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Do resilience and work engagement enhance distribution manager performance? A study of the automotive sector

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Abstract

Purpose: The purpose of this study is to examine the influence of resilience and work engagement on performance of managers in the automotive sector in Morocco. It analyses the mediating effect of work engagement between resilience and manager performance. Though earlier studies have focused on the effect of resilience on employee performance and work engagement, none has looked at the mediating role of work engagement in this context. Thus, the present paper attempts to fill this literature gap. **Research design, data and methodology:** A confirmatory survey was conducted among a sample of 196 employees of automobile companies in Tangier-Morocco. A structural equation analysis using SmartPLS was performed while Preacher and Hayes (2008) method was used to analyze the mediation effect. **Results:** a) Manager resilience has a positive influence on work engagement, which further influences their performance; b) there is a statistically insignificant relationship between resilience and manager performance; c) Structural equation modelling analysis shows that work engagement partially mediates the relationship between resilience and manager performance. **Conclusion:** Theoretical contributions, practical implications, and future research directions are discussed.

Keywords : Resilience, Manager Performance, Work Engagement, SmartPLS, Structural Equation Modeling.

JEL Classification Code : E44, F31, F37, G15

1. Introduction

In Morocco, the automotive sector has undergone considerable expansion in recent years. With a 31% growth rate between 2011 and 2018, it became the most exporting sector, and Morocco has become the first automobile producer in Africa. Many large companies have chosen to install in Morocco, for example, several Korean corporations like “Hands Corporation” preferred to invest in Morocco, it invested 450 million dollars to build a new factory in Tangiers, and it planned to hire more than 1600

employees. For this reason, the automotive sector has become the main employer sector in Morocco.

Stressful situations. They are forced to cope with the demands of customers who have become too demanding and continually adapting to the possible hazards of the market. From this perspective, the success of a company depends not only on the ability of its employees to be adaptive, but also on the ability of its managers to cope with adversity.

In this context, the resilience of managers is one of the key success factors of the company in times of crisis (Wall & Bellamy, 2019). It is defined as a personality trait of managers that enables them to overcome traumatic events by making effective use of their psychological resources (Gupta & Sharma, 2018). It reflects their ability to bounce back from turbulent and discontinuous events (Yang, Sun, & Park, 2015). In this sense, companies are therefore compelled to foster their managers' potential for resilience. This is the case of certain large French companies such as Renault, EADS or L'Oréal, which have set up a network for

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exchanging painful experiences among their employees so that they do not happen again (Cusin, 2008). All of this is intended to foster commitment (Maria Jakubik, 2016) and achieve a high level of manager performance (Robertson, Cooper, & Sarkar, 2015), which in turn contributes to the company's growth (Fisher, Maritz, & Lobo, 2016 ;Wall & Bellamy, 2019).

According to positive psychology and positive organizational behavior theory, the resilient manager reacts to negative events by recognizing and accepting their impact, for that, the manager will tend to invest more time, energy, and resources to "bounce back" to equilibrium. In this sense, a resilient manager has the skills and abilities to engage and to perform better in their current and future jobs. Similarly, Luthans, Lebsack, & Lebsack (2008) suggest that resilience plays an important role in managing "positive stress" and that resilience can be characterized as coping with both negative and positive events, which allows the manager to be more confident about taking on new challenges and therefore to be more engaged at work and more performing.

Indeed, the literature highlighting the relationship between work engagement and manager performance on the one hand, and the relationship between resilience and work engagement on the other, is abundant and significant (Malik & Garg, 2017, Dai, Zhuang, & Huan, 2019). However, only a limited number of studies were found in the literature, which investigated the confirmative connection between resilience and manager performance (Kappagoda, Othman, Fithri, & De Alwis, 2014; Cooper, Wang, Bartram, & Lee, 2018; Walpita & Arambepola, 2020). Nevertheless, this research has investigated the role of resilience as one of the four sub-elements of psychological capital (efficacy optimism, hope, and resilience) and as not a separate autonomous variable, which does not give us a clear picture of how resilience influences managerial performance. Consequently, this relationship needs to be further studied, while taking into account other variables.

In their systematic review, Robertson et al. (2015) found that resilience can enhance psychosocial functioning to improve performance. Similarly, Alessandri, Consiglio, Luthans, and Borgogni (2018), noted that the relationship between personal resources and valued behavior outcomes is indirect and is mediated by processes like work engagement. In this sense, Kašpárková, Vaculík, Procházka, and Schaufeli (2018) was introduced job satisfaction and work engagement as two mediators between resilience and job performance. For this study, the role of engagement as a mediator is still not very clear, because the total indirect effect is shared between satisfaction and engagement, also the presence of satisfaction can impact the mediating role of engagement in this relationship. Consequently, if we need to understand the role of engagement in this relationship,

we need to consider only work engagement as a mediator so that the common variance will not be shared with another variable.

Nonetheless, the consideration of the mediating role of engagement in this relationship remains, to our knowledge, under-explored. Realizing this gap in existing research, this study aims to answer the following questions: how and to what extent do the resilience can impact manager performance through work engagement? How does resilience affect work engagement and manager performance? Most existing studies have been conducted in the context of developed countries (North America, Europe, Japan, Korea), so, there is a need for investigating PsyCap especially manager resilience in other cultural settings (Nguyen & Nguyen, 2012; Choi & Lee, 2014). Particularly, in a sector under-explored like the automotive sector and in emerging economy such as Morocco. This study investigates these research questions with data collected from Moroccan firms in the free zone in Tangier.

The rest of the paper is organized as follows, Section 1 begins with a review of the literature to highlight the main concepts used and to provide a theoretical basis for the various hypotheses formulated. Section 2 presents the methodology of the research. Section 3 presents the main results obtained and a discussion of these results. Section 3 discusses the key findings and implications, as well as future research directions.

2. Literature Review and Conceptual Framework

2.1. Resilience

In the social sciences, the concept of resilience has been borrowed from the hard sciences. Its physiological meaning has been combined with psychological characteristics related to human beings. If in the first case refers to the internal capacity of a material to return to its initial shape after receiving a shock, in the second case, it goes beyond this purely static nature to include the psychological dimension of the individual. To this end, Anderson, Harris, Werner, and Gallistel, (1959) defined it as a biological, psycho-affective, social, and cultural process that allows for a new development after a physical trauma. However, this definition is purely related to the health context in which the individual may be subject to a physical accident.

However, in the business context where there is no such notion of physical trauma, the employee is exposed to disruptive events. They are expected to manage stressful work events. They are expected to deal with situations of overload, lack of resources and support, emotional and physical exhaustion, and work-life conflict. An employee

that possesses resilience's quality will be able to cope with these challenges. This is also the case for the manager who, given the nature of his position of high responsibility, is faced with conditions in which he would have to rely more on psychological resources than on external support to anticipate troubling events.

As a result, some researchers have defined managerial resilience as a state-like variable (Luthans, 2002; Britt, Shen, Sinclair, Grossman, & Klieger, 2016), it can be acquired through practice. It refers to the malleable positive human potential that can be managed in the context of the company or that can be developed by oneself through training programs. According to Masten (2001, p. 235) "resilience does not come from rare and special qualities, but from the everyday magic of ordinary, normative human resources". Based on this definition, companies find themselves obliged to take a more positive and proactive approach for managing their human resources by developing the psychological capital of their managers through training and motivation. In this case, resilience can be seen as a process of trial and error that, through learning, managers will be able to avoid repeating the same mistakes, so that, they will be prepared to meet future challenges.

Alternatively, other researchers consider resilience as a stable personality trait, for them, a manager's resilience is his ability to bounce back the face of adversity, uncertainty, conflict, and failure (Luthans, 2002; Kotzé & Nel, 2013). However, some other researchers have extended this definition, for them, resilience is not only the ability to recover from a negative experience, but also is the capacity to maintain a stable psychological position in a volatile situation (Seery, 2011; Varshney & Varshney, 2017). In this sense, a manager with a low resilience suffers more from psychological problems after an incident than a manager with high resilience (Varshney & Varshney, 2017). This is why resilient managers can be useful for their organization due to their ability to work through challenges and to use a negative experience to improve their performance in the future. In the continuance of this paper, we will follow this increasingly established conceptualization of resilience, i.e. we look resilience as a stable personality trait that enables the manager to cope with adversity.

2.2. Resilience Effect on Work Engagement

In recent years, work engagement has become more and more important for both scholars and practitioners (Motyka, 2018). Several studies have been conducted in this context for explaining these positive outcomes on employees' attitudes, employees' performance, and commitment (Malik & Garg, 2017; Alessandri et al., 2018). For example, Warr and Inceoglu, (2012), have highlighted the positive influence of work engagement on employee satisfaction.

Also, Rich, Lepine, and Crawford (2010); Christian, Garza, and Slaughter (2011), have demonstrated that work engagement has a positive effect on citizenship behavior and organizational performance.

Indeed, despite the numerous researches conducted in this perspective, researchers have not been able to find a single definition of work engagement. Most of the definitions used in the literature are based on the conceptualization of organizational commitment of Meyer and Allen, (1997). According to these authors, organizational commitment is the degree of emotional attachment between the employee and the organization. This definition has been extended by several researchers to define work engagement. Byrne, (2014, p.17) defines work engagement as a combination of cognitive, emotional and sentimental abilities that supports an employee to do his job successfully. Similarly, Alfes, Truss, Soane, Rees, and Gatenby (2013) emphasize the emotional and cognitive effort of an employee for conceptualizing work engagement. Also, Schaufeli, Salanova, González-Romá, and Bakker (2002, p.74) share the same idea, they defines work engagement as "a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption". Based on this conceptualization, an engaged employee will be more attached and involved in its work. He will exhibit energy and enthusiasm, to become a performant employee. Thus, we can adopt this definition, also, to define the work engagement for managers. A committed manager is more likely to use his personal resources, such as resilience, to become more engrossed in his work.

In several academic studies, resilience has been identified as a predictor of work engagement (Luthans et al., 2008; Othman & Nasurdin, 2011). Resilient employees are often viewed as engaged employees (Bande, Fernández-Ferrín, Varela, & Jaramillo, 2015; Wang, Li, & Li, 2017), because not only do they confront challenges and stress in the workplace, but they also have additional skills that enable them to adapt successfully to any difficult conditions in the workplace. According to Medhurst and Albrecht (2011), when a resilient salesperson is confronted with a difficult situation, he would be willing to invest more effort and energy to get the job done. This has been empirically tested in the work of Meintjes and Hofmeyr, (2018). These authors found a positive and significant relationship between employee resilience and work engagement in the pharmaceutical context in South Africa.

Based on this, we can formulate our hypothesis as follows:

H1: Resilience positively and significantly influence work engagement.

2.3. Work Engagement Effect on Manager Performance

The concept of employee performance has been used in several disciplinary fields such as marketing, management, human resources management, and industrial psychology. Its definition differs from one field to another, but in general, the conceptualizations used in the literature can be seen by two ways (Sonnentag, Volmer, & Sychala, 2008).

A group of researchers conceptualizes employee performance as a process that relates to the actions of people in accomplishing their work (Sonnentag et al., 2008). This conceptualization refers to the behavioral aspect of performance. In this case, the focus is on the action in itself, which is the only one that can be measured and evaluated. In this way, the employee's performance can be assessed in terms of his capability to perform his job more effectively. On the other hand, another group of researchers treats it as a result of individual behavior (Sonnentag et al., 2008). It refers to actions or behaviors under the control of the individual, which contribute to the organization's objectives and which can be measured through the individual's level of competence (Saoussany, 2018). For our research, we support the conceptualization of employee performance as an employee result. According to Anitha (2014), employee performance indicates the financial or non-financial results of the employee that positively influence the performance of the organization and subsequently contribute to the success of the company. So that, we can extend this definition to talk about managers' performance. For us, a high-performing manager is one who achieves financial and non-financial results and contributes to the success of his organization.

Indeed, various studies demonstrate that an important key for improving employee performance is to focus on promoting their work engagement ((Bakker & Leiter, 2010; Anitha, 2014; Ismail, Iqbal, & Nasr, 2019). These studies have shown that an engaged employee is willing to give more time and energy to succeed in their job compared to an unengaged employee. This is the case of the work of Ali, Sabir, and Mehreen (2019), who conducted an empirical study of a sample of 355 employees in the textile industry in China. They concluded that the more committed the employee is to his or her work, the better he or she performs. At the same time, Jakubik and Vakkuri (2015) showed that engaged employees perform better because they feel motivated and satisfied and are willing to work harder and longer for their organizations, making them more productive, more profitable and more successful.

However, as the impact of work engagement on employee performance has already been demonstrated in these previous studies, this study aimed to investigate the strength of the impact of managers' work engagement in the

automotive industry on their performance.

Based on this finding, we can formulate our hypothesis as follows:

H2: work engagement has a positive and significant effect on manager performance.

2.4. Resilience Effect on Employee Performance

Several authors have suggested that resilience is a personal resource that should be developed. Companies should make efforts and energy for shaping the resilience of their employees. According to the Positive Organization Behaviour theory, human psychological capital must be used and developed in the workplace. For Luthans (2002a, p. 59) "the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today's workplace." Resilience is one key to psychological capacities that need to be managed for increasing the manager performance in the workplace.

Following Avey, Reichard, Luthans, and Mhatre (2011) and Cooke, Cooper, Bartram, Wang, and Mei (2019), a resilient manager will be more motivated to spend more time and energy on his work, which contributes to its performance. This is especially true because a resilient manager can deal successfully with stressful, difficult situations and bounce back from challenges, which allows them to display their talents and to be more powerful and inventive. According to the study by Cooke et al. (2019), resilience can predict employee performance in the banking sector in China.

This argument does not only apply to the Western and Chinese context, but we believe that this argument can also be applied to the automotive sector in Morocco.

Based on this finding, we can formulate our hypothesis as follows:

H3: The resilience of the manager positively and significantly influences his/her performance.

2.5. Mediating Role of Commitment to Work

According to the literature review, the resilient employee is too attached and involved in his work and willing to do his best to make it succeed. Work engagement results from the employee's ability to mobilize these psychological resources to achieve a high level of performance. According to, Alessandri et al. (2018), the relationship between personal resources and valued behavior outcomes is indirect and is mediated by processes

like work engagement. Similarly, Bhatti, Hussain, and Al Daghan, (2018), noted that, the psychological resources available to the employee contribute to his performance through its engagement. In this sense, positive emotions and resilience allow the manager to focus on his work and to be more motivated to achieve a high level of performance. In other words, resilience positively influences work engagement, which in turn contributes to the manager's performance.

On the basis of this reasoning, we can formulate our mediation hypothesis as follows:

H4: Resilience positively and significantly influences manager's performance through work engagement.

This second part deals with the choice and description of the sample studied, the development of the questionnaire and also the statistical method chosen.

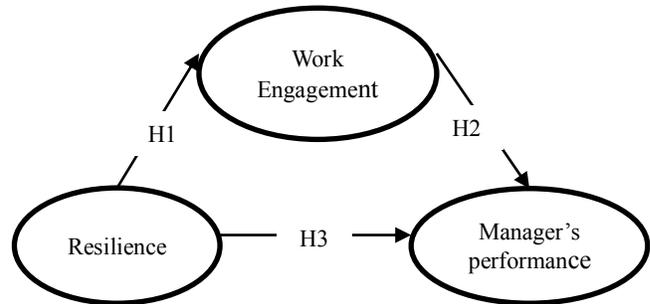


Figure 1: Conceptual research model

3. Research Model and Methodology

3.1. Research Model

Based on these different hypotheses, we can propose the conceptual model of our research (Figure 1).

3.2. Measurement of Variable

Resilience was measured with the 6-item resilience scale developed by Block and Kremen, (1996) and Niitsu, Houfek, Barron, Stoltenberg, Kupzyk, and Rice (2017).

Table 1: Operational Definition and Measurement Factors of Variables

No	Constructs	Encode	Scales	Source
1	Resilience	Res1	I tend to bounce back quickly after hard times	Block and Kremen, (1996) et Niitsu <i>et al.</i> , (2017)
2		Res2	I have a hard time making it through stressful events (R)	
3		Res3	It does not take me long to recover from a stressful event	
4		Res4	It is hard for me to snap back when something bad happens (R)	
5		Res5	I usually come through difficult times with little trouble	
6		Res6	I tend to take a long time to get over set-backs in my life (R)	
7	Work Commitment	Eng1	At my work, I feel bursting with energy	Schaufeli <i>et al.</i> , (2002, 2017)
8		Eng2	I am enthusiastic about my job	
9		Eng3	I am immersed in my work	
10	Manager performance	Per1	My performance is better than that of my colleagues with similar qualifications	Bishop (1987)
11		Per2	I am satisfied with my performance because it's mostly good.	
12		Per3	My performance is better than that of bankers with similar qualifications in other banks.	

All items are rated on a Likert scale of 1 to 5 from "strongly agree" to "strongly disagree". The questionnaire also contains a section for socio-demographic data. Also, since most of the measurement scales used were taken from the Anglo-Saxon literature, it was also very important to translate them. To do so, we opted for the "blind parallel" method proposed by Usunier, (1992). To do this, two teachers translated all the items separately from English into French. Then, the different translations were compared to arrive at a consensus translation at the end. Then, we opted for a test of our questionnaire with a group of 7

doctoral students. Thanks to their feedback, we were able to make improvements, simplifications and modifications to certain terms and questions that were difficult to understand. In the end, we were able to get the final version of our questionnaire.

3.3. Data Collection and Samples

A convenience sample of 196 respondents has participated in this research. Convenience sampling is a commonly used data collection method that gives

researchers more rapid access to data in comparison to random sampling (Ismail, Iqbal, & Nasr, 2019). In the Moroccan context, access to conventional data is known to be very hard (Amine, 2012). A culture of confidentiality predominates among many managers regarding the sharing of any type of business information with researchers or outsiders. Therefore, the convenience sample is a reliable alternative.

Our sample is made up of managers operating in the automotive sector in Tangier-Morocco for three months, starting from January up to March in 2020. The administration of the questionnaire was done online. This mode allowed us to save time, the financial cost was almost nil, and a control of the omitted values. Amongst 230 respondents, available questionnaires were 196, and then, its respondent rate reached to 85.41 % which is acceptable. A description of the characteristics of our respondents is presented in the following table:

Table 2: Description of the Respondents (N=196)

Variables	Character	N	%
Gender	Male	141	71.94
	Female	55	28.06
Age level	25-40	94	47.95
	41-60	83	42.35
	Over 60	19	9.70
Seniority	≤ 1 year	15	7.65
	1-5	86	43.87
	5-10	73	37.25
	≤10 years	22	11.23
Occupied position	Senior Manager	56	28.57
	Human resources	37	18.87
	Manager Engineer	1.3	52.55

3.4. Definition of the Statistical Analysis Method

For the statistical analysis of our model, we opted for structural equation modelling (SEM). For this, we chose modelling by the Partial least squares (PLS) approach by Smartpls software. This method is more suitable for small sample sizes and the data do not need to meet certain normal distribution requirements (Hair, 2017), also is better suited for theory development, prediction, and predictive causal analysis in complex situations and weak theoretical information (Balambo, Baz, & Lazaar, 2015). For these reasons, PLS-SEM was deemed better suited to the objectives of this study than CB-SEM, which is more

commonly used when the goal is the comparison of alternative theories.

4. Results

4.1. Common Method Biases

Given that the data were collected from a single source of respondents, it was necessary to evaluate effectively the common method bias. Procedural and statistical methods were used to check the potential common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). For the procedural method, the anonymity, confidentiality, and distribution of variables in the questionnaire were respected. At the same time, a statistical analysis method was used. This technique has been proposed by Kock (2015), who recommends a complete evaluation of the collinearity (VIFs) of the PLS model.

Table 3: Full collinearity VIFs

Variables	Res	W. E	PERF
Res		1.011	1.031
W.E	1.001		1.031
PERF	1.051	1.01	

Kock (2015) states that when a (VIFs) achieves a value below 3.3, this indicates that there is no common method bias problem. As shown in Table 6 below, the results of our test show that all values of (IFVs) are below 3.3, so our model can be considered free of common method bias.

4.2. Exploratory factor analysis

Since all of the measures used in our questionnaire come from the English-language literature, we consider it appropriate to use exploratory factor analysis to study the properties of each of the measurement scales. For this purpose, we decided to use the Principal Component Analysis (PCA). With this method we tried to extract the main factorial axes and to retain only those variables that have a factorial contribution greater than 0.5. To evaluate the reliability of each construct, we used Cronbach's Alpha coefficient. A value greater than 0.7 is acceptable according to Nunnally (1978). However, before starting these steps, it was necessary to ensure first of all the factorability of the data. To do this, two statistical tests are possible: the Kaiser-Meyer-Olkin test and Bartlett's sphericity test. The first test must be greater than 0.6 and the second must tend towards the value zero.

The results obtained from SPSS 21 indicate that Bartlett's Sphericity test is significant for all factors. Also, the results show that the Kaiser-Meyer-Olkin Index (KMO) has a

value between 0.7 and 0.8 which is well above the acceptable level of 0.6. In addition, all factor loadings exceed 0.5 with the exception of item N°6 (Res6) for the resilience variable. This item has been removed and the

PCA has been renewed in an iterative manner. Thereafter, the Alpha Cronbach is significant for all constructions, which means that the reliability is verified (Nunnally & Bernstein, 1994).

Table 4: Results of the exploratory factor analysis

The constructs	Items	Factorability test	Variance	Loadings	Cronbach's alpha
Resilience	Res1 Res2 Res3 Res4 Res5	KMO: ,881 χ^2 : 604,080 df: 10 p: 0.00	86,332	,693 ,663 ,763 ,665 ,746	,959
Work engagement	Eng1 Eng2 Eng3	KMO: ,814 χ^2 : 164,207 df: 10 p: 0.00	72.311	.732 .744 .693	,825
Employee performance	Per1 Per2 Per3	KMO: ,712 χ^2 : 92,298 df: 3 p: 0.00	71,738	,827 ,644 ,680	,806

4.3. Confirmatory factor analysis

According to Fornell et al. (1988), in structural equation modelling, two steps are used for testing the conceptual model: testing the measurement model and testing the structural model.

4.3.1. Measurement model test

The first step in evaluating a reflective measurement model is to examine the indicator loadings. Loadings greater than 0.708 are recommended (Hair, Ringle, Gudergan, Fischer, Nitzl, & Menictas, 2018).

Table 5 : Reliability and validity analysis

Constructs	Items	Factor loadings	CR	AVE
Resilience	Res1	0.787	0.921	0.700
	Res2	0.818		
	Res3	0.906		
	Res4	0.761		
	Res5	0.899		
Work engagement	Eng1	0.875	0.886	0.722
	Eng2	0.843		
	Eng3	0.830		
Manager performance	Per1	0.872	0.877	0.705
	Per2	0.882		
	Per3	0.760		

According to our assessment of the indicator Loadings, all items have a loading above 0.708 (Table 4). That's

means, the construct explains more than 50 percent of the indicator's variance, thus providing acceptable item reliability. The second step is assessing internal consistency reliability, most often using Jöreskog's (1971) composite reliability. it must be greater than 0.7 (Hair, 2017), According to our assessment, all values of the composite reliability are above 0.70, providing evidence of the construct measures' internal consistency reliability (Table 4). The third step is to assess the convergent validity of each construct measure by average variance extracted (AVE).The minimum acceptable AVE is 0.50 or higher(Hair et al., 2018). According to our analyze, all AVE values are higher than the critical threshold value of 0.50, providing support for the measures' convergent validity.

The fourth step is to assess discriminant validity. We use a Heterotrait-Monotrait Ratio (HTMT). According to Henseler, Ringle, and Sarstedt (2015), when all indicators loadings are between 0.65 and 0.85, Fornell and Larcker (1981)criterion does not perform well. The HTMT is defined as the mean value of the item correlations across constructs (i.e., the heterotrait-hetero method correlations) relative to the (geometric) mean of the average correlations for the items measuring the same construct (i.e., the Monotrait-Hetero Method correlations)(Hair et al., 2018, p.14). For Henseler et al. (2015), discriminant validity will be verified if (HTMT) value is less than 0.85 when constructs are conceptually more distinct. As we show in table N°5 all HTMT values obtained for each construct, are below the predefined threshold of 0.85 indicating that discriminant validity is verified.

Table 6: Heterotrait-Monotrait ratio (HTMT) (total sample)

	Resilience	Work Engagement	Manager performance
Resilience			
Work Engagement	0.255		
Manager performance	0.191	0.353	

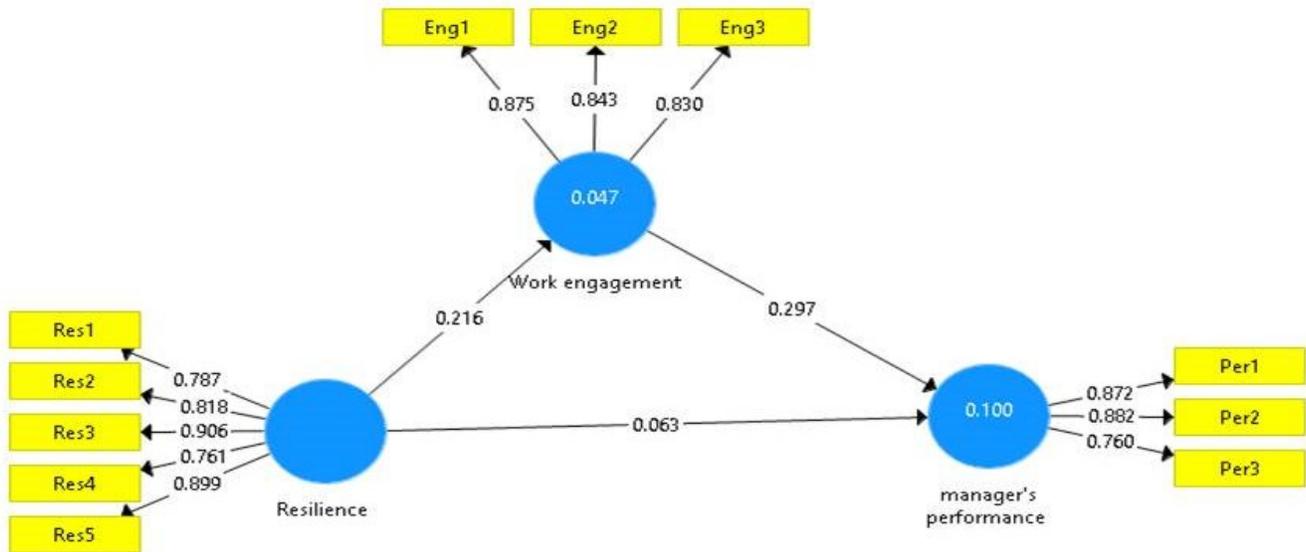


Figure 2: Measurement model test result

4.3.2. Hypothesis Verification

Partial least squares (PLS) were used to test the proposed framework. Hence, we firstly performed the variance inflation factor (VIF) to test the potential Multicollinearity. When the VIF values of the independent variables are less than 5, it means that the constructs haveno collinearity (Hair et al., 2013). The VIF of resilience and work engagement as the predictors of manager performance were 1.049 and 1,049. respectively. All VIF values are below the threshold of 5 (Hair et al., 2011). So collinearity among the predictors is not an issue. The next step is to examine the R2 value of the endogenous constructs. The R2 of the two endogenous variables; work engagement and manager performance were 0.047 and 0.100.which demonstrated weak predictive power(Henseler, Ringle, & Sinkovics, 2009). Also, predictive accuracy Q2of the model was assessed by using the blindfolding procedure(Wold, 1982). So, our result shows a value of 0.177 of Q²that’s mean the

endogenous variables in the model have predictive relevance (Tenenhaus, 1998). Moreover, Tenenhaus et al. (2005) suggested the use of the Goodness of Fit index (GoF). It represents the overall prediction quality of measurement and structural models and evaluates them jointly. If the GoF value is near to 1, the model will be considered performant (Wetzels, Odekerken-Schröder, & van Oppen, 2009).The GoF value calculated is 0.24, so that be considered satisfactory.

Finally, the structural model relationship was assessed using the bootstrapping function with 5000 subsamples based on the path coefficient according to Peterson and Brown, (2008). That allowed us to calculate the T-value and, P-value for all structural coefficients (path coefficient). A path coefficient is considered significant if T-value is greater than 1.64 (p<10%) and P-value is lower than 10%. Table 6 shows the results of all the paths.

Table 7: Hypothesis testing results

N°	Hypothèses	β	T-value	P-value	Decision
H1	Resilience → work engagement	0.297	2.532	0.089	Accepted*
H2	Work engagement → manager performance	0.316	2.038	0.009	Accepted
H3	Resilience → manager performance	0.063	0.393	0.700	Rejected

Note: a P ≤ 0.1, * P ≤ 0.05, ** P ≤ 0.01, *** P ≤ 0.001

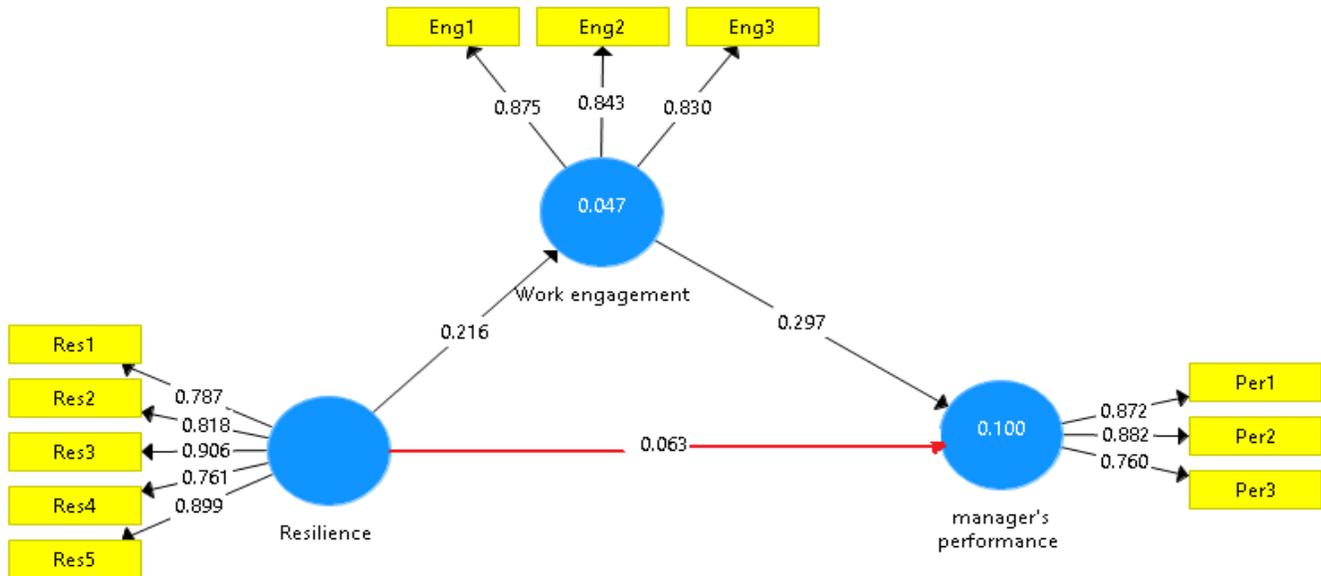


Figure 3: structural model test result

From the following table, **H1** was supported, even though the direct effect of resilience on work engagement was weak but significant, t-value = 2.532 is higher than 1.64 and P-value = 0.089 is lower than 5%. Also, **H2** was accepted, indicating a significant positive effect of work engagement on manager performance with a t-value = 2.532 is higher than 1.64 and P-value = 0.009 is lower than 5%. Also, **H3** was rejected because there is a positive but nonsignificant relationship between resilience and manager performance, t-value = 2.038 is lower than 1.64 and P-value is higher than 5%.

4.3.3. Analysis of mediation

Following the approach suggested by Preacher and Hayes (2008), the mediating effect of the work engagement will be verified. This will be done in two stages. Firstly, the indirect effect must be significant. Secondly, the confidence interval must not contain the value of zero.

Table 8 : Mediating effect tests

N°	Mediation Hypothesis	Std. Coefficient	T-value	P-value	Decision
H4	Resilience → work commitment → manager's performance	0.476	7.945	0.000	Significant

According to the results shown in Table 7, the indirect effect is significant. We can therefore conclude that the first condition of the mediation has been verified.

According to the table N°8, the confidence interval does not contain the value of zero, therefore, we conclude the existence of the mediation. Consequently, we can state that work engagement is a mediator between resilience and manager performance. In other words, the hypothesis of mediation is supported in the Moroccan context.

Table 9: The confidence interval

Path a	Path b	Indirect effect	STDEV	T-value	95%LL	95%UL
0.297	0.316	0.094	0.148	0.634	0.196	0.384

5. Discussion

This study aimed at exploring the relationship between resilience, work engagement and manager performance as well as exploring the mediating role of work engagement between resilience and manager performance. The primary results of this study revealed that there is a positive

influence of resilience on work engagement. This finding is in line with several studies such as Bande et al. (2015); Wang, Li, and Li (2017) which found a significant and positive correlation between resilience and work engagement, and that resilience predicts work engagement. This means an organization made up of resilient workers is better suited to our globalized world because they are more likely to overcome, analyze and respond appropriately to

the demands of the environment, thus promoting organizational performance.

In addition, our study showed that there is a positive and significant relationship between work engagement and manager performance. This result is coherent with the findings of Bakker and Leiter (2010), Anitha (2014), Ismail, Iqbal, and Nasr (2019) who empirically show that work engagement positively influences managers' performance. The higher a manager's engagement, the more likely it is that the He or she is likely to be able to provide excellent fieldwork. Our study reinforces the results of previous studies in this area and further investigates the work engagement-performance relationship in other areas than the western context.

Moreover, our study showed that there is a non significant relationship between resilience and manager performance. The result is contradictory to several research studies which state that resilience positively impacts employee performance (Luthans et al., 2005). This can be explained by the fact that this relationship must be moderated or mediated by other variables that will push resilient managers to become high performers.

Finally, our study confirmed that the relationship between resilience and manager performance is fully mediated by work engagement. Since the hypothesis N°3 has been rejected, and based on our research model, this result represents an important new finding which suggests that the link between resilience and manager performance may not be a simple and direct relationship. It indicates an indirect relationship in which resilience affects a manager's performance through work engagement. This means that a resilient manager can cope with adversity and focus his or her energy on productive ideas in the workplace, which in turn leads to improved performance.

5.1. Theoretical implications

The findings of the study contribute to the existing literature by presenting a comprehensive framework by illustrating the relationship among resilience, work engagement, and manager performance in the automotive sector of Morocco. This research also makes theoretical contributions of current literature on employee resilience and its implication at the workplace. It can be contributing to theory by studying employee resilience, that has not been investigated and tested empirically within an organizational context (Malik & Garg, 2017), particularly in the Moroccan automotive sector. By exploring the relationship between resilience, work engagement, and manager performance, this study fills a crucial paucity existing in the academic literature. This study offers a new perspective on the study of resilience as a personal trait embedded in the workplace. It highlights the virtuous behavior of the manager as a

determinant of performance through work engagement. Also, an important theoretical implication is to consider the role of work engagement as a unique mediator between resilience and managerial performance, which has not been studied before (Kašpárková et al., 2018). This study differs from previous work by studying the group of the manager in the automotive sector which is an under-explored sector in Morocco (Amine, 2012). Also, we have translated and adapted measurement scales that were developed in a foreign context and that have never been empirically tested in the Moroccan context. These scales have been the object of a "purification operation" to ensure their reliability, which subsequently makes them conform to the context of our study, so that they can be used in the future for similar work.

5.2. Practical implications

The findings of the current research also carry practical implications. It appears that companies in the automotive sector need to hire people through rigorous selection techniques that evaluate the personality, skills, and abilities of new managers to cope with adversity. In addition, organizations should treat manager engagement as a priority and actively take responsibility for promoting work engagement because doing so will increase manager performance and lead to better organizational effectiveness. The study recommends that human resource (HR) professionals need to invest in building a network to exchange painful experiences among their managers so that they do not happen again for developing resilience, in general, and to keep their managers more engaged and more performant.

5.3. Limitations of the study

This study has certain limitations. As the study sample is composed only of automotive companies located in Tangier, Morocco, future research is needed to generalize the results of this study to other industries operating in different parts of the country. A second limitation is that this study did not take into account demographic differences (age, gender, and education levels). Future research should integrate the demographic differences of work units in order to better understand the influence of contextual factors on personal resources. Third, we focused on resilience and work engagement as predictors of manager performance. It would be interesting to incorporate other variables into the model in the future. Finally, the sample size in this study is a constraint because it is a small sample. It will, therefore, be relevant in the future to do the same work, but this time targeting a larger sample that will later allow us to mobilize other statistical algorithms, such as LISREL, to shape our conceptual model.

In fact, the research perspectives are broad, and the subject of resilience in management science is still little explored, particularly with regard to the positive impact of resilience on organization performance.

References

- Alessandri, G., Consiglio, C., Luthans, F., & Borgogni, L. (2018). Testing a dynamic model of the impact of psychological capital on work engagement and job performance. *Career Development International*, 23(1), 33–47. <https://doi.org/10.1108/CDI-11-2016-0210>
- Alfes, K., Truss, C., Soane, E. C., Rees, C., & Gatenby, M. (2013). The relationship between line manager behavior, perceived HRM practices, and individual performance: Examining the mediating role of engagement. *Human Resource Management*, 52(6), 839–859.
- Ali, Z., Sabir, S., & Mehreen, A. (2019). Predicting engagement and performance through firm's internal factors: Evidence from textile sector. *Journal of Advances in Management Research*, 21, 32–37.
- Amine, B. (2012). *L'impact de la culture nationale sur la nature de l'intégration des Supply chains* (Ph.D Thesis).
- Anderson, J. E., Harris, D. B., Werner, E., & Gallistel, E. (1959). *A survey of children's adjustment over time*.
- Anitha, J. (2014). Determinants of employee engagement and their impact on employee performance. *International Journal of Productivity and Performance Management*, 63(3), 308–323. <https://doi.org/10.1108/IJPPM-01-2013-0008>
- Avey, J. B., Reichard, R. J., Luthans, F., & Mhatre, K. H. (2011). Meta-analysis of the impact of positive psychological capital on employee attitudes, behaviors, and performance. *Human Resource Development Quarterly*, 22(2), 127–152.
- Bakker, A. B., & Leiter, M. P. (2010). Work engagement: A handbook of essential theory and research. *Psychology press*.
- Balambo, M. A., Baz, J. E. L., & Lazaar, S. (2015). The analysis of structural equation models by PLS method in research on inter-organizational relationships: the case of research in Logistics. *The International Journal of Business Quantitative Economics and Applied Management Research*, 1(10), 17–27.
- Bande, B., Fernández-Ferrín, P., Varela, J. A., & Jaramillo, F. (2015). Emotions and salesperson propensity to leave: The effects of emotional intelligence and resilience. *Industrial Marketing Management*, 44, 142–153.
- Bhatti, M. A., Hussain, M. S., & Al Doghan, M. A. (2018). The role of personal and job resources in boosting nurses' work engagement and performance. *Global Business and Organizational Excellence*, 37(2), 32–40. <https://doi.org/10.1002/joe.21840>
- Bishop, J. (1987). The recognition and reward of employee performance. *Journal of Labor Economics*, 5(4, Part 2), S36–S56.
- Block, J., & Kremen, A. M. (1996). IQ and ego-resiliency: conceptual and empirical connections and separateness. *Journal of Personality and Social Psychology*, 70(2), 349.
- Britt, T. W., Shen, W., Sinclair, R. R., Grossman, M. R., & Klieger, D. M. (2016). How much do we really know about employee resilience? *Industrial and Organizational Psychology*, 9(2), 378–404.
- Byrne, Z. S. (2014). *Understanding employee engagement: Theory, research, and practice*. London, United Kingdom: Routledge.
- Choi, Y., & Lee, D. (2014). Psychological capital, big five traits, and employee outcomes. *Journal of Managerial Psychology*, 29(2), 122–140.
- Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011). Work engagement: A quantitative review and test of its relations with task and contextual performance. *Personnel Psychology*, 64(1), 89–136.
- Cooke, F. L., Cooper, B., Bartram, T., Wang, J., & Mei, H. (2019). Mapping the relationships between high-performance work systems, employee resilience and engagement: A study of the banking industry in China. *The International Journal of Human Resource Management*, 30(8), 1239–1260.
- Cooper, B., Wang, J., Bartram, T., & Lee, F. (2018). Well-being-oriented human resource management practices and employee performance in the Chinese banking sector: The role of social climate and resilience. *Human Resource Management*, 58(85–97), 1–13. <https://doi.org/10.1002/hrm.21934>
- Cusin, J. (2008). Survie en milieu hostile: l'étude qualitative de sujets sensibles en management. *Communication à Association Internationale de Management Stratégique (AIMS)*.
- Dai, Y. De, Zhuang, W. L., & Huan, T. C. (2019). Engage or quit? The moderating role of abusive supervision between resilience, intention to leave and work engagement. *Tourism Management*, 70(July 2018), 69–77. <https://doi.org/10.1016/j.tourman.2018.07.014>
- Fisher, R., Maritz, A., & Lobo, A. (2016). Does individual resilience influence entrepreneurial success. *Academy of Entrepreneurship Journal*, 22(2), 39–53.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
- Gupta, N., & Sharma, V. (2018). Relationship between leader member exchange (LMX), high-involvement HRP and employee resilience on extra-role performance: Mediating role of employee engagement. *Journal of Indian Business Research*, 10(2), 126–150. <https://doi.org/10.1108/JIBR-09-2017-0147>
- Hair, J. F., Hult, G. T. M., Ringle, C., & Marko, S. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (Second Ed.). New York, NY: SAGE Publications.
- Hair, J. F., Ringle, C. M., Gudergan, S. P., Fischer, A., Nitzl, C., & Menictas, C. (2018). Partial least squares structural equation modeling-based discrete choice modeling: an illustration in modeling retailer choice. *Business Research*. <https://doi.org/10.1007/s40685-018-0072-4>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135.
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. In *New challenges to international marketing* (pp. 277–319). Bingley, United Kingdom: Emerald Group Publishing Limited.
- Ismail, H. N., Iqbal, A., & Nasr, L. (2019). Employee engagement and job performance in Lebanon: the mediating role of

- creativity. *International Journal of Productivity and Performance Management*, 68(3), 506–523.
- Jakubik, M., & Vakkuri, M. (2015). The E-experience. *Exploring Employee Engagement. E-Publication Haaga-Helia*. Retrieved from http://www.Haaga-Helia.Fi/Sites/Default/Files/Kuvat-Jaliitteet/Palvelut/Julkaisut/Hh_e-Experience_higres.
- Jakubik, Maria. (2016). TALENT ENGAGEMENT FRAMEWORK AS A JOURNEY TO PERFORMANCE. *Review of Innovation and Competitiveness*, 2(3), 101–122. <https://doi.org/10.32728/ric.2016.23/6>
- Kappagoda, U., Othman, H., Fithri, Z., & De Alwis, W. P. (2014). The impact of psychological capital on job performance in the banking sector in Sri Lanka. *International Journal of Arts and Commerce*, 3(5).
- Kašpárková, L., Vaculík, M., Procházka, J., & Schaufeli, W. B. (2018). Why resilient workers perform better : The roles of job satisfaction and work engagement. *Journal of Workplace Behavioral Health*, 33(1), 43–62. <https://doi.org/10.1080/15555240.2018.1441719>
- Kotzé, M., & Nel, P. (2013). Psychometric properties of the adult resilience indicator. *SA Journal of Industrial Psychology*, 39(2), 1–11.
- Luthans, F. (2002). The need for and meaning of positive organizational behavior. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 23(6), 695–706.
- Luthans, K. W., Lebsack, S. A., & Lebsack, R. R. (2008). Positivity in healthcare: relation of optimism to performance. *Journal of Health Organization and Management*, 22(2), 178–188.
- Malik, P., & Garg, P. (2017). Learning organization and work engagement: the mediating role of employee resilience. *International Journal of Human Resource Management*, 31(8), 1071–1094. <https://doi.org/10.1080/09585192.2017.1396549>
- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, 56(3), 227.
- Medhurst, A., & Albrecht, S. (2011). Salesperson engagement and performance: A theoretical model. *Journal of Management & Organization*, 17(3), 398–411.
- Meintjes, A., & Hofmeyr, K. (2018). The impact of resilience and perceived organisational support on employee engagement in a competitive sales environment. *SA Journal of Human Resource Management*, 16, 1–11. <https://doi.org/10.4102/sajhrm.v16i0.953>
- Meyer, J. P., & Allen, N. J. (1997). *Commitment in the workplace: Theory, research, and application*. New York, NY: Sage.
- Motyka, B. (2018). Employee engagement and performance : a systematic literature review. *International Journal of Management and Economics*, 54(3), 227–244.
- Nguyen, T. D., & Nguyen, T. T. M. (2012). Psychological capital, quality of work life, and quality of life of marketers: Evidence from Vietnam. *Journal of Macromarketing*, 32(1), 87–95.
- Niitsu, K., Houfek, J. F., Barron, C. R., Stoltenberg, S. F., Kupzyk, K. A., & Rice, M. J. (2017). A concept analysis of resilience integrating genetics. *Issues in Mental Health Nursing*, 38(11), 896–906.
- Othman, N., & Nasuridin, A. M. (2011). Work Engagement of Malaysian Nurses : Exploring the Impact of Hope and Resilience. *World Academy of Science, Engineering and Technology*, 5(12), 1990–1994.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879.
- Rich, B. L., Lepine, J. A., & Crawford, E. R. (2010). Job engagement: Antecedents and effects on job performance. *Academy of Management Journal*, 53(3), 617–635.
- Robertson, I. T., Cooper, C. L., & Sarkar, M. C. (2015). Resilience Training in the Workplace from 2003-2014: A Systematic Review. *Journal of Occupational and Organizational Psychology*, 88(3), 533–562.
- SAOUSSANY, A. M. A. (2018). Mesure . Individual Job Performance : Its Determinants and Its La Performance Individuelle Au Travail : Ses Determinants Et Sa Mesure . Individual Job Performance : Its Determinants and Its Measurement. *Revue Du Contrôle de La Comptabilité et de l'Audit*, 6(September), 356–369.
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3(1), 71–92.
- Schaufeli, W. B., Shimazu, A., Hakonen, J., Salanova, M., & Witte, H. De. (2017). An Ultra-Short Measure for Work Engagement The UWES-3 Validation Across Five Countries. *European Journal of Psychological Assessment*, 1–15. <https://doi.org/10.1027/1015-5759/a000430>
- Seery, M. D. (2011). Resilience: A silver lining to experiencing adverse life events? *Current Directions in Psychological Science*, 20(6), 390–394.
- Sonnetag, S., Volmer, J., & Spychala, A. (2008). Job performance. *The Sage Handbook of Organizational Behavior*, 1, 427–447.
- Usunier, J.-C. (1992). *Commerce entre cultures: une approche culturelle du marketing international*. (Paris, Ed.). Paris, France: Presses universitaires de France.
- Varshney, D., & Varshney, N. K. (2017). The effect of resilience on performance and job satisfaction among construction managers in Saudi Arabia. *Global Business and Organizational Excellence*, 36(5), 36–45. <https://doi.org/10.1002/joe.21799>
- Wall, T., & Bellamy, L. (2019). Redressing small firm resilience: exploring owner-manager resources for resilience. *International Journal of Organizational Analysis*, 27(2), 269–288. <https://doi.org/10.1108/IJOA-02-2018-1364>
- Walpita, Y. N., & Arambepola, C. (2020). High resilience leads to better work performance in nurses: Evidence from South Asia. *Journal of Nursing Management*, 28(2), 342–350. <https://doi.org/10.1111/jonm.12930>
- Wang, Z., Li, C., & Li, X. (2017). Resilience, Leadership and Work Engagement: The Mediating Role of Positive Affect. *Social Indicators Research*, 132(2), 699–708. <https://doi.org/10.1007/s11205-016-1306-5>
- Warr, P., & Inceoglu, I. (2012). Job engagement, job satisfaction, and contrasting associations with person–job fit. *Journal of Occupational Health Psychology*, 17(2), 129.
- Wetzels, M., Odekerken-Schröder, G., & van Oppen, C. (2009). Using PLS Path Modeling for Assessing Hierarchical Construct Models: Guidelines and Empirical Illustration. *MIS Quarterly*, 33(1), 177. <https://doi.org/10.2307/20650284>

Wold, H. (1982). Soft modeling: the basic design and some extensions. *Systems under Indirect Observation*, 2, 343.

Yang, H.-C., Sun, I.-S., & Park, S.-H. (2015). Perceived Employment Instability Effect on Psychological Well-being

and Job Satisfaction: Resilience and Character Strength as Mediator. *The East Asian Journal of Business Management*, 5(4),29–35. <https://doi.org/10.13106/eajbm.2015.vol5.no4.29>.