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# Predicting intention to quit in the call centre industry: does the retail model fit?

Zhong Ming Benjamin Siong, *School of Psychology, Deakin University, Burwood, Australia*

David Mellor, *School of Psychology, Deakin University, Burwood, Australia*

Kathleen A. Moore, *School of Psychology, Deakin University, Burwood, Australia*

Lucy Firth, *Department of Information Systems, University of Melbourne, Parkville, Australia*

## Abstract

**Purpose** – Models of workplace turnover are rarely assessed in contexts other than that in which they were developed. This reduces their generalizability and their usefulness in providing managers with guidance as to what they might do to reduce workers intentions to quit. The purpose of this study is to test a model derived from a study of shop floor retail salespeople in the call centre environment.

**Design/methodology/approach** – A questionnaire measuring the variables in the model was completed by 126 call centre representatives recruited from 11 call centres in Melbourne, Australia.

**Findings** – Although the model was supported, the interactions among the variables differed. In particular, stressors played a bigger, albeit indirect, role in the intention to quit.

**Practical implications** – Call centre managers need to consider carefully the aspects of the work environment that may be stressful. If appropriately addressed, turnover may be reduced, and productivity increased.

**Originality/value** – This paper demonstrates that the model of turnover derived from shop floor salespeople is generally robust in the call centre setting. It provides management of call centres with some guidance as to the factors associated with turnover and areas that can be addressed to reduce it.

## Introduction

Workforce turnover is well-recognized as an issue of critical importance to managers. Lack of employee continuity and organizational stability, the high costs involved in the induction and training of new staff, and organizational productivity are some of the challenges that arise as a consequence of turnover. It is not surprising then that organizational psychologists and other researchers have made concerted efforts to identify the antecedent factors associated with employee turnover in order to assist managers to institute measure to prevent it.

Indeed, many models of workforce turnover have been proposed over recent years (e.g. Armstrong-Stassen *et al.*, 1994; Igbaria and Greenhaus, 1992; Koeske and Koeske, 1993; Tinker and Moore, 2001). These models typically incorporate core variables such as job

satisfaction, stress, organizational commitment, and supervisor support, along with a selection of other variables such as self-esteem, locus of control and intention to quit. Seldom, however, has the temporal stability or cross-setting generalisability of such models been reported.

In this paper, we report on an investigation of the generalisability of one such model of turnover. The model to be tested was proposed by Firth *et al.* (2004) in reporting their study of shop floor retail clothing sales personnel working in a large department store. Using path analysis they found that employees' commitment to the organization for which they worked, job satisfaction, stress, supervisor support, self-esteem, and the perceived stressors in the job accounted for 52 per cent of the variance in intention to quit. Emotional support from supervisors and self-esteem mediated the impact of stressors on stress reactions, job satisfaction, commitment to the organization and intention to quit. The model proposed by Firth *et al.* (2004) is presented in Figure 1.

The question arises as to whether Firth *et al.*'s model would be useful in other sales contexts. In this study we aimed to address the question in another sales sector, specifically the call centre industry. This industry is an emerging component of the sales sector that is characterized by features different to those found in the conventional retail context. For example, in contrast to the conventional retail sales setting where face to face interactions are the norm, they primarily utilize telecommunication and information technologies to generate sales, to provide company information and to help maintain good customer service relations (Bakker *et al.*, 2003; Lewig and Dollard, 2003). However, call centre work has been described an advanced form of Taylorism (Knights and McCabe, 1998), with workers, Call Centre Representatives (CCRs), being required to engage in routine, scripted interactions that are continuously and automatically distributed to them by the technology upon which call centres are based, and under the extreme emotional demand of maintaining a friendly manner (Holman, 2003). These conditions generate highly demanding, repetitive and stressful work roles that are associated with high levels of absenteeism and high staff turnover rates (Australian Communications Association Research (ACA), 1998, 1999, 2001; Australian Council of Trade Unions Call Centre Unions Group, 2001; Australian Communications Association Research (ACA), 1999; Deery *et al.*, 2002; Holman, 2002, 2003).

The importance of understanding turnover in call centres is evident when the growth of this industry is considered. In Australia it employed 160,000 CCRs in 1999 (Australian Services Union Research, 1999) and grew at rate of 20 per cent annually from 1998 to 2001 (Australian Communications Association Research (ACA), 1998; Australian Council of Trade Unions Call Centre Unions Group, 2001). At the same time, the average staff turnover rate in the industry rose from 18 per cent to between 23.7 per cent and 29.5 per cent, with the rate doubling in highly-stressed call centres (Australian Communications Association Research (ACA), 1998; Australian Communications Association Research (ACA), 2001; Hallis, 2000). Such high turnover rates inevitably increase the number of inexperienced CCRs and lower the standard of professional services provided to customers (Australian Communications Association Research (ACA), 2001), resulting in higher operating costs for the organization (Australian Communications Association Research (ACA), 1999). Research (Australian Communications Association Research (ACA), 1998; Australian Council of Trade Unions Call Centre Unions Group, 2001) has estimated that the annual cost of staff turnover in these centers has risen from \$100 million to \$330 million, with stress-related absenteeism

incurring an additional \$7.5 million per annum (Australian Council of Trade Unions Call Centre Unions Group, 2001). On average, the cost of losing a CCR in 1998 was estimated at \$10,000 (Australian Communications Association Research (ACA), 1998). Extrapolating from the above statistics, that average would have increased to between \$20,136 (101.4 per cent increase) and \$25,063 (150.4 per cent increase) in a successive three-year period to 2001. Therefore, it is important to identify the factors that lead to outcomes such as employee turnover in the call centre industry in order that they might be modified by management.

In this study, we aim to replicate the study conducted by Firth *et al.* (2004) to determine whether the model of turnover derived from the shop floor retail sales environment (see Figure 1) would be robust in the call centre context. We expect that the same variables would be associated with quitting intention, but that given the different nature of the work in department stores and call centres, the pathways to intentions to quit would be different. In particular, in light of the research and anecdotal evidence that call centre work is highly stressful, we expect that stressors and stress symptoms would play a bigger role in turnover intentions.

## **Method**

### ***Participants***

Participants in this study were 126 CCRs recruited from 11 call centres based in metropolitan Melbourne. The survey respondents were predominately female (58.7 per cent) and ranged in age from 19 years to 66 years ( $M=27.3$  years,  $SD=8.18$ ). Education levels varied from completing some time at high school to completing a degree. Tenure was relatively short with 70.6 per cent of respondents having worked less than two years in their current position.

### ***Measures***

Participants completed a questionnaire (see Firth *et al.*, 2004) that covered demographic characteristics, organizational stressors, stress, self-esteem, supervisor support, organizational commitment, job satisfaction, and the intention to quit.

Demographic data were collected on sex, age, level of education, tenure and number of hours worked per week.

Organizational stressors were measured using scales adapted from Tate *et al.* (1997) in their tri-nation study of retail sales people. Three items measured each of the following stressors: role ambiguity (e.g. my job responsibilities are not clear to me), role conflict (e.g. to satisfy some people at my job, I have to upset others), work-overload (e.g. it seems to me that I have more work at my job than I can handle) and work-family conflict (e.g. my job does not give me enough time for my family activities). Participant responded to each item on a five-point Likert scale, from "strongly agree" to "strongly disagree". Role ambiguity was reverse-scored so that high scores indicated high levels of role ambiguity. Tate and colleagues reported adequate reliability coefficients for each sub-scale ( $\alpha=0.61$  to  $0.91$ ). The present study similarly found adequate internal consistencies for role ambiguity ( $\alpha=0.85$ ), role conflict ( $\alpha=0.73$ ), role overload ( $\alpha=0.61$ ) and work-family conflict ( $\alpha=0.91$ ). Cronbach's  $\alpha$  for the sum of stressors was 0.73

Job stress was measured with three burnout items (e.g. I feel emotionally-drained by my job) and five items related to anxiety and somatic complaints (e.g. job-related problems keep me awake at night; I feel tense at my job). Participants indicated on a six-point scale the degree to which they experienced each of these symptoms. Firth *et al.* (2004) reported an internal reliability co-efficient of 0.87 for this scale. In this study Cronbach's alpha=0.90

Job satisfaction was measured using a five-point Likert scale to measure participants' agreement with four statements relating to extrinsic factors (e.g., job security, physical conditions), and four statements relating to intrinsic factors (e.g., the recognition received for work done, the freedom given to do one's best at the job). Firth *et al.* found this scale to be highly reliable, with  $\alpha=0.78$ . In this study it was slightly higher,  $\alpha=0.83$

Commitment to the organization was assessed via five items rated on a five-point scale (e.g. I really care about the fate of this store). In both Firth *et al.*, and the current study Cronbach's  $\alpha$  was 0.80.

Self-esteem was measured using four items (e.g. I feel that I have many good qualities) to which participants responded on a five-point scale, ranging from not at all like me to completely like me. Firth *et al.* reported Cronbach  $\alpha=0.74$ . In this study  $\alpha$  was 0.65

Support offered by supervisors was measured by three questions answered on four-point Likert scales (e.g. How much does the person go out of his/her way to make your work-life easier for you?). Similar internal reliability co-efficients were found by Firth *et al.* (0.80), and the current study (0.82)

Quitting intent was measured using two questions that reflected how participants felt about their leaving their jobs (e.g. How often do you think of leaving your present job?; How likely are you to look for a new job within the next year?). Responses were given on a five-point scale. Other research has shown this measure to have satisfactory internal reliability estimates (e.g. Firth *et al.*,  $\alpha=0.75$ ). The internal consistency in this study was also satisfactory ( $\alpha=0.90$ ).

### **Procedure**

Following ethics approval from the Deakin University Ethics Committee, participants were recruited from call centres where managers had provided written approval for the distribution of questionnaires. The participating call centres were drawn from a variety of industry sectors, such as financial services, telecommunication services, utility services, information technology services, newspaper companies, non-profit organizations, and travel and airline services.

Participants were required to complete a self-assessed questionnaire in their own time. A plain language statement was included with each questionnaire, stating the purpose of the study, guaranteeing confidentiality, and emphasizing the voluntary nature of the study. To ensure anonymity, participants were directed to return questionnaires via the replied-paid envelopes provided. Time taken to complete the survey took between 20 and 25 minutes. Of the 280 questionnaires distributed to CCRs, 126 were completed and returned, representing a response rate of 45 per cent.

## Results

The data were analyzed using SPSS/PC for Windows (Version 12) and AMOS (Version 5). The intercorrelations between variables, and the means, standard deviations, and Cronbach's alpha for each variable are presented in Table I.

### *Structural model*

The hypothesized model presented in Figure 1 was tested using SEM. The independence model confirmed that the variables in the model are correlated,  $\chi^2$  (21,  $n=126$ ), 392.27,  $p<0.001$ , and hence the correlation matrix is suitable for analysis. As shown in Table II, the data provided good support for the hypothesized model  $\chi^2$  (4, 1.84,  $p=0.766$ , Normed  $\chi^2$  0.459, Goodness of Fit 0.996; Adjusted Goodness of Fit 0.971; Normative Fit Index 0.997; RMSEA 0.000,  $p$ /close 0.851) and these statistics compare favourably with those from Firth *et al.* The  $\chi^2$  difference test indicated a significant improvement between the independence and the hypothesized models,  $\chi^2$  (17,  $n=126$ ), 390.43,  $p<0.001$ . Figure 2 contains the standardized beta-weights and percentages of variances explained.

The variables in the model explained 47 per cent of the variance in intention to quit; 55 per cent of variance in feelings of stress, 42 per cent of job satisfaction, 49 per cent of job commitment and 37 per cent of variance in perceptions of support.

Job stressors had no direct impact on intention to quit. However, feelings of commitment to the job ( $\beta=-0.30$ ) and satisfaction with the job ( $\beta=-0.40$ ) each contributed to a decrease in intention to quit. Job stressors had a direct impact on feelings of stress ( $\beta=0.55$ ), a reduced sense of supervisor support ( $\beta=-0.61$ ), as well as a decrease in job satisfaction. Feelings of supervisor support contributed to a sense of job satisfaction ( $\beta=0.28$ ), which in turn contributed to a sense of job commitment ( $\beta=0.42$ ). Feeling stressed reduced participants' sense of job commitment ( $\beta=-0.19$ ).

Although job stressors had no direct effect on intention to quit, they had a substantial indirect effect ( $\beta=0.48$ ) through the other variables in the model (see Table III). Conversely, job satisfaction through its direct and indirect effects substantially reduced intention to quit ( $\beta=-0.52$ ).

A comparison of the models for conventional retail workers and call centre representatives reveals that for CCRs the combined stressors (work overload, work family conflict, role ambiguity, and role conflict) had a bigger negative impact on stress, support and satisfaction. In turn, for CCRs the total effect of stress, support and satisfaction on intention to quit was greater (0.48 versus 0.16 for conventional retail workers). Individually, stress symptoms among the CCRs, had a smaller impact on intention to quit (0.06 versus 0.36), as did satisfaction (0.41 versus 0.52) and commitment to the organization (0.30 versus 0.48) than for the retail sales personnel. Esteem also played a less important role in intention to quit (0.06 versus 0.19) for CCRs, while supervisor support played a similar role (0.25 versus 0.21) in both cohorts.

## Discussion

In this study we set out to determine whether the pathway model of quitting intention proposed by Firth *et al.* would be replicated when applied to populations other than conventional retail salespeople. Our findings in the call centre environment indicate that, overall, the variables in the model accounted for similar proportions of the variance in quitting intentions. However, within the model the variables appear to behave in a different manner. This suggests that call centre management may need to consider different worker turnover intervention strategies to those recommended for management in conventional retail contexts.

As has been noted above, call centres are highly stressful workplaces, and as expected stressors (role conflict, work family conflict, role overload, and role ambiguity) play a substantially more detrimental role in this context than they do in conventional retail. The average level of stressors reported by CCRs was at the mid-point of the scale used however, these stressors contributed more substantially to a stress reaction (that is, feelings of burnout, anxiety and somatic complaints) than reported by retail staff (0.70 versus 0.23). While not tested in the current model, it might be that the routine and repetitive nature of call centre work, rather than role ambiguity and role conflict as measured here, contribute to high levels of stress reaction. It might be that managers need to consider varying the roles that staff occupy in order to reduce this repetitive demand identified by much previous research (Australian Communications Association Research (ACA), 1998, 1999, 2001; Australian Council of Trade Unions Call Centre Unions Group, 2001; Australian Services Union Research, 1999; Deery *et al.*, 2002; Holman, 2002, 2003).

Certainly support offered by supervisors contributed to an increase in job commitment and job satisfaction among CCRs and all three of these variables made a substantial contribution to reducing intention to quit. As expected based upon the retail model, stressors were not directly predictive of intention to quit among CCRs. Rather stressors are indirectly related to intention to quit via supervisor support, job satisfaction, and job commitment for a total effect of 0.48) however, the flow through of this effect onto turnover intention was lower than on the shop floor (-0.30). In contrast to the conventional retail context, we see that stress reaction leads the CCR to a loss of commitment to the organization, but not directly to a loss of job satisfaction or to an intention to quit. For conventional retail workers, stress reaction leads directly to lower job satisfaction and an intention to quit, but not to a lack of commitment to the organization. This difference could reflect a stronger sense of organizational identity on the part of retail sales personnel than on the part of CCRs. The loading of stress onto job commitment rather than directly onto job satisfaction or intention to quit by CCRs can be explained in terms of expectations and lack of face to face interactions with customers. Social knowledge of call centres may lead CCRs to have low expectations of job satisfaction. They may expect their employment to be short term due to the anticipated stress. Therefore, the experience of stress does not directly impact on satisfaction or on intentions to quit. Rather, it re-inforces a lack of commitment that may be played out in actions such as absenteeism, which is not measured in this study, as well as indirectly on intention to quit. The lack of face-to-face interaction may further assist CCRs to rationalize and depersonalize stress, and so avoid it impacting directly on job satisfaction and intentions to quit.

While not the most manifest difference, job satisfaction plays a role in the intention to quit both directly (-0.40 for CCRs versus -0.23 for retail sales personnel) and indirectly (total effect of -0.52 for CCRs versus -0.41 for retail sales personnel). This suggests that call centre

managers could reduce intention to quit by establishing which intrinsic and extrinsic factors contribute most strongly to job satisfaction amongst CCRs and taking steps to enhance them. For example, job security, physical conditions, recognition received for work done, and the freedom given to do one's best at the job may all be malleable factors, depending on the call centre.

The above findings may be related to different social perceptions of call centres and conventional retail contexts. In the department store setting, employees are covered by industry-wide agreements that govern working conditions. They may expect the environment to be pleasant, be thinking of having a career there, and expect to be committed to the job. In the call centre setting, there is likely to be little expectation that the work environment will be pleasant, as call centres generally have a bad reputation, and are widely known to be stressful. People who work there are unlikely to be thinking of establishing a career there, as evidenced by the relatively short call centre career our participants had (71 per cent less than two years versus 25 per cent of the retail sales personnel in the job less than three years). Specifically, in Australia many students and other part-time workers take on the role of CCR as a short term, convenient way of generating income, and with little intention of staying in the industry on a long term basis. Thus, they are unlikely to have a high level of commitment, and lack of commitment is likely to have less impact on their intention to quit. Quitting intention may be due to personal factors as much as the factors included in the turnover model.

While this study provides some insights into call centre turnover, there are some limitations. Amongst these is the diversity of call centres that could not be controlled here. Some call centres are purely inbound, and CCRs are employed to answer incoming calls to provide information or handle business; others are outbound, and it is the role of the CCR to make calls to solicit information or business. There may be significant difference between these types of call centres that need to be investigated further. In addition, we measured intention to quit as a proxy for turnover. While intention to quit is not the same as voluntarily turnover, many authors (e.g. Igbaria and Greenhaus, 1992) have used intentions as indicative of actual quitting behaviour on the basis of the evidence that intentions are the most immediate determinants of actual behaviour (Ajzen and Fishbein, 1980; Armitage and Connor, 2001; Kim and Hunter, 1983). The use of intention to quit is also of practical merit from a research perspective, as once people have actually implemented the behaviour to quit, there is little likelihood of gaining access to them to understand their prior situation. Indeed, in this study we were unable to access call centre staff who had actually quit due to privacy legislation prohibiting the call centres from providing their details to us.

The validity of studying intentions to quit in the workplace rather than actual quitting behaviour can be drawn from Sager's (1991) longitudinal study of salespeople, in which intention to quit was found to discriminate effectively between leavers and stayers. In a more recent study of turnover among psychiatric nurses, Alexander *et al.* (1998) found that intentions were significant predictors of turnover ( $\beta=0.23$ ), and that the majority of variables in their model impacted on turnover through intentions to quit. However, other researchers (e.g. Griffeth *et al.*, 2000; Hon and Griffeth, 1995) have argued that intentions to quit do not explain a large amount of the variance in quitting behaviour.

To account for variability in findings about the relationship between intention to quit and actual turnover, Allen *et al.* (2005) have suggested that personality factors such as self-

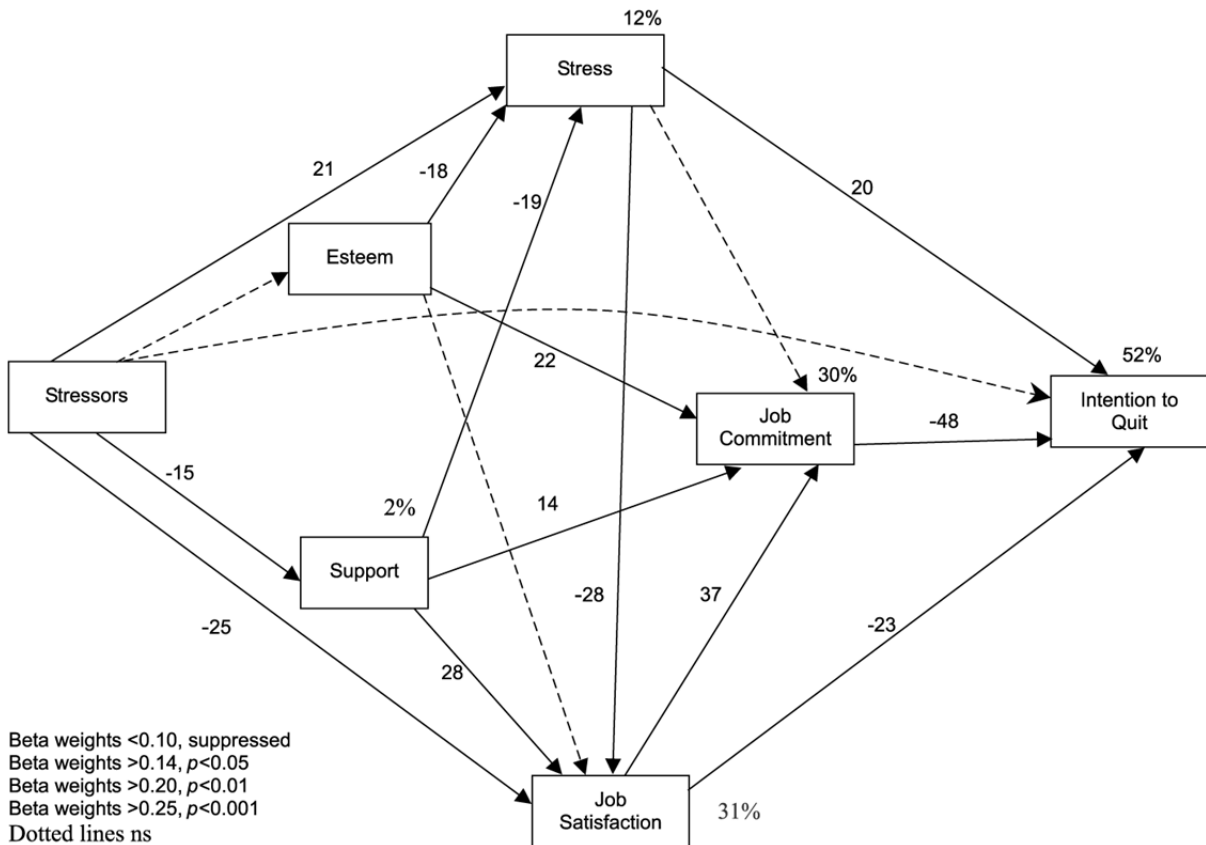


monitoring, and risk aversion may moderate the relationship. Other researchers (e.g. Côté and Morgan, 2002; Day *et al.*, 1998) have also implicated personality in turnover intentions, and the inclusion of this variable in the current model may have increased the amount of variance in quitting behaviour for which we accounted. Firth *et al.* (2004) suggested in their model of intention to quit amongst retail salespeople on the shop floor (see Figure 1) that self-esteem is one factor that may mediate the impact of stressors on stress reactions, job satisfaction, commitment to the organization and intention to quit. In the current study, self esteem played a less important role. It is arguable though whether or not such individual differences play a moderating or mediating role in the relationships. Unfortunately, one of the limitations of this study was that the sample size was not large enough to examine this issue.

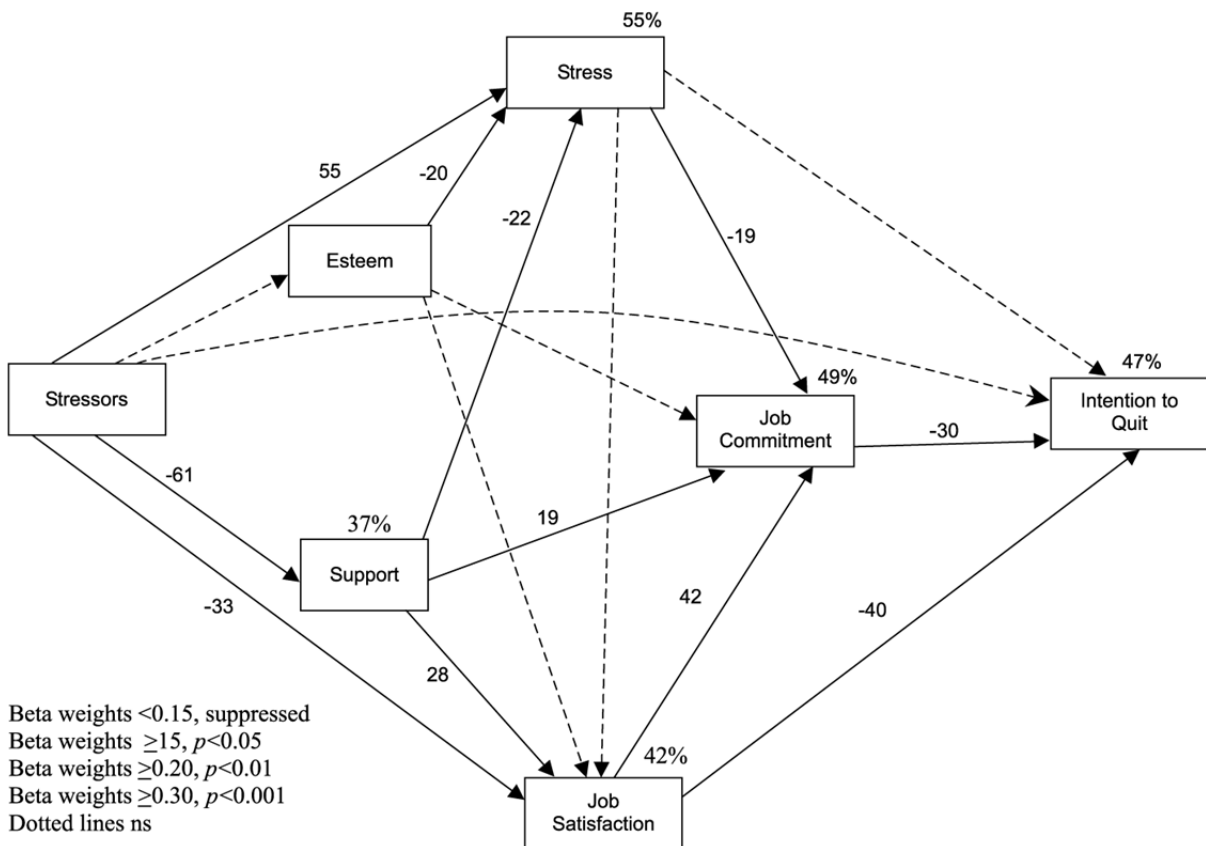
However, it is important to note that the purpose of this study was to ascertain whether the model of turnover which had been found by Firth *et al.* (2004) to be useful in explaining for intention to quit with retail salespeople on the show room floor would be equally applicable to the call centre environment. In this regard, the study was successful.

## **Conclusion**

As in the case of retail sales personnel, the variables in the model tested accounted for a large proportion of the variance in call centre turnover intention. Thus, the model would seem to have cross-setting utility. However, as expected, in the different environments the variables interact differently and it is these interactions which indicate the need for management-specific policies. For the call centre manager, the findings suggest that the core stressors are associated strongly with lack of supervisor support, and play a significant role in reducing satisfaction, and increasing stress symptoms. In turn, supervisor support raises organizational commitment which then reduces quitting intentions. Many of these are malleable factors, and if addressed appropriately, notably through supervisor support and where possible greater role variety, could reduce turnover and thereby increase the productivity of call centres.



**Figure 1** Proposed model as developed by Firth et al. with a population of conventional retail salespeople



**Figure 2** Model as manifest for call centre representatives

	1	2	3	4	5	6	7
1. Intention to quit	1						
2. Commitment	-0.59***	1					
3. Job Satisfaction	-0.63***	0.64***	1				
4. Stress	0.40***	-0.54***	-0.53***	1			
5. Esteem	-0.06 <sup>ns</sup>	0.20*	0.10	-0.25**	1		
6. Support	-0.45***	0.53**	0.55**	-0.57***	0.06 <sup>ns</sup>	1	
7. Sum of Stressors	0.49***	-0.55***	-0.59***	0.69***	-0.07 <sup>ns</sup>	-0.61***	1
Mean	6.65	15.52	23.49	15.56	16.24	8.26	35.04
SD	2.65	4.33	6.44	8.90	2.53	2.57	8.50
Possible range	2-10	5-25	8-40	0-36	4-20	3-12	12-60
Cronbach's $\alpha$	0.89	0.81	0.83	0.91	0.67	0.81	0.74

Notes: \* $p < 0.05$  (2-tailed); \*\*\* $p < 0.001$  (2-tailed); ns not significant

**Table I** Correlations, means, standard deviations, and internal reliabilities

	$\chi^2$	df	$p$	C/Min	GFI	AGFI	IFI	CFI	RMSEA	$p$
Firth <i>et al.</i> model	2.42	4	0.654	0.605	0.996	0.972	0.987	0.999	0.000	0.805
Current model	1.86	4	0.766	0.459	0.99	0.97	0.99	0.99	0.00	0.851

**Table II.** Goodness of fit statistics for models on intention to quit

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	1		2		3		4		5		6	
	RS	CC	RS	CC	RS	CC	RS	CC	RS	CC	RS	CC
1 Stressors												
2 Esteem	0.05	-0.06										
3 Support	-0.15	-0.61	0.00	0.00								
4 Stress	0.23	0.70	-0.18	-0.20	-0.19	-0.28						
5 Satisfaction	-0.35	-0.59	0.09	0.06	0.33	0.31	-0.28	-0.13				
6 Commitment	-0.16	-0.50	0.27	0.16	0.28	0.36	-0.18	-0.24	0.37	0.42		
7 Intention to quit	0.16	0.48	-0.19	-0.06	-0.25	-0.21	0.36	0.06	-0.41	-0.52	-0.48	-0.30

**Table III.** Standardized total direct effects for retail salespeople (RS) and call centre (CC) staff

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### **Corresponding author**

David Mellor can be contacted at: [mellor@deakin.edu.au](mailto:mellor@deakin.edu.au)