

Factors Affecting Burnout in Out-of-Office Workers in Thailand: A Moderated Multiple Regression Approach

Pattarachat Maneechaeye

Thai Aviation Services Limited Company, Thailand.

pattarachat@gmail.com

Abstract

This study seeks to analyze the factors affecting out-of-office workers' burnout in Thailand and develop a most suitable and practical burnout prediction model. To these ends, a moderated multiple regression approach was used. The population in this study was professional out-of-office employees and the research tools questionnaires and the convenience sampling method. A total of 420 good samples were collected and analyzed. 80 per cent of the main data set was used as a training set and randomized into a model fitting procedure. The 20 percent remaining data was then called as an unseen set randomized into a model prediction evaluation. The model can be moderately generalized. The findings in this study indicate that negative work-related factors contribute to raising the level of burnout. Given the moderating role of employee position, if an operational level employee experienced a high level of career satisfaction, there would be a lower level of burnout. However, at the managerial level, employee position had no effect on the relation between career satisfaction and burnout. Organizations should take appropriate steps to increase the level career of satisfaction among operational level staff so as to mitigate burnout risk. In future studies on this issue, longitudinal research should be conducted in order to gain more insights regarding burnout.

Keywords: Burnout, Isolation, Moderated Multiple Regression, Out-of-Office Workers.

1. Introduction

The fields of work where employees are not required to be in an office at all times are expanding. Whereas traditionally, these professions were widely related to jobs where employees were required to be at their customers' offices, thanks to internet, advanced mobile technology, and the digital disruption associated with it, today, more and more workers are also encouraged to work at home. While working outside one's office offers obvious benefits such as high autonomy and flexible working hours, it can nevertheless present a number of issues regarding work-related isolation and personal life conflicts. High-performing human capital requires heavy investment. Developing human resources (HR) and human capital has become an essential factor in promoting organization targets and goals (Luthans, Avey, Avolio, & Peterson, 2010). In order to meet customers' high expectations, an organization needs to continuously invest in its employees and keep training them to make sure that they work effectively and efficiently for the clients.

One big question is: What will happen to these HR investments in developing and training staff if employees are not satisfied with their current work and, for a number of other reasons as well, end up experiencing burnout and eventually leave the organization? It has been well established that generally while employee job satisfaction and career satisfaction can boost employee performance, isolation and work-life family conflicts can have a negative effect (Yu, Liu, & Ren, 2019; Selvarajan et al., 2019). On the face of it, based on these findings, it seems that out-of-office workers may be more insulated from burnout than office workers. This is a

pertinent question given that teleworking is now becoming a new normal due to the digital transformation of the workplace. Indeed, today, many professions are not required to work in the office owing to the technological advancement of internet and mobile device. While much of the work continues to be essentially the same, these people can work remotely to fulfill their work assignments. For example, medical representatives still travel to various hospitals to engage the targeted health care professional customers but do not need to go back to their office as they can send back reports to their managers by email. Management consultants work mostly at client sites to gain insights in their advisory roles for their business and remotely consult with their managers by using teleconference systems. While these jobs away from the office can promote job autonomy and generate much personal satisfaction, they might also yield some negative feelings related to an autonomous working style such as isolation and work-family conflict due to a job demand (Tremblay & Genin, 2008; Federici, 2013). This study focuses on out-of-office workers in Thailand. It aims to investigate various factors that affect burnout by following a moderated multiple regression approach. The end-goal is to develop a suitable and practical burnout prediction model in the context of out-of-office workers. While much academic research looks at the factors affecting turnover intention, few studies zero in on how to predict burnout in an out of office workers.

2. Literature Review

- Burnout

Generally, burnout is a direct outcome of stress from work. The term is used to refer to the mental and physical exhaustion at work faced by workers (Simha, Elloy, & Huang, 2014). It is a state of exhaustion that stems from excessive stress from over-work, especially when workers feel negatively overwhelmed and cannot meet expectations. Burnout is definitely latent and a continuing exposure to this negative work phenomenon can deteriorate employees' physical and mental fitness and cause errors to the job. As burnout grows, employees start to lose motivation and interest at work, which leads to a poorer job performance (Simha et al., 2014).

- Work-Family Conflict

As a form of a work-related conflict, work-family conflicts can significantly affect employees' personal or family life, especially when they have challenging work assignments. High expectations and a demanding professional life are often likely to impact an individual's personal life (Hawksley, 2007). This can be thought as a work-related dilemma as a position at work may demand a high level of personal contribution to meet job expectations. High demands at work might affect an employee's personal life, especially his/her family (D'Souza et al., 2006). Even though a flexible work arrangement could possibly help reduce this type of conflict, out-of-office workers are not necessarily spared either as the workload at home may be substantial (Hunter, Clark, & Carlson, 2019).

- Work Isolation

Work isolation refers to a lack of social and emotional interaction with co-workers at the workplace that can lead to a feeling of loneliness (Schrempft, Jackowska, Hamer, & Steptoe, 2019). In the context of a telework environment, for example, there is a lack of interaction and communication with teammates and supervisors, which can lead to an isolation problem (Golden, Veiga, & Dino, 2008). Employee that always works outside the office often face communication and human interaction problems, which can lead to a stressful situation due to job expectations and demands.

- Job and Career Satisfaction

Job satisfaction can be described as worker's mental and physical satisfaction with his/her work (Locke, 1969). It has also been described in other studies as the realization of a work value in an individuals' mind resulting in a pleasurable and satisfactory emotional state (Iaffaldano &

Muchinsky, 1985). Job satisfaction is an important concept in many work practices as it is positively correlated to employee mental and physical well-being (Inauen, Jenny, & Bauer, 2015). As to career satisfaction, it can broadly be defined as overall satisfaction related to one's professional title (Spurk, Abele, & Volmer, 2015). For example, if you work as a medical representative, you are satisfied with what you have done in that capacity not just with the job itself but with the overall assignment that relate to this title. Past research indicates that career satisfaction is predicted by work-family enrichment (Rastogi, Karatepe, & Mehmetoglu, 2019)

- The Job Demand and Job Resource Theory

The job demands and resources (JDR) theory is a classic theory that is widely cited as the reference framework for work-related problems in various organizations (Demerouti et al., 2001). It comprises two components; job demand and job resource. Job demand means that the organization requires employee to invest their time and effort into their works whereas job resource refers to the supporting context related to work (Lesener, Gussy, & Wolter, 2019). Even in cases where job demand is an unfavorable factor, well-planned job resource could mitigate this risk. The theory essentially concerns two main types of position: operational or managerial level. Generally, managerial level employees who work in an organization for a certain amount of time have higher overall satisfaction at work due to the power they have, their ability to manage the task, and higher job resources. Based on the job demand and resource theory, one big question is: Are managerial level employees less affected by burnout than operational level employees for all the reasons discussed above? Accordingly, the following hypotheses can be developed:

H1: *Employees experiencing a high level of work-family conflict will have a high burnout level.*

H2: *Employees experiencing a high level of isolation will have a high burnout level.*

H3: *Employees highly satisfied with their careers will have a low burnout level.*

H4: *Employees highly satisfied with their jobs will have a low burnout level.*

H5: *Employees working in managerial positions will have a low burnout level.*

3. Methodology

- Population and Data Collection

This study uses a cross-sectional design. The population consists of employees whose professional engagements require them to work outside their office and includes salespersons, auditors, medical representatives, and sales agents. The convenience sampling method was applied. Only those who often work outside their office were selected for sampling. In this research, 500 questionnaires were initially sent out. After screening and drop outs, 420 qualified for analysis. The study uses self-administered questionnaires which are divided into six parts: burnout, work-family conflict, isolation, career satisfaction, job satisfaction, and general demographic data. The burnout scale consists of 5 items and uses the Maslach Burnout Inventory (MBI) (Maslach, Jackson, Leiter, Schaufeli, & Schwab, 1986) to measure burnout (Cronbach's Alpha = 0.92). It contains statements such as "I feel tired when I get up in the morning and have to face another day on the job." The second part, work-family-conflict, also consists of a 5-item scale. Based on Netemeyer, Boles, and McMurrian's (1996) work, it measures the level of conflict (Cronbach's Alpha = 0.89) and includes statements such as "The time spent at work detracts me from family or my social life." In the third part, Isolation, the 5-item scale measures one's level of isolation at work (Cronbach's Alpha = 0.88). The statements are derived from Golden, Veiga, and Dino's (2008) research. One example is "I always miss an opportunity to be in an activity as a part of a team." The next part, Career Satisfaction, uses the 5-item scale devised by Greenhaus, Parasuraman, and Wormley (1990) to measure career satisfaction (Cronbach's Alpha = 0.90) and includes such statements as "I am satisfied with my career achievement." Part five rates Job Satisfaction based on a reduced

version of Weiss, Dawis, and England's (1967) Minnesota Satisfaction Questionnaire (MSQ) (Cronbach's Alpha = 0.91). One of the components reads as follows: "I am satisfied with my current job." Finally, in Part six, Position, the following dichotomous scale was used and subdivided into operational or managerial position: "What is your current position in an organization?"

- Data Analysis

The 420 samples selected were analyzed by using a moderated multiple regression approach that tested the hypothesis of the study. The reason for opting for this approach was that it allows the testing of multiple predictors and the series of moderators for interaction effects at once. The analysis process was conducted by using R language (R Core Team, 2019).

4. Results

The results were separated into 2 parts: (i) descriptive statistics for both nominal and continuous demographic data, and (ii) inferential statistics for fitting the moderated multiple regression model. In both cases the analytical process was done using R language.

- Descriptive Statistics

After filling in a missing value by column average, smoothing out noisy data, identifying and screening outlier, resolving duplicated data, and correcting inconsistencies, a clean dataset of 420 samples was analysed. 80 percent of main dataset was identified as a training set and randomized into a model fitting procedure. The remaining 20 percent data was then used as a testing set (or unseen set) and randomized into a model prediction performance evaluation. As shown in Table 1, the majority of the respondents consists of females (56.9%) and holds degree above a Bachelor degree (55.2%). Slightly more than half of them work in the public sector (50.5%) and hold operational level positions (59.5%). A majority of them are single (63.8%). Moreover, as indicated in Table 2, the mean age of the population is 37.22 years old, with a standard deviation of 11.27, and the current average work tenure is 9.42 years, with a standard deviation of 10.45. Moreover, the sample had average work experience of 13.84 years, with a standard deviation of 11.07, and on average they earn a monthly income of THB 52,503.83 (USD1,650), with standard deviation of THB 43,621.53 (USD1,385).

Table 1: Descriptive Statistics for Nominal Demographic Data

Demographic Data (<i>n</i> = 420)	Frequency	Percentage
1. Sex		
- Male	181	43.1
- Female	239	56.9
2. Education		
- Bachelor Degree	188	44.8
- Above Bachelor Degree	232	55.2
3. Workplace		
- Private Sector	208	49.5
- Public Sector	212	50.5
4. Current Position		
- Operational	250	59.5
- Managerial	170	40.5
5. Marriage		
- Single	287	63.8
- Married	133	31.7

Table 2: Descriptive Statistics for Continuous Demographic Data

Demographic Data (<i>n</i> = 420)	Mean	SD
1. Age (Year)	37.22	11.27
2. Current Workplace Tenure (Year)	9.42	10.45
3. Total Work Experience (Year)	13.84	11.07
4. Estimated Monthly Salary (Baht)	52,503.83	43,621.53

- Inferential Statistics

As shown in Table 3, all the variables were internally inconsistent (alpha was more than 0.70) and the data distributed normally (skewness and kurtosis were in a range of plus and minus two). The predictors variance inflation factor (VIF) was not more than 5, indicating no multicollinearity. Moreover, all variables were moderately correlated. Isolation and Burnout were the most positively correlated variables and Isolation and Job Satisfaction, the most negatively correlated.

Table 3: Mean, Standard Deviation, Alpha, Skewness, Kurtosis, VIF and Correlation Matrix

Variable	M	SD	Alpha	VIF	Skew	Kur	WFC	ISL	CRS	JST	BOT
1. WFC	3.18	0.94	0.89	2.375	-0.27	-0.36	-	0.43**	-0.13**	-0.18**	0.53**
2. ISL	2.83	0.82	0.88	2.454	-0.12	-0.01	0.43**	-	-0.15**	-0.20**	0.44**
3. CRS	3.62	0.82	0.90	4.000	-0.69	1.17	-0.13**	-0.15**	-	0.74**	-0.43**
4. JST	3.59	0.86	0.91	4.189	-0.62	0.52	-0.18**	-0.20**	0.74**	-	-0.50**
5. BOT	2.93	1.00	0.92	-	-0.08	-0.57	0.53**	0.74**	-0.43**	-0.50**	-

WFC: Work-Family Conflict, ISL: Isolation, CRS: Career Satisfaction, JST: Job Satisfaction, BOT: Burnout,
***p* < 0.01

By using an ordinary least square estimation, a moderated multiple regression model could be developed. As indicated in Table 4 below, overall, this model was significant ($F=38.26$, p -value < 0.000). The series of predictors could explain the amount of variance in burnout by 51.3%. With a variable importance of 5.531, the most critical predictor of the level of burnout was work-family conflict.

Table 4: Fitting a Moderated Multiple Regression Model

Number	Term	Estimate	Standard Error	t value	p-value	Variable Importance
1	Intercept	3.370	0.360	9.341	0.000***	-
2	WFC	0.350	0.063	5.531	0.000***	5.531
3	POSI	-1.151	0.537	-2.144	0.032*	2.144
4	ISL	0.252	0.071	3.521	0.000***	3.521
5	CRS	-0.344	0.094	-3.627	0.000***	3.627
6	JST	-0.271	0.090	-3.014	0.002**	3.014
7	POSI: WFC	-0.006	0.094	-0.067	0.946	0.066
8	POSI: ISL	0.042	0.105	0.398	0.691	0.397
9	POSI: CRS	0.416	0.146	2.842	0.004**	2.842
10	POSI: JST	-0.153	0.134	-1.139	0.255	1.139

R-square = 0.513, Adjusted R-square = 0.504, F-statistic = 38.26, p -value < 0.000***

* p < 0.05, ** p < 0.01, *** p < 0.000, POSI: Position (Operational or Managerial)

As part of developing the most suitable prediction model to evaluate and predict the level of burnout among workers, the full model was stepped wise in both forward and backward

directions (Galvao et al., 2008). A stepwise moderated multiple regression was devised. As reported in Table 5, there were only 7 predictors left in the equation. One of them was the interaction between position and career satisfaction. The entire function was significant ($F=57.34$, p -value < 0.000). The series of predictors could explain the amount of variance in burnout by 51.11 percent. All predictors were statistically significant, including interaction. The most important predictor of the level of burnout was still work-family conflict with a variable importance of 7.433 and the least important one, the interaction between position and career satisfaction with a variable importance of 2.914.

Table 5: Stepping Wise a Moderated Multiple Regression Model

Number	Term	Estimate	Standard Error	t value	p-value	Variable Importance
1	Intercept	3.367	0.312	10.769	0.000***	-
2	WFC	0.347	0.046	7.433	0.000***	7.433
3	POSI	-1.135	0.372	-3.050	0.002**	3.049
4	ISL	0.272	0.052	5.181	0.000***	5.181
5	CRS	-0.285	0.082	-3.487	0.000***	3.487
6	JST	-0.341	0.066	-5.111	0.000***	5.111
7	POSI: CRS	0.287	0.098	2.915	0.003**	2.914
R-square = 0.511, Adjusted R-square = 0.502, F-statistic = 57.34, p -value < 0.000 ***						
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.000$, POSI: Position (Operational or Managerial)						

The final stage in developing a model by training dataset was to compare any differences from both the full and reduced models. Both models were put into a Chi-squared test of difference. The result showed that there was no significant difference between the two models. Therefore, the reduced model was more suitable for further use and considered more parsimonious.

Table 6: Comparison of the Full and Reduced Models

Full Model	BOT=3.370+0.350(WFC)-1.151(POSI)+0.252(ISL)-0.344(CRS)-0.271(JST)-0.006(POSI*WFC)+0.042(POSI*ISL)+0.416(POSI*CRS)-0.153(POSI*JST)				
Stepwise Model	BOT=3.367+0.347(WFC)-1.135(POSI)+0.272(ISL)-0.285(CRS)-0.341(JST)+0.287(POSI*CRS)				
Model	Residual df	RSS	df	Sum of Square	p-value
1	326	165.76	-	-	-
2	329	166.62	-3	-0.860	0.638

After selecting the most suitable and parsimonious of the two models, a model diagnosis was conducted by checking autocorrelation and heteroscedasticity. As shown in Table 7, the Durbin-Watson Test of Autocorrelation revealed a non-significance, indicating that there was no autocorrelation problem.

Table 7: Durbin Watson Test of Autocorrelation

Test Statistics	Autocorrelation	D-W Statistic	p-value
Durbin-Watson test of autocorrelation	0.104	1.786	0.052

Unlike autocorrelation, heteroscedasticity, however, was found to be a problem in the regression model as indicated by the non-constant variance score test used to check the amount of residual variance and whether they were dispersed evenly along the fitted value. Table 8

below shows non-significance, which means that the number of residual variances were dispersed evenly along the fitted value.

Table 8: Non-Constant Variance Score Test of Heteroscedasticity

Test Statistics	df	Chi-squared	p-value
Non-constant Variance Score Test	1	1.940	0.163

In accordance with the machine learning concept, after the most suitable regression model was fitted and diagnosed, it was tested by an unseen dataset or testing set. To evaluate the prediction performance of the model in this study, 20 percent of the main dataset were randomized and kept as a testing set. In a regression model predicting a continuous value, four metrics are used to evaluate a prediction performance (mean absolute error, mean square error, root mean square error, and r-square) with scores ranging from 0 to 1. Whereas the first three metrics were considered to be an absolute measure of fit as the lower the number, the better the absolute fit, r-square was a relative measure of fit as the higher the number, the better the relative fit. These fit measures as shown in Table 9 indicate a moderate level of generalization of the prediction model.

Table 9: Prediction Evaluation Performance Metrics

Mean Absolute Error (MAE)	Mean Square Error (MSE)	Root Mean Square Error (RMSE)	R-square (based on unseen dataset)
0.570	0.538	0.733	0.395

The burnout prediction model can be visualized in Figure 1.

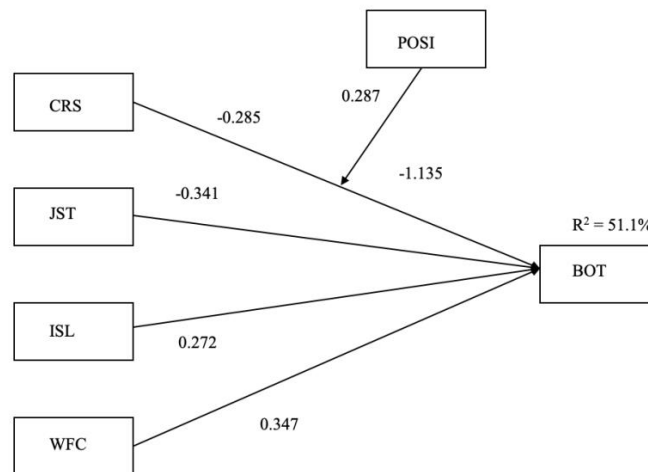


Figure 1: Moderated Multiple Regression Model in this Study (WFC: Work-Family Conflict; ISL: Isolation; CRS: Career Satisfaction; JST: Job Satisfaction; POSI: Position; BOT: Burnout)

As to the moderated multiple regression model, the interaction between career satisfaction and position was significant as represented in Figure 2, which shows the interaction of job position with career satisfaction (CRS) and burnout (BOT). Operational level staff was coded as 0 (solid line) and managerial officer coded as 1 (dotted line). The interaction between job position and career satisfaction was significant, which is why the operational level and managerial level lines crossed each other (Hayes, 2017).

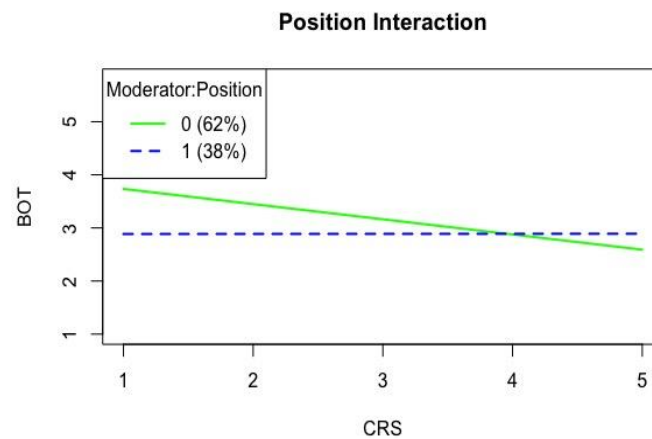


Figure 2: Job Position Interaction Effect in This Model
(created by the author for this study)

5. Discussion of Results

As mentioned earlier, the moderated multiple regression model was developed by training dataset and indicated a well-fitted with empirical data. All predictor coefficients in this model were statistically significant and no problem was found with the general assumption. Work-family conflict was determined to be the most influential factor affecting burnout. When tested on an unseen dataset, the model displayed a moderate level of generalization as shown by the prediction evaluation performance of the four metrics discussed above. This indicates that this model could be used to predict a level of burnout within the same context. The unique selling point of this study is the interaction effect of job position. Given the interaction effect indicated by the model, for operational level staff, the higher the level of career satisfaction, the lower the level of burnout. For managerial staff, job position had no effect on the relationship between career satisfaction and burnout.

As the results show, job satisfaction and career satisfaction negatively affect burnout. Thus, a high level of these two predictors could prevent employees from being burnout. Companies should provide good work-related resources to employees, such as career development plans or fair support so as to build morale and boost job and career satisfaction. This would benefit the firm as when satisfied with their job and their career, employees tend to perform their job better. Isolation and work-family conflict positively affected burnout. Those negative predictors were related directly to burnout. Isolation problems could be mitigated by work-related social support even in the case of employees working remotely from teammates as this could be done for example via teleconference. For one, this would make employees feel like they were still a part of a team.

As to work-family conflict, companies should consider the possibility of putting into place a flexible working schedule in order to allow employees to manage both their work and their personal lives on their own. The interaction effect of position on career satisfaction and burnout sheds light on the mystery regarding operational level employees' feelings toward work. As this study shows, the more satisfied with their careers operational level staff are, the less likely they are to feel 'burned out'. This finding suggests that companies should ensure that they instill pride, reward good performances, and provide sound, realistic and attractive career plans at every operational level. For example, managers should praise employees when they do good work and make them realize that company is proud of their career and possibly reward them with a bonus or a promotion. If the front-line staff feels proud to be part of the firm, the level

of burnout at operational level staff may be reduced. Finally, in this study, all hypotheses were accepted. They are summarized in Table 10.

Table 10: Summary of Hypothesis Testing Results

Hypothesis	Result	Explanation
H1	Accepted	The higher the level of work-family conflict, the higher the burnout level.
H2	Accepted	The higher the level of isolation, the higher the burnout level.
H3	Accepted	The higher the level of career satisfaction, the lower the burnout level.
H4	Accepted	The higher the level of job satisfaction, the lower the burnout level.
H5	Accepted	Managerial officers suffer less from burnout as compared to other employees.

6. Conclusion and Recommendations

Of all the factors discussed, work-family conflict affects a worker's level of burnout more than any other factors. This finding is consistent with the conclusion of a previous study conducted by Selvarajan, Singh, Cloninger, and Misra (2019) in which it was found that work-family conflict is closely related to employee burnout. Employees' stress and burnout have a direct impact on an organization as they significantly reduce one's job performance. They can cause serious health problems to employees (both mental and physical) and ultimately lead to an intention to leave the organization, rendering all previous company's staff training investment irrelevant and a loss to the organization. Another factor contributing to increasing the level of burnout in this study is work-related isolation. It had a negative impact on employee burnout. On the other hand, unsurprisingly, it was found that career satisfaction and job satisfaction did not negatively affect burnout. When people feel satisfy with their job and career, there is a small probability that they will feel burnout from their occupation (Hoff, Carabetta, & Collinson, 2019). It is well documented that managerial level officers have a lower level of burnout compared to operational staff (Lyness & Judiesch, 2001).

This research also determined that if operational level employees had a high level of career satisfaction, there would be a lower level of burnout. At the managerial level, however, employee position had no effect on the relation between career satisfaction and burnout. An organization should therefore focus on increasing career satisfaction among operational level staff. The following are suggestions for further studies, which are based on the limitations of this study. Firstly, this research used a quantitative methodology. In order to go deeper down into each employee's mind about burnout, a qualitative research should be done so as to gain more insights regarding burnout. Secondly, this is a cross-sectional study that gives a snap shot at a present time. In order to develop a more profound understanding of all the issues involved in a burnout situation, a longitudinal study should be done.

References

- D'Souza, R. M., Strazdins, L., Broom, D. H., Rodgers, B., & Berry, H. L. (2006). Work demands, job insecurity and sickness absence from work. How productive is the new, flexible labour force? *Australian and New Zealand Journal of Public Health*, 30(3), 205–212.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499.
- Federici, R. A. (2013). Principals' self-efficacy: Relations with job autonomy, job satisfaction, and contextual constraints. *European Journal of Psychology of Education*, 28(1), 73–86.
- Galvao, R. K. H., Araujo, M. C. U., Fragoso, W. D., Silva, E. C., Jose, G. E., Soares, S. F. C., & Paiva, H. M. (2008). A variable elimination method to improve the parsimony of MLR models using the successive projections algorithm. *Chemometrics and Intelligent*

- Laboratory Systems*, 92(1), 83–91.
- Golden, T. D., Veiga, J. F., & Dino, R. N. (2008). The impact of professional isolation on teleworker job performance and turnover intentions: Does time spent teleworking, interacting face-to-face, or having access to communication-enhancing technology matter? *Journal of Applied Psychology*, 93(6), 1412.
- Greenhaus, J. H., Parasuraman, S., & Wormley, W. M. (1990). Effects of race on organizational experiences, job performance evaluations, and career outcomes. *Academy of Management Journal*, 33(1), 64–86.
- Hawksley, B. (2007). Work-related stress, work/life balance and personal life coaching. *British Journal of Community Nursing*, 12(1), 34–36.
- Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford publications.
- Hoff, T., Carabetta, S., & Collinson, G. E. (2019). Satisfaction, burnout, and turnover among nurse practitioners and physician assistants: a review of the empirical literature. *Medical Care Research and Review*, 76(1), 3–31.
- Hunter, E. M., Clark, M. A., & Carlson, D. S. (2019). Violating work-family boundaries: Reactions to interruptions at work and home. *Journal of Management*, 45(3), 1284–1308.
- Iaffaldano, M. T., & Muchinsky, P. M. (1985). Job satisfaction and job performance: A meta-analysis. *Psychological Bulletin*, 97(2), 251.
- Inauen, A., Jenny, G. J., & Bauer, G. F. (2015). Discriminating Five Forms of Job Satisfaction: Investigating Their Relevance for Occupational Health Research and Practice. *Occupational Health Research and Practice. Psychology*, 6, 138–150. <https://doi.org/10.4236/psych.2015.62013>
- Lesener, T., Gusy, B., & Wolter, C. (2019). The job demands-resources model: A meta-analytic review of longitudinal studies. *Work & Stress*, 33(1), 76–103.
- Locke, E. A. (1969). What is job satisfaction? *Organizational Behavior and Human Performance*, 4(4), 309–336.
- Luthans, F., Avey, J. B., Avolio, B. J., & Peterson, S. J. (2010). The development and resulting performance impact of positive psychological capital. *Human Resource Development Quarterly*, 21(1), 41–67.
- Lyness, K. S., & Judiesch, M. K. (2001). Are female managers quitters? The relationships of gender, promotions, and family leaves of absence to voluntary turnover. *Journal of Applied Psychology*, 86(6), 1167–1178. <https://doi.org/10.1037/0021-9010.86.6.1167>
- Maslach, C., Jackson, S. E., Leiter, M. P., Schaufeli, W. B., & Schwab, R. L. (1986). *Maslach burnout inventory* (Vol. 21). Consulting psychologists press Palo Alto, CA.
- Netemeyer, R. G., Boles, J. S., & McMurrian, R. (1996). Development and validation of work–family conflict and family–work conflict scales. *Journal of Applied Psychology*, 81(4), 400.
- Rastogi, M., Karatepe, O. M., & Mehmetoglu, M. (2019). Linking resources to career satisfaction through work–family enrichment. *The Service Industries Journal*, 39(11–12), 855–876.
- Schrempft, S., Jackowska, M., Hamer, M., & Steptoe, A. (2019). Associations between social isolation, loneliness, and objective physical activity in older men and women. *BMC Public Health*, 19(1), 74.
- Selvarajan, T. T., Singh, B., Cloninger, P. A., & Misra, K. (2019). Work–family conflict and counterproductive work behaviors: Moderating role of regulatory focus and mediating role of affect. *Organization Management Journal*, 16(1), 42–54.
- Simha, A., Elloy, D. F., & Huang, H. C. (2014). The moderated relationship between job burnout and organizational cynicism. *Management Decision*, 52(3), 482–504. <https://doi.org/10.1108/MD-08-2013-0422>

- Spurk, D., Abele, A. E., & Volmer, J. (2015). The Career Satisfaction Scale in Context: A Test for Measurement Invariance Across Four Occupational Groups. *Journal of Career Assessment*, 23(2), 191–209.
- R Core Team (2019, November 15). R: A language and environment for statistical computing. Retrieved November 15, 2019, from <http://www.R-project.org/>
- Tremblay, D.-G., & Genin, E. (2008). Money, work–life balance and autonomy: why do IT professionals choose self-employment? *Applied Research in Quality of Life*, 3(3), 161–179.
- Weiss, D. J., Dawis, R. V, & England, G. W. (1967). Manual for the Minnesota satisfaction questionnaire. *Minnesota Studies in Vocational Rehabilitation*, 22 *Bulletin*, 45, 487-495
- Yu, S., Liu, C., & Ren, H. Y. X. Y. J. (2019). Work-Related Identity Discrepancy and Employee Turnover Intention: The Mediation Effect of Job Satisfaction. *International Journal of Business and Social Science*, 10(11), 30-37.