

## Revisiting and Replicating the Dominant Logic on Salesperson Job Satisfaction, Organizational Commitment, and Turnover

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### Abstract:

This study addresses a significant gap in the sales and marketing literature, limited replication of key research phenomena. The present study uses a longitudinal design to replicate and extend the principle theoretical model in sales management research suggested by Brown and Peterson (1993) meta-analysis and reevaluates our understanding of the drivers and antecedents of salesforce job satisfaction and organizational commitment. Current replication overcomes various limitations found in previous sales research such as the limitedness longitudinal data, static panel of early hire salespeople, while providing additional evidence to support previous findings and extend the body of knowledge.

**Keywords:** salespeople turnover | salespeople turnover intention | role ambiguity and conflict | sales rep job satisfaction | organizational commitment

### Article:

#### 1. Introduction

Identifying antecedents and outcomes of job satisfaction (JS) and organizational commitment (OC) in the sales settings is a topic of continuing interest to sales researchers and managers (e.g., Boles et al., 2007, Hartmann et al., 2016, Johnston et al., 1990, Macintosh and Krush, 2014). Research has linked salesperson JS to a wide variety of antecedents and outcomes including: role ambiguity (RA), role conflict (RC), work-family conflict, family-work conflict, emotional exhaustion, mentoring, effort, performance appraisal criteria, and various leadership functions (e.g., Brown and Peterson, 1994, Hartmann et al., 2016, Johnston et al., 1990, Pettijohn et al., 2000, Rutherford et al., 2009). In contrast, OC is the only work-related outcome of JS that receives consistent support (e.g., Brown and Peterson, 1993, Johnston et al., 1988) - though some studies have linked JS directly to propensity to leave (PTL) (e.g., Boles et al., 1997, Johnston et al., 1988).

Proposed antecedents of OC have included a wide range of constructs such as JS, RA, RC, socialization, and organizational support (e.g., Rutherford, Park, & Han, 2011). However, aside

from links between RC and JS, research has not consistently supported these proposed antecedents. Outcomes of OC center on PTL (Johnston et al., 1990, Rutherford et al., 2009).

PTL is a key construct in the JS and OC literature because it is the immediate precursor of turnover (Johnston et al., 1990). Turnover is a critical factor for most sales force managers with some firms experiencing turnover rates over 50 percent in (Landau & Werbel, 1995). The cost of finding, hiring, and training a new salesperson can approach \$100,000 (Darmon, 2008). This is a significant cost and emphasizes the importance of understanding the antecedents and outcomes of JS and OC.

The foundation for much of the research seeking to clarify the inter-relationships of JS and a variety of other work-related and person difference constructs is the meta-analysis conducted by Brown and Peterson (1993) (henceforth B&P). Their meta-analysis involved 59 studies examining the effect of role stress (i.e., RC and RA) on salesperson JS and OC, and consequently PTL (see Fig. 1). Grounded in role theory, this study has been cited over 1700 times (Google Scholar) and represents a seminal work in sales force research. However, B&P's meta-analysis represents results from studies conducted over 25 years ago. Given the importance of this study and its findings, a more current replication of the study is warranted.

The current study replicates the two models suggested by B&P and extends them by including controls variables and salesperson turnover. In their first model (Model 1 in Fig. 1); B&P argue that role stressors are the direct antecedents of performance and satisfaction. They link both performance and JS to OC and posit that OC is a predictor of PTL. Based on their findings, B&P also propose an alternative model, in which role stressors are also viewed as direct antecedences of OC, and PTL (Model 2 in Fig. 1). In addition to replicating these two models, we extend B&P's study by including salesperson turnover and controlling for leadership styles, age, gender, and sales experience of salespeople (Model 3 in Fig. 1).

The current replication contributes to the literature in several ways. *First*, we replicate B&P utilizing longitudinal data collected in four waves over the course of four years. A longitudinal research design and temporal separation allows us to examine and replicate the causal linkages among role stress, and salespeople's job-related outcomes more accurately. Scholars have argued that OC and JS of salespeople are based on long-term interaction of sales representatives with their managers and work environment, and thus takes time to develop (Griffin, 1991, Tett and Meyer, 1993). In contrast, B&P's meta-analysis synthesized results from largely cross-sectional studies conducted in the preceding years. Similarly, prior research notes the decision of salespeople to leave their firms is dynamic, and frequently made over time (Bolander et al., 2017, Lucas et al., 1987). Therefore, using longitudinal data helps more accurately reexamine the causal impact of role-related responsibilities of salespeople on their OC and JS, and eventually their propensity to leave firms.

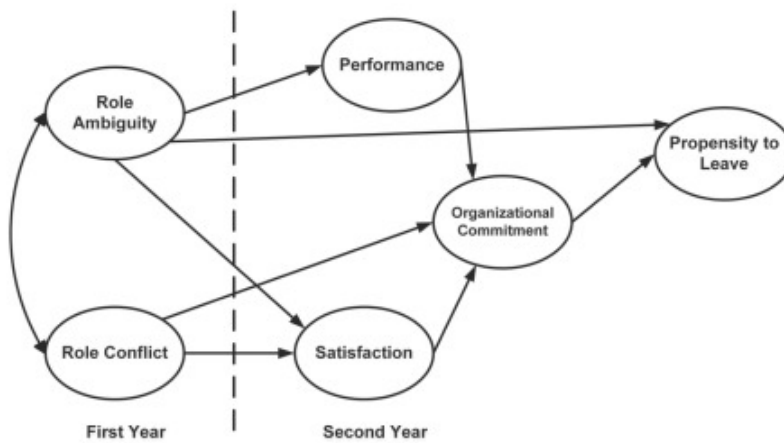
*Second*, our replication study extends B&P research by assessing their models in the context of a single cohort of salespeople in a business-to-consumers (B2C) service-selling setting. This provides stronger internal validity than studies with a combination of ages and controls for any variation associated with the moderating effects of context as in B&P. Likewise, Easley, Madden, and Dunn (2000) suggest that replication studies can extend and establish the external

validity of prior research by generalizing earlier findings to different populations or samples of data. While B&P used a meta-analysis, the current research replicates and extends the findings in a service selling context and utilizes a large cohort of newly hired salespeople.

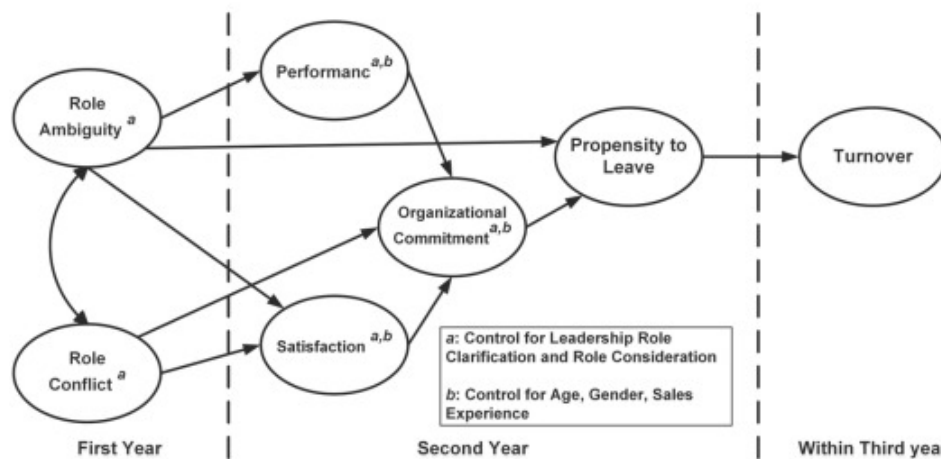
**Model 1: Brown & Peterson (1993) First Model**



**Model 2: Brown & Peterson (1993) Second Model**



**Model 3: Extended Model**



**Fig. 1.** Conceptual models.

*Third*, we extend B&P models by adding salesperson turnover as the outcome construct in the models. This is a very important extension since PTL is not a perfect substitute for turnover data. While PTL is considered the immediate precursor of turnover (Futrell & Parasuraman, 1984), some studies find that PTL predicts less than 30 percent of turnover (Johnston et al., 1990). Thus, adding turnover to the model represents a significant extension to the original study.

*Fourth*, by inserting control variables such as leadership activities, salesperson age, gender, and sales experience, the current replication adds further clarity to the proposed relationships in the original model. Thus, our replication extends the understanding of B&P's study by examining potential boundary conditions that may influence their findings (Babin, Griffin, & Hair, 2016). The inclusion of leadership variables as predictors of RA and role clarity reduces the potential effects of omitted variables<sup>1</sup>.

In this study, we first present the theoretical grounding of the B&P study. Next, we describe the sample used in the replication, followed by a description of the measures used. Next the analytical approach is described which leads to a section focusing on the results of the model. The manuscript concludes with a discussion of the results and directions for future research.

## **2. Theoretical foundations of the Brown and Peterson study**

B&P presented a parsimonious model synthesized from the existing sales research regarding JS and OC. The original model posited that RC and RA were antecedents of performance and satisfaction while performance was antecedent to both JS and OC (the upper panel in Fig. 1). The rationale for the negative impacts of RA on performance and satisfaction relates to the nature of sales related tasks (Jaramillo, Mulki, & Boles, 2011). Salespeople need to manage diverse and unpredictable responsibilities when making a variety of decisions in ambiguous circumstances. Further, RC arises when salespeople are challenged with various and frequently incompatible requests from customers and managers (Behrman & Perreault, 1984). Therefore, it is expected that both RA and RC negatively affect salesperson performance and satisfaction.

B&P also posited that performance predicts both JS and OC. The relationship between performance and JS is not unequivocally supported by previous research (MacKenzie, Podsakoff, & Ahearne, 1998). While some studies have found empirical evidence to support this relationship (e.g., Bagozzi, 1980), others failed to find significant results regarding the relationship between performance and JS (e.g., Behrman & Perreault, 1984). However, B&P relied on a modest positive association of performance on JS found in previous research and hypothesized that performance is a driver of JS. Performance is also posited as an antecedent of OC because high performance salespeople are better rewarded by firms. In addition, satisfied salespeople tend to be more involved in their organizations. Thus, B&P suggested that JS is an antecedent of OC. Finally, the model posited that OC negatively relates to PTL.

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<sup>1</sup> We would like to thank an anonymous reviewer for this suggestion.

**Table 1.** Descriptive statistics.

	Mean	S.D	1	2	3	4	5	6	7	8	9	10	11
1. Role Conflict	4.30	0.84											
2. Role Ambiguity	3.95	0.64	0.43***										
3. Job Satisfaction	3.30	0.92	-0.33***	-0.28***									
4. Organizational Commitment	3.48	0.86	-0.36***	-0.26***	0.59***								
5. Propensity to Leave	4.11	0.89	0.20***	0.18***	-0.41***	-0.42***							
6. Performance	107.60	93.85	-0.07*	-0.04	0.06	0.14***	-0.07*						
7. Turnover	0.32	0.47	0.06	0.03	-0.14***	-0.14***	0.24***	-0.05					
8. Leadership Consideration	4.09	0.67	-0.37***	-0.28***	0.32***	0.33***	-0.14***	0.04	-0.05				
9. Leadership Role Clarification	3.32	1.02	-0.31***	-0.28***	0.30***	0.27***	-0.18***	0.04	-0.05	0.39***			
10. Age	36.73	10.41	-0.01	0.07	-0.03	-0.08*	0.06	-0.05	-0.07	0.00	-0.07*		
11. Gender	1.20	0.37	0.07	0.10**	0.03	-0.01	0.01	-0.03	0.01	-0.02	-0.05	0.02	
12. Sales Experience	2.02	1.92	-0.02	-0.04	0.02	0.03	-0.01	-0.01	0.03	0.03	-0.04	0.21***	-0.06

Notes: \*\*\*  $p < .01$ , \*  $p < .1$

After reviewing the *meta*-analysis results, B&P proposed an alternative model where RA is hypothesized as an antecedent of PTL (Model 2, the middle panel in Fig. 1). For some salespeople, the origin of RA is a lack of confidence to make necessary decisions in their jobs rather than the lack of clear guidance from managers (Brown & Peterson, 1993). Therefore, such salespeople may feel that their jobs do not suitably fit them and begin to contemplate quitting organizations. Thus, B&P suggested that RC is a direct predictor of PTL. Further, the second model adds RC as an antecedent of OC. Conflicts between salespeople and their managers minimize salesperson involvement in their organizations (Siguaw, Brown, & Widing, 1994). Therefore, a negative association between RC and OC was suggested in the second model. B&P showed that the second model supports newly added relationships and benefits based on improved statistical fit indices.

We extend this revised B&P model in several ways. First, we include salespeople's turnover. Second, we use objective sales performance, and third, we include leadership, role clarification, and leadership (Johnston et al., 1990) as precursory control variables. Finally, we control for age, gender, and sales experience as additional potential boundary conditions on the model.

### 3. Methodology

The data for this replication study comes from a static panel of 551 salespeople in the insurance industry. The respondents covered multiple firms that operate and sell throughout the US. The sampling frame is new insurance salespeople who are tracked starting the first 30 days of their hiring throughout the study. At the time of the data collection, the potential respondents had been with their firms for approximately six months. A questionnaire was sent to 3300 sales representatives with a description of the research objectives and procedures. After two weeks, a follow up was sent to those who had not responded. 1346 responses were collected after the second attempt, with an effective response rate of 40%. The second survey was sent twelve months after the completion of the first round of data collection. A total of 931 salespeople completed the second survey.

A third wave of surveys was distributed to salespeople participating in both first and second surveys twelve months after the administration of the second survey. A year after distributing the third survey, a follow-up was sent to salespeople who filled the third survey to collect turnover data. This resulted in 551 sales representatives that responded to all surveys. We measured leadership role clarification and consideration in survey one. The second survey measured RA and conflict. JS, OC, performance, and PTL were measured in the third survey. The average age in the sample is 36.7 years. Eighty-two percent of respondents are men and 81% graduated from college. Table 1 summarizes descriptive statistics of the data.

#### 3.1. Measures

Multi-item scales from previous studies were adapted to measure the constructs used in this study. Table 2 shows measurement items and their properties. RC was assessed by adapting two items related to how sales representatives evaluate possible role-related conflicts with their sales managers (Rizzo, House, & Lirtzman, 1970). Three items from Rizzo et al., 1970, Teas et al., 1979 studies were adopted and modified to measure RA. A two-item scale was used to

measure salespeople's JS. Since commitment of salespeople to their agency is one of the key variables in B&P models, we measured JS of salespeople with respect to their agencies. OC was measured by three items related to salespeople's commitment to their agencies adapted from McGee and Ford (1987). Two items from Mowday, Koberg, and McArthur (1984) study were used to measure salesperson PTL. Salesperson performance was measured by the number of contracts secured in the time span between the first and second survey. A three-item scale was adapted and modified to be used in the context of sales managers and salespeople from Schriesheim, 1978, Johnston et al., 1990 studies in order to measure leadership consideration. Leadership role clarification was measured by four items adopted from Schriesheim (1978) study regarding how sales managers helped their sales representatives during training programs to clearly explain responsibilities in terms of activity plans, case preparation, new agent classes, and role playing. Finally, consistent with Johnston et al. (1990), turnover was measured within a year after they responded to the final survey.

**Table 2.** Measurement items and properties.

<b>Construct and Measurement Items</b>	<b>Mean</b>	<b>S.D</b>	<b>Loading</b>
<b>Role Conflict</b> ( <i>Alpha = 0.83, AVE = 0.71, CR = 0.89</i> )			
My supervisor and I often see things in much the same way (R).	4.19	0.85	0.90
My supervisor and I are alike in a number of areas (R).	4.42	0.98	0.80
<b>Role Ambiguity</b> ( <i>Alpha = 0.74, AVE = 0.50, CR = 0.88</i> )			
I know exactly what my supervisor expects of me (R).	4.04	0.81	0.78
I know exactly what is expected of me in this job (R).	3.81	0.74	0.65
I have the clear-cut authority I need to accomplish the tasks required of me (R).	4.01	0.79	0.68
<b>Job Satisfaction</b> ( <i>Alpha = 0.67, AVE = 0.52, CR = 0.83</i> )			
The company does a good job selecting its field management.	3.31	1.01	0.66
The company gives serious consideration to complaints from agents in the field.	3.30	1.12	0.78
<b>Organizational Commitment</b> ( <i>Alpha = 0.75, AVE = 0.52, CR = 0.89</i> )			
I feel like "part of family" at this this agency	3.55	1.00	0.79
I enjoy discussing my agency with people outside it.	3.27	1.08	0.62
I would be very happy to spend the rest of my career with this agency.	3.63	1.07	0.73
<b>Propensity to Leave</b> ( <i>Alpha = 0.71, AVE = 0.55, CR = 0.81</i> )			
I plan to stay with this company for quite some time (R).	3.89	0.93	0.81
I would turn down an offer from another company if it came tomorrow (R).	4.33	1.09	0.69
<b>Leadership Consideration</b> ( <i>Alpha = 0.74, AVE = 0.52, CR = 0.84</i> )			
My agent manger shares work-related information.	4.00	0.71	0.69
My supervisor is very confident that I will succeed.	4.13	0.74	0.60
In my agency there is a good working relationship between agents and the agency manager.	4.06	0.92	0.84
<b>Leadership Role Clarification</b> ( <i>Alpha = 0.84, AVE = 0.51, CR = 0.89</i> )			
Using the scale below, how would you rate the training you have received [from your manager] in each of the following areas:			
Activity plans and review.	3.47	1.20	0.73
Case preparation and review.	3.30	1.29	0.77
New agent class.	3.49	1.43	0.65
Role playing.	2.93	1.46	0.70

*Notes:* Alpha = Cronbach Alpha, AVE = Average Variance Extracted, CR = Composite Reliability. R = Reverse Item.

### 3.2. Data analysis

We used the two-step approach to validate the measures and test the models outlined in Fig. 1. In the first stage, we assess the measurement model by running a confirmatory factor analysis. In the second stage, the structural model is tested.

### *3.2.1. Measurement model*

Results from a confirmatory factor analysis show that measurement model fit the data well for both Model 1 & 2 ( $X^2(51) = 124.82$ ,  $p < .001$ , CFI 0.96, TLI 0.95, RMSEA 0.05, and SRMR 0.03) and Model 3 ( $X^2(214) = 333.93$ ,  $p < .001$ , CFI 0.97, TLI 0.96, RMSEA 0.03, and SRMR 0.03) (Hair, Black, Babin, & Anderson, 2010). Findings also indicate that all variables in the measurement model have strong convergent and discriminate validity. Specifically, all the measurement items load significantly on their respective constructs with the minimum standardized value of 0.62 (Johnson, Friend, Rutherford, & Hamwi, 2016). The minimum value for composite reliabilities is 0.81, and all constructs have the AVE above 0.50 (Bagozzi & Yi, 1988). Finally, square roots of AVEs for each variable are larger than correlations of all other constructs in the structure model (Fornell & Larcker, 1981). Therefore, discriminant validity is established. Table 2 summarizes items, standardized loadings, Alphas, AVEs, and composite reliabilities of the constructs.

The data collection procedure adopted in the present study satisfies the guidelines for reducing possible sources of common method biases in survey data suggested by Hulland, Baumgartner, and Smith (2018). In particular, the data collection procedure in this study contains data collected from four different surveys over time. Further, surveys were distributed with detailed descriptions of the study's goals and objectives, thus salespeople were substantially informed about the true purpose of the study. The use of objective measures of performance and turnover are important in removing any self-report bias. Also, Verbeke, Dietz, and Verwaal (2011) report that objective measures of performance are stronger predictors of sales performance than managerial reports (p. 427). Therefore, we concluded that these data collection elements assist in reducing potential common method bias.

### *3.2.2. Structural models*

In the second step, the structural model fit statistics show good fit for both Model 1 and Model 2 according to Hair et al. (2010). The overall fit for Model 1 was:  $X^2(57) = 133.93$ ,  $p < .001$ , CFI 0.96, TLI 0.95, RMSEA 0.05, and SRMR 0.04. Similarly, Model 2 had fit indices which meet the standards of good fit. Model 2 fit was:  $X^2(57) = 131.51$ ,  $p < .001$ , CFI 0.97, TLI 0.95, RMSEA 0.04, and SRMR 0.03. Model 3 is the extended model of the replication includes turnover. This model also had good fit with indices of:  $X^2(241) = 367.45$ ,  $p < .001$ , CFI 0.96, TLI 0.96, RMSEA 0.03, and SRMR 0.03.



**Table 3.** Structural model path coefficients.

Path	Model 1: Replication of Brown and Peterson (1993) First Model			Model 2: Replication of Brown and Peterson (1993) Second Model			Model 3: The Extension Model	
	$(\gamma)$	t-value	Sig. at Original	$(\gamma)$	t-value	Sig. at Original	$(\gamma)$	t-value
			Model?			Model?		
Role Ambiguity → Role Conflict	0.56	9.12***	Yes	0.56	9.11***	Yes	0.47	7.34***
Role Ambiguity → Performance	-0.02	-0.36	Yes	-0.06	-1.35	Yes	-0.05	-0.99
Role Conflict → Performance	-0.06	-0.97	No					
Role Ambiguity → Job Satisfaction	-0.21	-3.12***	Yes	-0.22	-3.11***	Yes	-0.13	-1.96*
Role Conflict → Job Satisfaction	-0.35	-5.08***	Yes	-0.31	-4.41***	Yes	-0.23	-3.23***
Performance → Job Satisfaction	0.03	0.55	No					
Role Conflict → Organizational Commitment				-0.10	-1.90*	Yes	-0.09	-1.61
Performance → Organizational Commitment	0.10	2.63***	Yes	0.11	2.89***	Yes	0.11	3.00***
Job Satisfaction → Organizational Commitment	0.84	10.80***	Yes	0.78	10.32***	Yes	0.76	9.34***
Organizational Commitment → Propensity to Leave	-0.59	-10.31***	Yes	-0.58	-9.22***	Yes	-0.58	-9.43***
Role Ambiguity → Propensity to Leave				0.01	0.28	Yes	0.00	0.01
Propensity to Leave → Actual Turnover							0.29	5.71***
Leadership Role Clarification → Role Ambiguity							-0.13	-2.17**
Leadership Consideration → Role Ambiguity							-0.32	-5.02***
Leadership Role Clarification → Role Conflict							-0.07	-1.30
Leadership Consideration → Role Conflict							-0.42	-6.93***
Leadership Role Clarification → Performance							0.00	0.01
Leadership Consideration → Performance							0.01	0.16
Age → Performance							-0.05	-1.11
Gender → Performance							-0.02	-0.52
Sales Experience → Performance							0.00	0.03
Leadership Role Clarification → Job Satisfaction							0.23	3.52***
Leadership Consideration → Job Satisfaction							0.18	2.58***
Age → Job Satisfaction							-0.03	-0.63
Gender → Job Satisfaction							0.07	1.50
Sales Experience → Job Satisfaction							0.07	1.37
Leadership Role Clarification → Organizational Commitment							0.01	0.21
Leadership Consideration → Organizational Commitment							0.04	0.71
Age → Organizational Commitment							-0.06	-1.54
Gender → Organizational Commitment							-0.02	-0.60
Sales Experience → Organizational Commitment							0.03	0.72

Notes: \*\*\*  $p < .01$ , \*\*  $p < .05$ , \*  $p < .1$ .

## 4. Results

The results of the structural path analysis are summarized in Table 3 including standardized path coefficients and significant tests. The path coefficients and t-values for B&P first (Model 1) and second models (Model 2), as well as our extension model after adding turnover and control variables to their models (Model 3). The relationship between RA and RC is supported in Model 1 ( $\gamma = 0.56$ ,  $t = 9.12$ ), Model 2 ( $\gamma = 0.56$ ,  $t = 9.11$ ), and Model 3 ( $\gamma = 0.47$ ,  $t = 7.34$ ). Unlike B&P's (1993) results, the relationship between RA and performance is not supported in Model 1 ( $\gamma = -0.02$ ), Model 2 ( $\gamma = -0.06$ ), and Model 3 ( $\gamma = -0.05$ ). RC is not significantly related to performance in Model 1 ( $\gamma = -0.06$ ), similar to B&P's (1993) findings. The path between RA and JS is significant in Model 1 ( $\gamma = -0.21$ ,  $t = -3.12$ ), Model 2 ( $\gamma = -0.22$ ,  $t = -3.11$ ), and Model 3 ( $\gamma = -0.13$ ,  $t = -1.96$ ). The results also indicate that the relationship between RC and JS is supported in Model 1 ( $\gamma = -0.35$ ,  $t = -5.08$ ), Model 2 ( $\gamma = -0.31$ ,  $t = -4.41$ ), and Model 3 ( $\gamma = -0.23$ ,  $t = -3.23$ ). These results are consistent with B&P's findings.

Similar to B&P, the relationship between performance and JS is not supported in Model 1 ( $\gamma = 0.03$ ). The relationship between RC and OC is supported in Model 2 ( $\gamma = -0.1$ ,  $t = 1.90$ ), in contrast to Model 3 ( $\gamma = -0.09$ ). However, this relationship is supported in B&P. Next, our findings show that the impact of performance on OC is significant in Model 1 ( $\gamma = 0.10$ ,  $t = 2.63$ ), Model 2 ( $\gamma = 0.11$ ,  $t = 2.89$ ), and Model 3 ( $\gamma = 0.11$ ,  $t = 3.00$ ), in support of B&P results. JS turns to be a significant antecedent of OC in Model 1 ( $\gamma = 0.84$ ,  $t = 10.80$ ), Model 2 ( $\gamma = 0.78$ ,  $t = 10.32$ ), and Model 3 ( $\gamma = 0.76$ ,  $t = 9.34$ ). These findings support the B&P's (1993) reports. Table 3 also indicates that the relationship between OC and salespeople's PTL is significant in Model 1 ( $\gamma = -0.59$ ,  $t = -10.31$ ), Model 2 ( $\gamma = -0.58$ ,  $t = -9.22$ ), and Model 3 ( $\gamma = -0.58$ ,  $t = -9.43$ ), in support of B&P findings. In contrast to B&P results, the relationship between RA and PTL is not supported in both Model 2 ( $\gamma = 0.01$ ) and Model 3 ( $\gamma = 0.00$ ). Finally, the relationship between PTL and salespeople turnover is supported ( $\gamma = 0.29$ ,  $t = 5.71$ ).

Table 3 also presents the results of the control assessment of the control variables on roles stressors and salespeople's performance, JS, and OC. Particularly, results indicate significant and negative impacts of leadership role clarification ( $\gamma = -0.13$ ,  $t = -2.17$ ) and leadership role consideration ( $\gamma = -0.32$ ,  $t = -5.02$ ) on RA. However, the impact of leadership role clarification on RC is not significant ( $\gamma = -0.07$ ). The relationship between leadership role consideration and RC is negative and significant ( $\gamma = -0.42$ ,  $t = -6.93$ ). Results indicate that both leadership role clarification ( $\gamma = 0.23$ ,  $t = 3.52$ ) and leadership consideration ( $\gamma = 0.18$ ,  $t = 2.58$ ) have significant impacts on JS. The impacts of leadership role clarification ( $\gamma = 0.00$ ), leadership consideration ( $\gamma = 0.01$ ), age ( $\gamma = -0.05$ ), gender ( $\gamma = -0.02$ ), and sales experience ( $\gamma = 0.00$ ) on performance are not significant. Next, non-significant results are reported on the impacts of age ( $\gamma = -0.03$ ), gender ( $\gamma = 0.07$ ), and sales experience ( $\gamma = 0.07$ ) on JS. Finally, the impacts of leadership role clarification ( $\gamma = 0.01$ ), leadership consideration ( $\gamma = 0.04$ ), age ( $\gamma = -0.06$ ), gender ( $\gamma = 0.02$ ), and sales experience ( $\gamma = 0.03$ ) on OC are not supported.

### 4.1. Mediation analysis

We follow Zhao, Lynch, and Chen's (2010) suggestions for conducting mediation tests. Table 4 summarizes direct and indirect effects for RA, JS, OC, and PTL as four mediators in Model 3.

We only report those specific indirect effects in Table 4 that are statistically significant. We found that JS is a full mediator for the relationship between RA and OC as the indirect relationship between these two constructs is significant ( $\gamma = -0.17$ ,  $t = -2.44$ ). Further, the indirect relationship between RC and OC is significant ( $\gamma = -0.17$ ,  $t = -2.45$ ). Thus, a full mediation effect of JS exists for the relationship between RC and OC. OC is also a full mediator for the relationship between performance and PTL because the indirect effect of these two constructs is significant ( $\gamma = -0.06$ ,  $t = -3.51$ ). The indirect effect of JS on PTL is significant ( $\gamma = -0.44$ ,  $t = -5.20$ ). Therefore, OC is a full mediator for the relationship between JS and PTL. Finally, the results summarized in Table 4 indicate that the indirect relationship between OC and turnover is significant ( $\gamma = -0.17$ ,  $t = -3.52$ ). Therefore, PTL fully mediates the relationship between OC and turnover.

**Table 4.** Analysis of mediation effects.

		<b>Model 3: Extension of Brown and Peterson (1993)</b>				
		<b>Direct Effect</b>		<b>Indirect Effect</b>		<b>Mediation Type</b>
<b>Mediator</b>	<b>Relationship</b>	$\gamma$	t-value	$\gamma$	t-value	
Job Satisfaction	Role Ambiguity → Organizational Commitment	-0.00	-1.25	-0.17	-2.44**	Full mediation
	Role Conflict → Organizational Commitment	-0.07	-1.19	-0.17	-2.45**	Full mediation
Organizational Commitment	Performance → Propensity to Leave	-0.03	-0.65	-0.06	-3.51***	Full mediation
	Job Satisfaction → Propensity to Leave	0.01	0.16	-0.44	-0.520***	Full mediation
Propensity to Leave	Organizational Commitment → Turnover	0.00	-0.03	-0.17	-3.52***	Full mediation

*Notes:* All effects are estimated using the bootstrap resampling procedure (5000 runs), \*\*\*  $p < .01$ , \*\*  $p < .05$ .

## 5. Discussion

Our replication supports many of the relationships reported by the B&P study. These results are not surprising. B&P reports a meta-analysis and one would expect an additional study looking at these linkages to support the meta-findings. These findings reaffirm the importance of role stressors on salespeople's attitudes. In addition, our replication results support the relationship between PTL and salespeople's turnover. However, replication of the first and second model proposed by B&P reveals that RA is not a significant antecedent to performance and PTL in the current study. Unlike B&P findings, we also conclude that RC does not have a significant on salespeople's OC. Our results may evidence these differences for several reasons.

First, the current longitudinal study uses four time periods as opposed to B&P meta-analysis. The longitudinal data may help explain some differences in our replication results. Second, and perhaps more relevant, is the fact that our sample was composed strictly of new hires as opposed to the typical cross-sectional sales force samples that make up many of the studies included in the original meta-analysis. In addition, our replication is only composed of B2C salespeople as opposed to the mixture of Business-to-Business and B2C sample examined by B&P.

Not only is the sales context different, but the type of sales call also may represent a difference between B&P study and our replication. Life insurance sales typically represent a "hunter" type of sale whereas B&P article represents more of a combination of hunter and farmer with its variety of sales studies. This difference in the salesperson's focus, and the difference in looking only at newly hired salespeople vs. a cross-section of position tenures, may account for some of the reported differences between the original study and findings from the current research. We

will specifically address three specific findings that suggest the dominant logic on satisfaction and commitment may not be fully addressed.

Our findings do not support B&P findings that RA has a significant effect on objective performance. B&P findings are consistent with the performance meta-analysis by Verbeke et al. (2011) who find a significant relationship. However, in the assessment of moderators, they find but when correcting for moderators, the relationships vary in strength. We suggest that our longitudinal relationships using objective measurement, tested within a nomological net, should be viewed in that light. The comparison with meta-analytic bivariate correlations does not partial out the effects of other variables and is primarily cross-sectional results.

The moderation analysis by Verbeke et al. (2011) provides support for the potential influence of measurement and study artifacts. The inclusion of the objective performance measure addresses a growing trend in the sales literature—the focus on objective data. Jaramillo, Mulki, and Marshall (2005) had one objective measure of performance in a meta-analysis spanning 25 years. We suggest that our findings based on longitudinal relationships using objective measurement and tested within a nomological net, should be viewed in that light. This suggests that the question is not completely answered regarding the timing, measurement and design of assessing RA and objective sales performance.

Although the study of turnover in the management field continues beyond the 100-year mark (Hom, Lee, Shaw, & Hausknecht, 2017), yet many sales studies examining PTL fail to measure turnover. Therefore, the inclusion of sales force turnover is not trivial. Thus, the current study both extends the B&P model and provides a more comprehensive look at the outcomes of satisfaction and commitment. The fully mediated relationship between satisfaction and turnover as well as the fully mediated commitment to satisfaction relationship provide stronger support for the structure of the B&P model's logic. Secondly, the panel of salespeople during the early stages of their careers provides evidence of the generalizability of B&P to this important time period of salesforce onboarding and socialization. Additional evidence of the mediation as well as the strength of the relationships using turnover, provides stronger evidence of the need to develop these fundamental constructs, satisfaction and commitment, as they are the affective portion of salesperson engagement (Kumar & Pansari, 2016).

Lastly, the relationship between in-role performance and JS has been an inconsistent finding in the sales literature as in B&P. Studies conducted after B&P find similar oddities even going so far as to call the relationship “spurious” (MacKenzie et al., 1998, Rich, 1997). In the broader management literature various forms of the relation have been explored to uncover the true nature of the relationship (Alessandri et al., 2017, Judge et al., 2001). Therefore, our findings are consistent with the breadth of the literature. In our study, even with longitudinal data, we did not look at a time lag for the relationship which is at the core of the dynamic model suggested by both Alessandri et al., 2017, Judge et al., 2001. As with other relationships in our replication, we believe our findings continue to point out that there are still questions to be answered with regard to the in-role performance to JS relationship.

### 5.1. Future research directions and limitations

Since B&P (1993) meta-analysis, marketing scholars have extended our understanding of factors that impact on salesforce's satisfaction or their decisions to leave firms. Considering progress in the literature over the past thirty years, in this section we identify three directions that can contribute to future research in this literature.

*Understanding role of salespeople's motivation:* Motivation has been studied in the literature as a key factor in determining job outcomes such as satisfaction (Khusainova et al., 2018, Walker et al., 1977, Williams and Plouffe, 2007). In addition, prior research demonstrates that salesperson motivation affects decision of individuals to leave their jobs (Bande et al., 2015, Hartmann and Rutherford, 2015, Wang and Ma, 2013). However, most of research in the literature focuses on motivation either at intrinsic versus extrinsic levels (Mallin and Pullins, 2009, Miao et al., 2007) or as a black box (Hohenberg & Homburg, 2016), without exploring different components of salespeople's motivation and how they develop or change over time.

Specifically, expectancy theory argues that motivation comprises three dimensions of valence (desirability of rewards), instrumentality (probability of achieving rewards), and expectancy (probability of achieving desired outcomes through one's efforts) (Gray & Wert-Gray, 1999). Magnitude of sales reps' motivation relies on a combination of valence, instrumentality, and expectancy of sales-related tasks and reward; which each may vary over time. This implies opportunities for further research on how each different motivation dimension complements B&P's framework. Future research can explain how leadership characteristics or role stressors modify salesperson valence or instrumentality, leading to changes in their JS or intention to leave.

*External shocks and salesforce's satisfaction and turnover intention:* B&P models do not evaluate impacts of "shocks" on salespeople's satisfaction or PTL. Shock is defined as any "jarring event that initiates the psychological analyses involved in quitting" (Holtom, Mitchell, Lee, & Inderrieden, 2005, p. 339). Examples of shocks are offers of a better position, mergers and acquisitions, changes in management, or having new mentors. Compared to one's goals and values, a salesperson perceives a shock in a negative, neutral, or positive way. If shocks on salespeople exceed their psychological thresholds, they can play a substantial role in individuals' behavioral outcomes such as JS and turnover intention (Boles, Dudley, Onyemah, Rouzies, & Weeks, 2012).

In spite of the importance of shocks in salespeople's professions, there are few studies in the literature that examine shocks' impacts on sales reps' satisfaction with the job or their intention to leave firms. As an example, research indicates that employees react to shocks differently depending on their background and levels of formal education (Dickter, Roznowski, & Harrison, 1996) or work environment and level of collaboration with co-workers (Holtom et al., 2005). Therefore, one prominent future research direction is to explore comprehensive models of salesperson JS and PTL by including expected/unexpected, job/non-job related, or negative/positive shocks. As shocks may have both short- and long-term effects on salespeople, longitudinal studies can shed additional light on how long-term vs. short-term aftermaths of shocks stimulate and modify salespeople's attitudes (e.g., satisfaction), intentions (e.g., to leave), or behaviors (e.g., job search or turnover).

*Service ecosystems and salesforce's satisfaction and turnover intention:* As the third future research direction, we propose that marketing scholars can significantly contribute to the literature by reexamining B&P's models in new selling environment called service ecosystem (Hartmann et al., 2018, Thaichon et al., 2018). Indeed, a recent study by Hartmann et al. (2018) notes that selling processes and salespeople's role in customer value creation have evolved into broader social systems called service ecosystems. In such environments, selling processes and traditional definitions of salespeople expand into selling actors that collectively or individually "perform selling regardless of their role" in the ecosystem (Hartmann et al., 2018, p. 2). This novel approach may require new insights on impacts of leadership behaviors on sales actors' JS and leaving intention.

Particularly, in service ecosystems selling actors are embedded in overlapped institutional arrangements. Therefore, they may be constantly exposed to various leadership behaviors in different organizations with unequal organizational influences or powers in a service ecosystem. New directions for future research involve examining how such distributed leadership behaviors in service ecosystems increase selling actors' satisfaction over time. In addition, future research can highlight factors that enhance selling actors' engagement and participation in their service ecosystems, which in turn may reduce their intention to leave an ecosystem.

*Limitations.* Like all studies, the current research has some limitations that must be noted. One of these involves the use of a global OC measures. Some recent sales research (Fu, Bolander, & Jones, 2009) has used the multi-faceted OC measure developed by Allen and Meyer (1990). The three facets of their measure include normative, affective, and continuance commitment. While this provides a more nuanced view of the inter-relationships of various constructs with OC, the current study used the single facet construct measure because it was the measure used in the original study and it is still in wide use in sales research (e.g., Macintosh and Krush, 2014, Ramaswami and Singh, 2003, Rutherford et al., 2011). An additional limitation relates to the sample. While the study is based on a large and all-new hires sample, results from our replication may not hold in other sales settings. This potential lack of generalizability to other samples is one reason for conducting replication studies since additional studies may uncover some boundary constructs that result in different findings from the original study.

## **6. Conclusion**

The core constructs of B&P have been studied in various articles in the intervening years with some replications with international samples (e.g., Brashear-Alejandro et al., 2003, Netemeyer et al., 2004), as well as extensions including other types of work performance such as extra roll performance (MacKenzie et al., 1998). This replication was conducted to reassess a principle theoretical model in sales management research and reevaluates our understanding of the drivers and antecedents of salesforce JS and OC. As noted, this replication retests and extends the B&P meta-analytic model. We believe the use of a longitudinal design with objective performance and an extension of turnover provide additional contributions beyond the reassessment of the foundational model. Secondly, the use of a homogeneous sample of during early career phases of newly hired salespeople provides more internal validity to the findings while also allowing for a very controlled assessment of the model without mixing industries, career stages, and different product types. This eliminates the need to include such variables as potential moderators. That

leads to the additional contribution provided by the inclusion of control variables. The demographic and theoretically based controls are an additional nuance to the reassessment of B&P by removing potential bias, assessing boundary conditions and also reducing concerns of omitted variable bias.

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