion (57 samples)	Emotional dissonance	There was a significant relationship between emotional dissonance (e.g. surface acting) and emotional exhaustion. The relationship was moderated by gender such that the linkage was stronger in studies involving more women. It was also stronger among police workers.
Aloe, Amo, and Shanahan (2014)	<i>Educational Psychology Review</i>	Teachers (16 samples)	Classroom management self-efficacy (CMSE)	It was determined that there is a significant relationship between classroom management self-efficacy (CMSE) and all three dimensions of burnout, including emotional exhaustion. Results suggest that teachers with higher levels of CMSE are less likely to experience the feelings of burnout.
Lee et al. (2011)	<i>Professional Psychology: Research and Practice</i>	Psychotherapists (17 samples)	Antecedents of EE: Job stress, Self-control, Overinvolvement, Job support, Professional identity; Outcomes of EE: Job satisfaction, Turnover intention	Overinvolvement had the strongest relationship with emotional exhaustion. All of the other antecedents also had significant relationships with emotional exhaustion in the anticipated direction except for job support, which did not have a significant relationship. Emotional exhaustion was also significantly related to both job satisfaction and turnover intention, but the relationship was stronger with job satisfaction.
Swider and Zimmerman (2010)	<i>Journal of Vocational Behavior</i>	Included a wide sampling of positions mainly in the helping professions as taken from the PsychINFO database. (115 samples)	Antecedents of EE: Neuroticism, Extraversion, Agreeableness, Conscientiousness, Openness; Outcomes of EE: Absenteeism, Turnover intentions, Job performance,	The antecedents are all part of the five-factor model of personalities. All of them except openness exhibited significant relationships with emotional exhaustion. Neuroticism had the strongest relationship with emotional exhaustion. Emotional exhaustion had a significant relationship with all three of the outcome variables, with the strongest association to absenteeism.
Purvanova and Muros (2010)	<i>Journal of Vocational Behavior</i>	Included a wide sampling of positions mainly in the helping professions as taken from the PsychINFO database. (183 Samples)	Gender, Occupational type, Labor policies	This study primarily analyzed potential gender differences with various situational moderations. Results indicated that women were slightly more likely overall to experience emotional exhaustion, but not as much as individual studies seem to suggest. Male-dominated or female-dominated professions did not amplify exhaustion for the minority gender. Emotional exhaustion and burnout in general are higher in the United States due to labor policies.
Lim et al. (2010)	<i>Journal of Employment Counseling</i>	Mental Health Professionals (15 Samples)	Age, Work setting, Education, Work hours, Gender	Age was the most significant determinant of emotional exhaustion. Older people were less likely to have emotional exhaustion in these related professions. Education showed a positive, yet moderate, relationship with emotional exhaustion. The longer one worked (i.e. work hours) the more likely one was to have emotional exhaustion. Working for an agency versus private group (i.e. work setting) increased the likelihood of having emotional exhaustion.
Alarcon, Eschleman, and Bowling (2009)	<i>Work & Stress</i>	Various occupations covered by the social sciences primarily from PsychINFO; had to contain a measure of personality or disposition for inclusion (114 samples)	Self-esteem, Self-efficacy, Locus of control, Emotional stability, Extraversion, Conscientiousness, Agreeableness, Positive affectivity, Negative affectivity, Optimism, Proactive personality, Hardiness, Type "A"	All of the personality variables except one had significant relationships with all three dimensions of burnout including emotional exhaustion. Type "A" personality only had a significant relationship with personal accomplishment. However, emotional stability, positive affectivity, and negative affectivity each had relatively stronger relationships with emotional exhaustion than did the other personality traits. The stronger associations were attributed to these being affective-related variables. The particular

(continued)

Table 1. Continued.

Authors	Publication	Scope	Variables	Findings
Halbesleben (2006)	<i>Journal of Applied Psychology</i>	Various occupations covered by the social sciences; had to contain measures of social support for inclusion (122 samples)	Work support: Supervisor, Coworker; Nonwork support: Family, Friends	instrument used to measure burnout also somewhat moderated the associations. Overall, findings indicate that sources of support did not have differential effects on the individual dimensions of burnout. However, work-related sources of social support, because of their more direct relationship to work demands, were more closely associated with emotional exhaustion than were depersonalization or personal accomplishment. The opposite pattern was found with non-work sources of support.
Brewer and Shapard (2004)	<i>Human Resource Development Review</i>	Included a wide sampling of positions mainly in the helping professions and primarily taken from PsychINFO database (27 samples)	Age, Field experience, Position experience	There was a small and negative correlation between age and emotional exhaustion (e.g. older people tended to experience less emotional exhaustion) at least in certain fields. There was a slight negative association between years of experience in a field and emotional exhaustion. Results were inconclusive regarding experience in a particular position and emotional exhaustion.
Lee and Ashforth (1996)	<i>Journal of Applied Psychology</i>	Various occupations covered by the social sciences; main categories included clinical psychology, education, management, nursing, psychology, social work, and sociology (56 samples)	Antecedents: 26 different demand and resource correlates were tested against all three burnout dimensions. Outcomes: 7 different outcome variables were tested	Thirteen of the 26 demand and resource correlates had individually corrected weighted mean correlations greater than or equal to .30 with emotional exhaustion. Role conflict, role stress, stressful events, workload, and work pressure were all greater than or equal to .50 with emotional exhaustion. For the resource correlates, weighted mean correlations between emotional exhaustion and social support, supervisor support, community bond, innovation, participation, unmet expectations, and noncontingent punishment were all greater than or equal to .30. Emotional exhaustion was more strongly related to both job demands and job resources than the other burnout dimensions. The demands overall had stronger relationships with emotional exhaustion than resources did.

Hypothesis development

In 2011, Hollet-Haudebert and colleagues (Hollet-Haudebert, Mulki, and Fournier 2011) offered a chronological summary of previous salesperson burnout research. The preponderance of articles had emotional exhaustion, or a closely related assessment of burnout, as the primary dependent variable. As research on salesperson burnout has matured, however, emotional exhaustion has shifted to more of a facilitating role, often studied as a central construct linking antecedents such as role stressors to outcomes such as job satisfaction and organizational commitment. Hence, conceptual development and testing for this meta-analysis will focus on the most heavily studied antecedents of emotional exhaustion followed by the most heavily studied consequences of emotional exhaustion.

Antecedents of emotional exhaustion

Role theory has been studied widely and serves as a theoretical umbrella covering multiple domains. In one early conceptualization, Thomas and Biddle (1966) offered that work roles operate along a continuum with conflict anchoring one end and continuity the other. Within sales research, three components of role theory have been studied most heavily:

role ambiguity, role conflict, and work overload. Taken collectively, these three subdomains constitute “role stress” (Cordes and Dougherty 1993; Singh, Goolsby, and Rhoads 1994). Given the boundary-spanning nature of sales, role stress is likely prevalent in this profession to varying degrees across each subdomain. Therefore, each component of role stress will be addressed in turn as they have exhibited differential findings with respect to emotional exhaustion across various research disciplines and within sales.

Role ambiguity

Often studied as antecedent to emotional exhaustion, *role ambiguity* can be defined as the extent to which role expectations are indeterminate and the means by which to achieve expectations are uncertain and the degree to which the results of role performance are unknown (Behrman and Perreault 1984). Results for hypothesized relationships between role ambiguity and emotional exhaustion within sales research have exhibited mixed findings. As anticipated, role ambiguity was found to be a significant contributor to emotional exhaustion in certain sales studies (e.g. Babakus et al. 1999; Lewin and Sager 2009; Shepherd, Tashchian, and Ridnour 2011) but not in others (e.g. Boles, Johnston, and Hair 1997; Hamwi, Rutherford, and Boles 2011) and was

not even proposed as directly related to emotional exhaustion in another study (e.g. Lewin and Sager, 2007). Role ambiguity, along with other role stressors, has typically been measured using the global scales created by Rizzo, House, and Lirtzman (1970). Ambiguity may manifest from multiple sources, including company policy, managerial direction, and the expectations of coworkers, to name a few. In fact, an exploratory study using a multidimensional scale of role ambiguity determined that several of the dimensions had negligible impact on emotional exhaustion. (Ambrose et al. 2014). While findings have been inconclusive, role theory, along with supportive findings in certain cases, suggest that ambiguity at work will lead to heightened levels of stress. Hence, it is hypothesized that

H1: There is a positive association between role ambiguity and emotional exhaustion.

Role conflict

As a second subdomain of role stress, *role conflict* can be defined as the degree of incompatibility associated with various role expectations at work (Cordes and Dougherty 1993; Singh, Goolsby, and Rhoads 1994). Role conflict has generally been found to have a strong positive association with emotional exhaustion in meta-analytic reviews related to other work settings (i.e. Lee and Ashforth 1996): emotional exhaustion levels rise as the degree of role conflict increases. A certain amount of role conflict is highly likely in boundary-spanning roles such as sales in which representatives may be caught between incompatible goals of customers and the company along with various other stakeholders. The stress of such tension naturally leads to emotional exhaustion. Role conflict has been studied often in salesperson burnout research with less equivocal findings than role ambiguity. Thus, it is predicted that

H2: There is a positive association between role conflict and emotional exhaustion.

Work overload

Work overload, also referred to as *role overload*, serves as the third subdomain of role stress and can be defined as the extent to which work expectations exceed one's ability and motivation to perform them (Cordes and Dougherty 1993; Singh, Goolsby, and Rhoads 1994). Said another way, there is simply not enough perceived time or resources available to accomplish one's tasks (Lewin and Sager 2007). In meta-analytic review of other work settings, work overload has exhibited a strong positive relationship with emotional exhaustion (e.g. Lee and Ashforth 1996). Within a sales setting specifically, overload may manifest in multiple ways, including having too many accounts to call on or excessive levels of paperwork to complete. Yet, similar to role conflict, the findings with emotional exhaustion have been less ambiguous. Hence, it is predicted that

H3: There is a positive association between work overload and emotional exhaustion.

Work-family conflict

While not considered one of the three subdomains of work-related role stress, researchers have acknowledged for a long time that work-family conflict is interrelated with such role stressors (Boles, Johnston, and Hair 1997). Defined as the extent to which work roles and family roles are incompatible (Greenhaus and Beutell 1985), work-family conflict has been determined to play a significant role in the business-to-business sales profession. It has been suggested that work-family conflict is especially salient in sales because there are often travel requirements involved and stress that can extend to family life when sales performance targets are not reached (Boles, Johnston, and Hair 1997). Of course, responsibilities both at work and outside of work are individually important; however, when taken collectively they can overwhelm an individual (Boles, Johnston, and Hair 1997). In the sales literature, a consistent linkage between work-family conflict and emotional exhaustion is expected. Hence, it is hypothesized that

H4: There is a positive association between work-family conflict and emotional exhaustion.

Supervisory support

Beyond job demands that can lead to heightened stress and subsequent exhaustion, researchers have investigated a number of resources that individuals can draw upon to help cope and even reduce stress levels (Lee and Ashforth 1996; Schwab, Jackson, and Schuler 1986). Managerial support encompasses a variety of ways in which supervisors interact with individual employees. Support can be provided on technical aspects such as training on selling skills. It can also be provided from a social-emotional perspective such as through encouragement, empathy, and recognition (Kemp, Leila Borders, and Ricks 2013). Lee and Ashforth (1996) have established that in other professions, resources do not mitigate emotional exhaustion to the same level that role stressors increase it; nevertheless, there are some offsetting effects. Within sales research, supervisory support has generally exhibited a negative relationship with emotional exhaustion when directly tested (e.g. Lewin and Sager 2008). Reasoning suggests that with greater managerial support, emotional exhaustions levels will decrease. Hence, it is proposed that

H5: There is a negative association between supervisor support and emotional exhaustion.

Perceived organizational support

As another resource that employees can draw upon, *perceived organizational support* is defined as the extent to which an employee perceives that the organization values his or her contributions and cares for his or her well-being (Eisenberger et al. 1986). Employees form global perceptions regarding how much an organization values them and cares about their prospering (Eisenberger et al. 1986; Rutherford et al. 2010). Beyond supervisory support, employees look to the organization itself and make determinations regarding the overall level of commitment they perceive. When these

perceptions of commitment are positive, employees will be more inclined to reciprocate their commitment levels to the organization (Eisenberger et al. 1986). However, a direct relationship between perceived organizational support and emotional exhaustion has rarely been hypothesized and tested within sales research. Hamwi and colleagues (Hamwi, Rutherford, and Boles 2011) did not find a direct association and reasoned that even though organizational support helps, it does not reduce the stress related to the actual job. Meta-analytic reviews of work settings outside of sales generally have not proposed organizational support for testing. However, similar constructs such as social support have exhibited some impact on reducing emotional exhaustion levels (Lee and Ashforth 1996; Halbesleben 2006). Consistent with various resource theories, logic suggests that perceived organizational support is a resource that can be used to reduce negative feelings. Thus, it is hypothesized that

H6: There is a negative association between perceived organizational support and emotional exhaustion.

Consequences of emotional exhaustion

Job-related burnout has long been linked to negative outcomes, including compromised physical health (Hollet-Haudebert, Mulki, and Fournier 2011) and withdrawal from fellow employees, customers, the organization, and eventually the job itself (Lewin and Sager 2007; Schwab, Jackson, and Schuler 1986). As the central manifestation of burnout, emotional exhaustion has been studied against various potential outcomes by sales researchers. The most common outcomes can be classified into attitudinal consequences, including reduced job satisfaction, reduced organizational commitment, and intentions to leave. The most commonly studied behavioral consequence is diminished job performance. The literature has often delivered equivocal findings depending on the context of the study and associated framework under scrutiny. It is important for researchers to better understand these linkages considering billions of dollars are at stake in lost productivity to companies (Lewin and Sager 2008). Therefore, each of these outcomes will be addressed in turn as they have exhibited differential findings with respect to emotional exhaustion.

Job satisfaction

Perhaps no other construct has received as much attention in sales research as job satisfaction (Brown and Peterson, 1993; Rutherford et al. 2009). Yet conclusive determinations as to what fosters job satisfaction in sales have often remained elusive to researchers. The theoretical assertion follows that as emotional exhaustion increases, job satisfaction will diminish. This hypothesized association has been confirmed in some sales-related studies (e.g. Babakus et al. 1999; Shepherd, Tashchian, and Ridnour 2011) but not in all studies (e.g. Boles, Johnston, and Hair 1997). Meanwhile, job satisfaction has been proposed as an end-stage outcome in most burnout studies, but it has been modeled as a mediator between burnout and both organizational commitment

and propensity to leave in another study (e.g. Low et al. 2001). In meta-analytic reviews outside of sales, emotional exhaustion has consistently been linked to job satisfaction (Lee and Ashforth 1996; Lee et al. 2011). In fact, it has been more closely linked to attitudinal outcomes such as job satisfaction than to actual job performance (Lee et al. 2011). Thus, it is proposed that

H7: There is a negative association between emotional exhaustion and job satisfaction.

Organizational commitment

The degree to which an employee is involved in, and identifies with, his or her company is referred to as *organizational commitment* (Porter et al. 1974; Rutherford et al. 2009). In meta-analytic reviews outside of sales, emotional exhaustion has exhibited a strong negative association with organizational commitment (Lee and Ashforth 1996). While the evidence within the sales literature is more limited, emotional exhaustion has been hypothesized and found to be negatively associated with organizational commitment (Babakus et al. 1999; Jaramillo, Mulki, and Boles 2011; Rutherford et al. 2009). These findings are expected, considering organizational commitment is considered an attitudinal outcome measure likely to be heavily influenced by job stressors. Hence, it is hypothesized that

H8: There is a negative association between emotional exhaustion and organizational commitment.

Turnover intentions

The third attitudinal construct studied as a consequence of emotional exhaustion is intent to leave. Research has consistently proposed that as one's emotional exhaustion levels rise, the propensity to seek alternate employment also rises. Meta-analytic reviews outside of sales have generally concluded a linkage, but one that is not as strong as that with job satisfaction (Lee et al. 2011). With respect to sales research, a direct linkage stemming from emotional exhaustion to turnover intentions has been less conclusive. For example, a direct association was found in one study (Boles, Johnston, and Hair 1997) but not in another study (Rutherford et al. 2009). Instead, only an indirect association between emotional exhaustion was determined. Hence, it is hypothesized that

H9: There is a positive association between emotional exhaustion and turnover intentions.

Job performance

Job performance is a behavioral outcome that has also been heavily studied in various forms within sales. The theoretical assertion is that as emotional exhaustion levels rise, job performance will decline. Meta-analytic review outside of sales has reinforced this negative association (Lee et al. 2011), but the linkage has not been as strong as with other outcome measures. The explanations range, but it is generally

believed that heightened stress is also a signal of care and attention that will not degrade job performance, at least in the short term (Lee et al. 2011). Meanwhile, regarding job performance as a direct outcome of emotional exhaustion within sales, the results have been mixed. Although Babakus et al. (1999) did not find a direct association between emotional exhaustion and performance, multiple studies have determined that emotional exhaustion will ultimately lead to reduced job performance (Jaramillo, Mulki, and Boles 2011; Low et al. 2001). Hence, it is hypothesized that

H10: There is a negative association between emotional exhaustion and job performance.

Methodology

Eligibility and literature search criteria

To be considered for inclusion, a study must have reported a Pearson's correlation coefficient (r) between emotional exhaustion and some other construct. Studies containing other statistics that can be converted to r (F value, t value, P value, and chi-square [χ^2]) were also eligible for inclusion. No preconceived list of constructs was created to investigate with emotional exhaustion as the authors wanted to create a complete picture of what research has been conducted in the area.

Any article published prior to September 2017 was considered. To ensure that the final database was as complete and representative as possible, a multisampling strategy was undertaken. First, computer-based searches of published articles, conference proceedings, unpublished dissertations, and theses were conducted using the keywords "emotional exhaustion" or "burnout" in the "document text," "all fields + text," or "All text" options. We did not limit the search to any of the other search options (e.g. abstract, author, title, keyword). A total of 37 databases were searched (e.g. ABI/Inform Complete, EBSCO, JSTOR, PsycInfo, Proquest, and SAGE). Second, we examined all prior meta-analyses related to burnout to determine whether there were any articles not found in the search (e.g. Purvanova and Muros 2010). Third, requests for working papers, forthcoming articles, and unpublished research dealing with emotional exhaustion were posted on the ELMAR electronic marketing list in an effort to address the potential "file drawer" problem associated with meta-analytic studies (Rosenthal 1995). After these three steps, there were 768 published articles and 1,363 dissertations and theses. Fourth, since the focus of this meta-analysis is sales, the authors reviewed all of the articles and dissertations to limit the studies to those that used a business-to-business sales sample only. Finally, to ensure completeness, we examined the reference section for all articles that used a business-to-business sales sample to determine whether there were any other articles that could be included. In the end, the search process yielded 33 studies with 270 correlations meeting the stated criteria for inclusion. Although it may appear that the number of studies included in this meta-analysis is somewhat low, there are many meta-analyses that have been published with similar numbers, especially when examining

sales as the targeted population. For example, specifically within sales, Rich et al. (1999) included 17 articles; Mulki, Jaramillo, and Locander (2005) included 15 articles; Jaramillo et al. (2007) included 16 articles; Brown and Lam (2008) included 28 articles; and Samaraweera and Gelb (2015) included 34 articles.

Coding of studies, adjustments for artifacts, and homogeneity results

Development of the final database followed the procedures outlined in other meta-analyses reported in the literature (Brown and Peterson 1993; Edmondson and Boyer 2013). The authors coded each study on four variables: sample size, reliability of both the emotional exhaustion scale and the other variable scale, and the effect size (correlation). To check for coding quality, two researchers coded each study independently. The corresponding interrater reliability index was .94, with all minor differences resolved through discussion (Perreault and Leigh 1989).

After all data were coded, the researchers examined the database to determine the constructs studied in the literature. Any construct that had at least five correlations was considered for this meta-analysis. In the end, it was determined that there were 29 different studies and 10 different meta-analyses that could be conducted. According to the literature, six of these constructs could be considered antecedents of emotional exhaustion: role ambiguity, role conflict, work overload, work-family conflict, perceived organizational support, and supervisory support. The remaining four constructs – job satisfaction, organizational commitment, job performance, and turnover intentions – are typically outcomes of emotional exhaustion.

To ensure that the true relationship was not underestimated, the effect size of each relationship was corrected for attenuation bias using the procedure outlined by Hunter and Schmidt (2004). The corrected effect size and the sample size were then entered into Version 3 of the Comprehensive Meta-Analysis software program (Borenstein et al. 2013). Homogeneity tests were conducted using the Q statistic for each emotional exhaustion-variable relationship (Lipsey and Wilson 2001). The Q statistic (ranging from 13.747 to 370.639) for each relationship was found to be significant, indicating a lack of homogeneity (See Table 2). Therefore, a random-effects model was employed when analyzing each of the relationships.

Results

Sample description and reliability of measures

The 29 studies included in the meta-analysis rendered 104 correlations. The average study sample size across all variables is 226.63 (see Table 2 for individual construct sample sizes). Study samples came from a variety of industries and countries (e.g. China, Croatia, Ecuador, France, Netherlands, Spain, United Kingdom, United States).

Table 2. Meta-analytic results.

Constructa	Kb	Nc	rd	95% Cle	Range of <i>r</i>	Q statistic	Fail-safe <i>N</i>
Role ambiguity (H ₁ , +)	15	3,251	.391***	[.307, .469]	-.082 to .599	104.952***	2,000
Role conflict (H ₂ , +)	14	3,111	.586***	[.474, .679]	.185 to .926	246.297***	4,302
Work overload (H ₃ , +)	5	1,687	.484***	[.293, .638]	.301 to .677	86.341***	599
Work-family conflict (H ₄ , +)	8	1,438	.629***	[.557, .692]	.407 to .737	30.726***	1,536
Supervisory support (H ₅ , -)	9	2,370	-.471***	[-.540, -.396]	-.583 to -.252	39.564***	1,315
Organizational support (H ₆ , -)	6	1,147	-.546***	[-.612, -.471]	-.646 to -.463	13.747*	639
Job satisfaction (H ₇ , -)	15	2,990	-.515***	[-.639, -.365]	-.790 to .313	370.639***	3,789
Organizational commitment (H ₈ , -)	11	2,344	-.494***	[-.567, -.414]	-.662 to -.179	60.516***	1,882
Turnover intentions (H ₉ , +)	12	2,487	.586***	[.501, .660]	.224 to .782	99.499***	3,456
Job performance (H ₁₀ , -)	9	2,747	-.264***	[-.343, -.181]	-.414 to -.102	39.892***	398

^aConstruct with the predicted relationship, based on the literature, in parentheses.

^bNumber of studies.

^cSample size.

^dCorrelation corrected for attenuation bias and weighted by sample size.

^e95% Confidence interval for the corrected average correlation *r*.

p* < .05; *p* < .01; ****p* < .001.

Of the 29 studies analyzed, 27 reported the reliability of the emotional exhaustion scale. The reliabilities range from .66 to .94 with the average reliability, weighted by sample size, being .87. With respect to the other variables being considered, 79 of the 104 effect sizes included reported scale reliability. The average weighted reliabilities for role ambiguity, role conflict, and work overload were .80, .76, .70, respectively. The average weighted reliabilities for work-family conflict, organizational support, and supervisor support were .88, .93, and .90, respectively. For organizational commitment, job satisfaction, job performance, and turnover intentions, the average weighted reliabilities were .86, .87, .84, .91, respectively. Thus, on average, each of the scales included in this meta-analysis demonstrated a relatively strong internal consistency across studies (Nunnally and Bernstein 1994).

Meta-analytic results

Meta-analyses were conducted for each of the 10 variables included in this study. Table 2 displays the results of these meta-analyses. Using Cohen's (1977) rule of thumb for interpreting effect size magnitude, a weak (small) effect size is a corrected correlation that is less than or equal to .10; a moderate (medium) effect size is a corrected correlation that is greater than .10 but less than .40; and a strong (large) effect size is a corrected correlation that is greater than or equal to .40 (Lipsey and Wilson 2001). Overall, role ambiguity (H₁, *r* = .391, *p* < .001) exhibited a moderate positive relationship with emotional exhaustion. Role conflict (H₂, *r* = .586, *p* < .001), work overload (H₃, *r* = .484, *p* < .001), and work-family conflict (H₄, *r* = .629, *p* < .001) exhibited strong positive relationships with emotional exhaustion. The results also revealed a strong negative relationship between emotional exhaustion and both supervisory support (H₅, *r* = -.471, *p* < .001) and perceived organizational support (H₆, *r* = -.546, *p* < .001). In addition, job performance (H₁₀, *r* = -.264, *p* < .001) exhibited a moderate negative relationship with emotional exhaustion while job satisfaction (H₇, *r* = -.515, *p* < .001) and organizational commitment (H₈, *r* = -.494, *p* < .001) exhibited strong negative relationships. Finally, turnover intentions had a strong positive relationship with emotional exhaustion (H₉, *r* = .586, *p* < .001).

These results find support for all of the hypotheses developed. The fail-safe *N*s (also known as availability bias and file-drawer effect) ranged from 398 to 4,302, with an average of 1,991.6; therefore, all of the constructs passed the 5*k* + 10 criterion set forth by Rosenthal (1979), indicating that studies not included in the meta-analysis do not represent serious threats to the validity of the findings.

Discussion

This meta-analysis investigated six antecedents (role ambiguity, role conflict, work overload, work-family conflict, perceived organizational support, and supervisory support) and four consequences (job satisfaction, organizational commitment, job performance, and turnover intentions) of emotional exhaustion. Specifically, role conflict, work overload, and work-family conflict exhibited strong positive relationships with emotional exhaustion while supervisory support and perceived organizational support exhibited strong negative relationships with emotional exhaustion. In addition, role ambiguity exhibited a moderate positive relationship with emotional exhaustion. This moderate positive relationship most likely stems from the multidimensional nature of role ambiguity and potentially reinforces the findings of Ambrose et al. (2014), in which only the customer facet of role ambiguity was linked to emotional exhaustion. For consequences, job satisfaction and organizational commitment had strong negative relationships with emotional exhaustion while turnover intentions had a strong positive relationship. Job performance also exhibited a moderate negative relationship with emotional exhaustion.

For sales organizations, this highlights that the onset of emotional exhaustion is extremely detrimental to the organization. When a salesperson becomes emotionally exhausted, the salesperson is more likely to experience reduced job satisfaction and organizational commitment while increasing the likelihood that the salesperson leaves the organization. In the event that the salesperson does not leave the organization, an emotionally exhausted salesperson's job performance is likely to suffer. In any of these events, the organization will face negative ramifications. These negative ramifications will exist due to either reduced sales revenue or increased costs to hire and train new salespeople due to

prior employees leaving the firm. Zoltners, Sinha, and Lorimer (2017) stated that costs to an organization when a salesperson leaves the firm include three different time periods: a withdrawal period (i.e. when the employee contemplates leaving and is distracted and job searching), a vacancy period (i.e. time between when the former salesperson leaves and a new one is hired), and a hiring/orientation period (i.e. time it takes the new salesperson to become acclimated to the new organization). It is estimated that the turnover cost is 150% of a salesperson's salary (Graham-Leviss 2011); therefore, if the salesperson was making \$75,000 a year, the cost for that individual leaving the firm would be \$112,500.

Because of the negative ramifications an organization might experience due to a salesperson's emotional exhaustion, it is imperative that organizations understand what might cause emotional exhaustion. Drawing on these findings, organizations should attempt to minimize emotional exhaustion by reducing work-family conflict, role conflict, work overload, and role ambiguity while increasing an employee's perceptions of organizational support and supervisory support. There are various ways organizations can attempt to minimize emotional exhaustion based on these six constructs. See Table 3 for a detailed list of these potential ways. Overall, by reducing role ambiguity, role conflict, work overload, and work-family conflict and increasing organizational and supervisory support, sales organizations may be able to reduce the amount of emotional exhaustion felt by their sales employees. This reduced emotional exhaustion may then lead to higher job satisfaction, organizational commitment, and job performance and lower turnover intentions for these sales organizations.

Finally, when comparing this meta-analysis to prior emotional exhaustion meta-analyses, as listed in Table 1, it is evident there are multiple constructs that have never been included in a meta-analysis with emotional exhaustion. In fact, only two of the prior meta-analyses included any of the constructs currently being investigated. Halbesleben (2006) examined emotional exhaustion and supervisor support using a general workforce study. Results from Halbesleben (2006) found a correlation of $-.28$ while this study found a correlation of $-.47$ from studies that used only business-to-business sales samples. In addition, Lee and Ashforth (1996) examined the relationship that emotional exhaustion has with role ambiguity (.21), role conflict (.53), supervisor support ($-.37$), job satisfaction ($-.31$), organizational commitment ($-.43$), and turnover intentions (.44). It is important to recognize that no sales samples were used in Lee and Ashforth's (1996) study. Although the correlation differences between these studies and the current meta-analyses were not statistically tested, when examining the strength of these relationships, several noteworthy differences exist. For example, the relationships between emotional exhaustion and role ambiguity (Lee and Ashforth 1996 report .21; our meta-analysis reports .39), turnover intentions (Lee and Ashforth 1996 report .44; our meta-analysis reports .59), and job satisfaction (Lee and Ashforth 1996 report $-.31$; our meta-analysis reports $-.52$) were substantially stronger in the current study. This highlights that the sales profession

warrants examination outside of the general population. Further, this comparison with Table 1 indicates that there are four constructs studied in this meta-analysis that have not been previously examined with emotional exhaustion regardless of sample population (work overload, work family conflict, organizational support, and job performance).

Limitations and future research

Like all meta-analyses, this study has several limitations. First, although all efforts were made to reduce selection bias, it is possible that not all relevant studies were included in the sample. Second, it is important to note that correlations are reported in our findings. Although prior literature was used to determine potential causality, this meta-analysis does not make an attempt to confirm this causality. Third, although six antecedents and four outcomes of emotional exhaustion were included in this study, it is possible that other antecedents and/or outcomes are important when investigating emotional exhaustion among sales employees. This study included all constructs that had a significant amount of sales research needed to conduct a meta-analysis, but this does not mean that other constructs would not be meaningful to investigate. For example, in many cases sales literature only focuses on emotional exhaustion even though there are two other dimensions of burnout (depersonalization and personal accomplishment). It would be useful to investigate these additional constructs via either meta-analytic review or empirical research. Finally, although Ambrose et al (2014) discussed the multidimensionality of role ambiguity, this meta-analysis only examined the construct from a global perspective since prior work did not separate out its dimensions. Caution should be used when interpreting the role ambiguity results because of the potential multidimensionality of this construct. In addition, there are many different forms of job performance (e.g. behavioral versus outcome based, subjective versus objective) that were not specifically examined in this study even though there could be inconsistencies in the relationship because of these measurement differences.

Because of this, we foresee several avenues for future research based on the results of this meta-analysis. First, although many of the outcomes typically investigated in sales research were included in this meta-analysis, other outcomes such as customer satisfaction should be considered. For example, do customers notice when employees become emotionally exhausted and does this impact their level of satisfaction with the organization? Second, six typical antecedents to emotional exhaustion were considered in this meta-analysis; however, there are many other antecedents that might positively or negatively impact emotional exhaustion. By investigating antecedents such as ethical climate, creativity, customer orientation, locus of control, autonomy, emotional intelligence, engagement, organizational citizenship behavior, and motivation a better understanding of what causes a salesperson to become emotionally exhausted can be determined. Third, burnout is typically viewed as a process; therefore cross-sectional research may not be fully

Table 3. Ways to reduce emotional exhaustion.

Antecedent	Ways to reduce emotional exhaustion based on antecedent
Work–family conflict	<ul style="list-style-type: none"> Allow employees control over their schedule (e.g. time of work, number of hours worked, location) Build a positive company culture Create policies that respect employees' work boundaries (e.g. no last-minute meeting changes, no calling after a specific hour) Create a family-friendly environment by offering family-specific benefits (e.g. day-care or elder-care assistance or facilities, fertility and adoption benefits, generous paid and/or unpaid leave) Create family-bonding activities for individuals within the organization Provide appropriate training to supervisors to tailor their management style for a family-supportive environment
Role conflict	<ul style="list-style-type: none"> Create policies and best practices that do not place the salesperson in a difficult position with customers Clearly define what salespeople are able to do for customers Set appropriate boundaries or limits for tasks likely to create emotional exhaustion Create a collegial and friendly environment that encourages productivity Have clear customer policies regarding expectations with salespeople Do not require salespeople to engage in behaviors that go against their personal values Train employees on positive approaches to resolve interpersonal conflict Clarify priorities of employees to minimize conflict
Organization support	<ul style="list-style-type: none"> Establish a formal complaint process with guidelines for workplace conflict Create company policies as mentioned by antecedents listed in this table Provide training to supervisors as mentioned by antecedents listed in this table Train managers to recognize physical signs of emotional exhaustion among employees Provide company-wide recognition for individual and team achievements Pay employees appropriately (salary and benefits) Create an environment where employees can experiment and fail without fear in order to encourage innovation Treat employees fairly and equitably Offer employee development programs (e.g. tuition reimbursement, mentor program, specific personal training) Promote personal health and well-being Minimize drama, negativity, and red tape Design flexibility in how supervisors are permitted to motivate their employees (e.g. intrinsic and extrinsic) Survey employees regarding their job and satisfaction Educate managers about potential workplace biases (e.g. gender, age, stereotypes)
Work overload	<ul style="list-style-type: none"> Do not hold the 80-hour-per-week superstar on a pedestal, rather acknowledge those that work smarter not harder Encourage teamwork Enforce reasonable work hours – if necessary, send employees home at the end of the workday Assess workload using a productivity review Match personal skills with work requirements Create equitable job responsibilities among employees Reduce the number of parallel tasks that an individual or team is working on Train employees to think on their feet Provide help in balancing work and family life Use technology to improve productivity Allow employees to delegate some responsibilities Aid employees when necessary in prioritizing expectations so that an employee will understand which activities require the highest standards and when it is okay to lower the bar and still meet business needs
Supervisor support	<ul style="list-style-type: none"> Streamline channels of communication Allow flexibility and increased autonomy in the work schedule Allow long weekends and use of vacation time to facilitate time to recharge Encourage employees to take 15-minute breaks throughout the day and full lunch breaks Provide training on ways to work smarter not harder, improving skills and competencies Be realistic when assigning workloads Ensure employees are in positions they feel passionate about Allow employees time to develop new projects and be creative Allow employees opportunities for bonding with coworkers via team-building activities Equip employees with adequate tools and resources Get to know employees personally and be genuinely concerned for their well-being Be fair and ethical in decision making Maintain an open-door policy to allow employees to express their concerns Acknowledge, reward, and promote excellent performance Provide feedback on performance Educate employees about stress in the workplace and encourage relaxation and healthy active lifestyles Allow salespeople to say no to new responsibilities or commitments when recovering from emotional exhaustion Help employees understand their value to the organization Surprise your sales staff with a treat (i.e. food, gift certificates, leave early, or party) Ensure employees are adequately informed Be decisive in policies and decision making and publicize those decisions Encourage employees to build employee confidence Offer tailored training programs Minimize negativity in the workplace
Role ambiguity	<ul style="list-style-type: none"> Provide role model behaviors related to schedules Clearly define and communicate the expectations of the role Obtain confirmation that employees understand required expectations Establish realistic expectations of job performance and time spent Allow ride-along for new hires to get a realistic expectation of the job Communicate employee tasks among the team so duplicate efforts are minimized Evaluate performance periodically, without micromanaging, to ensure that salespeople are on task

uncovering the relationship with other constructs since it may evolve over time. Future studies should consider conducting experimental research using repeated measures on variables that are known to change over time as this will allow additional insights related to emotional exhaustion. Fourth, this meta-analysis examined business-to-business salespeople only. Although this was the first meta-analysis that investigated this specific marketing sample, there are other jobs within the marketing discipline such as retail sales and customer service representatives that could be equally important to an organization. Further, even within the sales sample, additional research is needed to investigate the impact that the type of sales position has on emotional exhaustion (e.g. inside versus outside sales, percentage of time spent traveling for work). Finally, this study provided a list of potential ways to reduce emotional exhaustion by reducing role conflict, role ambiguity, and work overload and increasing supervisory support; however, it is possible that the impacts of the items on this list are not of equal importance. It would be helpful if experimental research were conducted investigating the differences in the impact that these items (e.g. training, support) have on emotional exhaustion.

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References

- Alarcon, Gene, Kevin J. Eschleman, and Nathan A. Bowling. 2009. "Relationships between Personality Variables and Burnout: A Meta-Analysis." *Work & Stress* 23 (3):244–263. doi: [10.1080/02678370903282600](https://doi.org/10.1080/02678370903282600).
- Aloe, Ariel M., Laura C. Amo, and Michele E. Shanahan. 2014. "Classroom Management Self-Efficacy and Burnout: A Multivariate Meta-Analysis." *Educational Psychology Review* 26 (1):101–126. doi: [10.1007/s10648-013-9244-0](https://doi.org/10.1007/s10648-013-9244-0).
- Ambrose, Scott C., Brian N. Rutherford, C. David Shepherd, and Armen Tashchian. 2014. "Boundary Spanner Multi-Faceted Role Ambiguity and Burnout: An Exploratory Study." *Industrial Marketing Management* 43 (6):1070–1078. doi: [10.1016/j.indmarman.2014.05.020](https://doi.org/10.1016/j.indmarman.2014.05.020).
- Babakus, Emin, David W. Cravens, Mark Johnston, and William C. Moncrief. 1999. "The Role of Emotional Exhaustion in Sales Force Attitude and Behavior Relationships." *Journal of the Academy of Marketing Science* 27 (1):58–70. doi: [10.1177/0092070399271005](https://doi.org/10.1177/0092070399271005).
- Behrman, Douglas N., and William D. Perreault, Jr. 1984. "A Role Stress Model of the Performance and Satisfaction of Industrial Salespersons." *The Journal of Marketing* 48 (4):9–21. doi: [10.1177/002224298404800402](https://doi.org/10.1177/002224298404800402).
- Boles, James S., Mark W. Johnston, and Joseph F. Hair, Jr. 1997. "Role Stress, Work-Family Conflict and Emotional Exhaustion: Inter-Relationships and Effects on Some Work-Related Consequences." *Journal of Personal Selling & Sales Management* 17 (1):17–28.
- Borenstein, Michael, Larry Hedges, Julian Higgins, and Hannah Rothstein. 2013. *Comprehensive Meta-Analysis Version 3*. Englewood, NJ: Biostat.
- Brewer, Earnest W., and Leslie Shapard. 2004. "Employee Burnout: A Meta-Analysis of the Relationship between Age or Years of Experience." *Human Resource Development Review* 3 (2):102–123. doi: [10.1177/1534484304263335](https://doi.org/10.1177/1534484304263335).
- Brown, Steven P., and Son K. Lam. 2008. "A Meta-Analysis of Relationships Linking Employee Satisfaction to Customer Responses." *Journal of Retailing* 84 (3):243–255.
- Brown, Steven P., and Robert A. Peterson. 1993. "Antecedents and Consequences of Salesperson Job Satisfaction: Meta-Analysis and Assessment of Causal Effects." *Journal of Marketing Research* 30 (1): 63–77.
- Cieslak, Roman, Kotaro Shoji, Allison Douglas, Erin Melville, Aleksandra Luszczynska, and Charles C. Benight. 2014. "A Meta-Analysis of the Relationship between Job Burnout and Secondary Traumatic Stress among Workers with Indirect Exposure to Trauma." *Psychological Services* 11 (1):75–86. doi: [10.1037/a0033798](https://doi.org/10.1037/a0033798).
- Cohen, Jacob. 1977. *Statistical Power Analysis for the Behavioral Sciences*. New York, NY: Academic Press.
- Cordes, Cynthia L., and Thomas W. Dougherty. 1993. "A Review and an Integration of Research on Job Burnout." *Academy of Management Review* 18 (4):621–656.
- Edmondson, Diane R., and Stefanie L. Boyer. 2013. "The Moderating Effect of the Boundary Spanning Role on Perceived Supervisory Support: A Meta-Analytic Review." *Journal of Business Research* 66 (11):2186–2192. doi: [10.1016/j.jbusres.2012.01.010](https://doi.org/10.1016/j.jbusres.2012.01.010).
- Eisenberger, Robert, Robin Huntington, Steven Hutchison, and Debora Sowa. 1986. "Perceived Organizational Support." *Journal of Applied Psychology* 71 (3):500. doi: [10.1037/0021-9010.71.3.500](https://doi.org/10.1037/0021-9010.71.3.500).
- Freudenberger, Herbert J. 1974. "Staff Burnout." *Journal of Social Issues* 30 (1):159–165. doi: [10.1111/j.1540-4560.1974.tb00706.x](https://doi.org/10.1111/j.1540-4560.1974.tb00706.x).
- Graham-Leviss, Katherine. 2011. "The High Cost of Sales Team Turnover." *Entrepreneur*. Accessed June 8, 2018. <https://www.entrepreneur.com/article/220310>.
- Greenhaus, Jeffrey H., and Nicholas J. Beutell. 1985. "Sources of Conflict between Work and Family Roles." *Academy of Management Review* 10 (1):76–88. doi: [10.5465/amr.1985.4277352](https://doi.org/10.5465/amr.1985.4277352).
- Halbesleben, Jonathan R. 2006. "Sources of Social Support and Burnout: A Meta-Analytic Test of the Conservation of Resources Model." *Journal of Applied Psychology* 91 (5):1134. doi: [10.1037/0021-9010.91.5.1134](https://doi.org/10.1037/0021-9010.91.5.1134).
- Hamwi, G. Alexander, Brian Rutherford, and James Boles. 2011. "Reducing Emotional Exhaustion and Increasing Organizational Support." *Journal of Business and Industrial Marketing* 26 (1):4–13.
- Hollet-Haudebert, Sandrine, Jay Mulki, and Christophe Fournier. 2011. "Neglected Burnout Dimensions: Effect of Depersonalization and Personal Nonaccomplishment on Organizational Commitment of Salespeople." *Journal of Personal Selling and Sales Management* 31 (4):411–428.
- Hunter, John E., and Frank L. Schmidt. 2004. *Methods of Meta-Analysis: Correcting for Error and Bias in Research Findings*. Thousand Oaks, CA: Sage Publications, Inc.
- Jaramillo, Fernando, Daniel Ladik, Greg W. Marshall, and Jay P. Mulki. 2007. "A Meta-Analysis of the Relationship between Sales Orientation-Customer Orientation (SOCO) and Salesperson Job Performance." *Journal of Business & Industrial Marketing* 22 (5): 302–310. doi: [10.1108/08858620710773431](https://doi.org/10.1108/08858620710773431).
- Jaramillo, Fernando, Jay P. Mulki, and James S. Boles. 2011. "Workplace Stressors, Job Attitude, and Job Behaviors: is Interpersonal Conflict the Missing Link?" *Journal of Personal Selling & Sales Management* 31 (3):339–356. doi: [10.2753/PSS0885-3134310310](https://doi.org/10.2753/PSS0885-3134310310).
- Kemp, Elyria, A. Leila Borders, and Joe M. Ricks. 2013. "Sales Manager Support: Fostering Emotional Health in Salespeople." *European*

- Journal of Marketing* 47 (3/4):635–654. doi: [10.1108/03090561311297508](https://doi.org/10.1108/03090561311297508).
- Kenworthy, Jared, Cara Fay, Mark Frame, and Robyn Petree. 2014. “A Meta-Analytic Review of the Relationship between Emotional Dissonance and Emotional Exhaustion.” *Journal of Applied Social Psychology* 44 (2):94–105. doi: [10.1111/jasp.12211](https://doi.org/10.1111/jasp.12211).
- Koeske, Gary F., and Randi D. Koeske. 1989. “Construct Validity of the Maslach Burnout Inventory: A Critical Review and Reconceptualization.” *The Journal of Applied Behavioral Science* 25 (2):131–144. doi: [10.1177/0021886389252004](https://doi.org/10.1177/0021886389252004).
- Lee, Raymond T., and Blake E. Ashforth. 1996. “A Meta-Analytic Examination of the Correlates of the Three Dimensions of Job Burnout.” *Journal of Applied Psychology* 81 (2):123–133. doi: [10.1037/0021-9010.81.2.123](https://doi.org/10.1037/0021-9010.81.2.123).
- Lee, Jayoung, Nayoung Lim, Eunjoo Yang, and Sang Min Lee. 2011. “Antecedents and Consequences of Three Dimensions of Burnout in Psychotherapists: A Meta-Analysis.” *Professional Psychology: Research and Practice* 42 (3):252–258. doi: [10.1037/a0023319](https://doi.org/10.1037/a0023319).
- Lewin, Jeffrey E., and Jeffrey K. Sager. 2007. “A Process Model of Burnout among Salespeople: Some New Thoughts.” *Journal of Business Research* 60 (12):1216–1224.
- Lewin, Jeffrey E., and Jeffrey K. Sager. 2008. “Salesperson Burnout: A Test of the Coping-Mediation Model of Social Support.” *Journal of Personal Selling & Sales Management* 28 (3):233–246. doi: [10.2753/PSS0885-3134280302](https://doi.org/10.2753/PSS0885-3134280302).
- Lewin, Jeffrey E., and Jeffrey K. Sager. 2009. “An Investigation of the Influence of Coping Resources in Salespersons’ Emotional Exhaustion.” *Industrial Marketing Management* 38 (7):798–805. doi: [10.1016/j.indmarman.2008.02.013](https://doi.org/10.1016/j.indmarman.2008.02.013).
- Lewin, Jeffrey E., and Jeffrey K. Sager. 2010. “The Influence of Personal Characteristics and Coping Strategies on Salesperson’s Turnover Intentions.” *Journal of Personal Selling and Sales Management* 30 (4):355–370. doi: [10.2753/PSS0885-3134300405](https://doi.org/10.2753/PSS0885-3134300405).
- Lim, Nayoung, Eun Kyoung Kim, Hyunjung Kim, Eunjoo Yang, and Sang Min Lee. 2010. “Individual and Work-Related Factors Influencing Burnout of Mental Health Professionals: A Meta-Analysis.” *Journal of Employment Counseling* 47 (2):86–96. doi: [10.1002/j.2161-1920.2010.tb00093.x](https://doi.org/10.1002/j.2161-1920.2010.tb00093.x).
- Lipsey, Mark W., and David B. Wilson. 2001. *Practical Meta-Analysis*. Thousand Oaks, CA: Sage Publications.
- Low, George S., David W. Cravens, Ken Grant, and William C. Moncrief. III. 2001. “Antecedents and Consequences of Salesperson Burnout.” *European Journal of Marketing* 35 (5/6):587–612.
- Maslach, Christina. 1982. *Burnout: The Cost of Caring*. Englewood Cliffs, NJ: Prentice Hall.
- Maslach, Christina, and Susan E. Jackson. 1981. “The Measurement of Experienced Burnout.” *Journal of Organizational Behavior* 2 (2): 99–113.
- Maslach, Christina, and Michael P. Leiter. 2008. “Early Predictors of Job Burnout and Engagement.” *Journal of Applied Psychology* 93 (3): 498–512.
- Mulki, Jay, Fernando Jaramillo, and William Locander. 2005. “Transform or Transact? Which Leader Gets Better Results? A Meta-Analysis.” *Journal of Business and Leadership: Research, Practice, and Teaching* 1 (1):85–94.
- Nunnally, Jum C., and Ira Bernstein. 1994. *Psychometric Theory*. (2nd ed.). New York, NY: McGraw-Hill.
- Perreault, William D., and Laurence E. Leigh. 1989. “Reliability of Nominal Data Based on Qualitative Judgments.” *Journal of Marketing Research* 26 (2):135–148.
- Pinkovitz, William H., Joseph Moskal, and Gary Green. 1997. “How Much Does Your Employee Turnover Cost You?” *Small Business Forum* 14 (3):70–71.
- Porter, Lyman W., Richard M. Steers, Richard T. Mowday, and Paul V. Boulian. 1974. “Organizational Commitment, Job Satisfaction, and Turnover among Psychiatric Technicians.” *Journal of Applied Psychology* 59 (5):603. doi: [10.1037/h0037335](https://doi.org/10.1037/h0037335).
- Purvanova, Radostina K., and John P. Muros. 2010. “Gender Differences in Burnout: A Meta-Analysis.” *Journal of Vocational Behavior* 77 (2):168–185. doi: [10.1016/j.jvb.2010.04.006](https://doi.org/10.1016/j.jvb.2010.04.006).
- Rich, Gregory A., William H. Bommer, Scott B. MacKenzie, Philip M. Podsakoff, and Jonathan L. Johnson. 1999. “Apples and Apples or Apples and Oranges? A Meta-Analysis of Objective and Subjective Measures of Salesperson Performance.” *Journal of Personal Selling & Sales Management* 19 (4):41–52.
- Rizzo, John R., Robert J. House, and Sidney I. Lirtzman. 1970. “Role Conflict and Ambiguity in Complex Organizations.” *Administrative Science Quarterly* 15 (2):150–163. doi: [10.2307/2391486](https://doi.org/10.2307/2391486).
- Robertson, Peter J. 1995. “Involvement in Boundary-Spanning Activity: mitigating the Relationship between Work Setting and Behavior.” *Journal of Public Administration Research and Theory* 5 (1):73–98. doi: [10.1093/oxfordjournals.jpart.a037240](https://doi.org/10.1093/oxfordjournals.jpart.a037240).
- Rosenthal, Robert W. 1979. “Sequences of Games with Varying Opponents.” *Econometrica* 47 (6):1353.
- Rosenthal, Robert. 1995. “Writing Meta-Analytic Reviews.” *Psychological Bulletin* 118 (2):183–192. doi: [10.1037/0033-2909.118.2.183](https://doi.org/10.1037/0033-2909.118.2.183).
- Russ, Fredrick A., and Kevin M. McNeilly. 1995. “Links among Satisfaction, Commitment and Turnover Intentions: The Moderating Effect of Experience, Gender and Performance.” *Journal of Business Research* 34 (1):57–65.
- Rutherford, Brian, James S. Boles, G. Alexander Hamwi, Ramana Madupalli, and Leann Rutherford. 2009. “The Role of the Seven Dimensions of Job Satisfaction in Salesperson’s Attitudes and Behaviors.” *Journal of Business Research* 62 (11):1146–1151. doi: [10.1016/j.jbusres.2008.10.019](https://doi.org/10.1016/j.jbusres.2008.10.019).
- Rutherford, Brian, James S. Boles, G. Alexander Hamwi, and Leann G. Rutherford. 2010. “Perceived Organizational Support and the Seven Facets of Salesperson Job Satisfaction.” *Journal of Selling & Major account Management* 10 (1):8–20.
- Rutherford, Brian N., C. David Shepherd, and Armen Tashchian. 2015. “Validating the Reduced Burnout Scale and Sequencing of Burnout.” *Journal of Business Research* 68 (1):67–73. doi: [10.1016/j.jbusres.2014.05.006](https://doi.org/10.1016/j.jbusres.2014.05.006).
- Samaraweera, Manoshi, and Betsy D. Gelb. 2015. “Formal Salesforce Controls and Revenue Production: A Meta-Analysis.” *Journal of Personal Selling & Sales Management* 35 (1):23–32. doi: [10.1080/08853134.2014.977796](https://doi.org/10.1080/08853134.2014.977796).
- Schwab, Richard L., Susan E. Jackson, and Randal S. Schuler. 1986. “Educator Burnout: Sources and Consequences.” *Educational Research Quarterly* 10 (3):14–30.
- Shepherd, C. David, Armen Tashchian, and Rick E. Ridnour. 2011. “An Investigation of the Job Burnout Syndrome in Personal Selling.” *Journal of Personal Selling and Sales Management* 31 (4):397–410.
- Singh, Jagdip, Jerry R. Goolsby, and Gary K. Rhoads. 1994. “Behavioral and Psychological Consequences of Boundary Spanning Burnout for Customer Service Representatives.” *Journal of Marketing Research* 31 (4):558–569.
- Swider, Brian W., and Ryan D. Zimmerman. 2010. “Born to Burnout: A Meta-Analytic Path Model of Personality, Job Burnout, and Work Outcomes.” *Journal of Vocational Behavior* 76 (3):487–506. doi: [10.1016/j.jvb.2010.01.003](https://doi.org/10.1016/j.jvb.2010.01.003).
- Thomas, Edwin J., and Bruce J. Biddle. 1966. *Role Theory: Concepts and Research*. New York, NY: Wiley.
- Zoltners, Andris A., P. K. Sinha, and Sally E. Lorimer. 2017. “How to Reduce the Costs of Salesperson Turnover.” Harvard Business Review. Accessed June 8, 2018. <https://hbr.org/2017/11/how-to-reduce-the-costs-of-salesperson-turnover>.

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