

An Analysis on the Relationship between Adversity Index Factors and Job Performance of Tax Officials: Focused on the Moderating Effect of Flex

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Abstract

According as the scope of tax administration service has widened to comprise the complex functions of welfare tax administration, beyond the simple taxation of the past, in response to the needs of the times, the workload of front-line tax officials who meet taxpayers face-to-face is rapidly increasing. Thus, taxpayers' diverse needs require workload, responsibility, and job performance of tax officials, not to speak of basic technical expertise in taxation. In addition, tax officials have been confronted with diverse and complicated adversities at customer contact service, such as technical limits, and frictions with colleagues, superiors and taxpayers in the process of performing their jobs. In recent years, interest in adversity as a socio-psychological factor of organization members has been increasing; in particular, however, there has been no study on the adversity factor of tax official. This study aims to investigate the impacts of revenue officers' adversity quotient factors (control, ownership, range, continuity) on job performance and empirically analyze the context of their relationships, using the moderator variable of resilience concerning whether there are differences in adversity quotient factors affecting job performance according to resilience. As a result of an empirical analysis, adversity quotient factors had significant positive (+) impacts on job performance, and as a result of an analysis of the interaction terms of regulation effect analysis, of the adversity quotient factors, except for control and continuity, ownership (ownership x resilience) and range (range x resilience) had statistically significant positive (+) impacts on job performance. Thus, it was found that the regulation effects of the ownership and range of adversity quotient factors on job performance positively acted when they were controlled with resilience.

Despite the implications of this study, the limitations of this study are as follows:

First, because this study is the results of analysis on tax officials in Busan and Gyeongnam area, there is surely a limit to generalize the results of the study. It is necessary to expand the region and organization in the future and make efforts to generalize the research. Second, a possibility that job performance may differ depending on the position or duties of tax officials exists in analyzing the moderating effect of resilience. Studies afterwards need to extract samples in detail and analyze them extensively. Third, a possibility of systematic errors is implied because the data on variables are measured by the questionnaire response, studies afterwards should be conducted that can increase external validity by using various data.

Keywords: Adversity, Adversity quotient factors, Resilience, Job performance, Tax officer

1. INTRODUCTION

Tax administration service is an agency levying tax that provides not only the work as a simple tax institution but also the complex function like welfare cleaning work. In accordance to various needs of the times, the workload of the tax officials who face the taxpayers directly is increasing rapidly. The officials need to be equipped with technical expertise related to taxation and are required for heavy workload, responsibility, and work performance due to various needs of taxpayers. In addition, they are facing various and complicated adversities in the customer service such as technical limitations, and friction with colleagues, bosses, and taxpayers in their job performance.

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According to Oxford Dictionary, 'adversity' is defined as 'difficult, uncomfortable, unpleasant situation or troublesome situation or environment because things are not smooth.' For these above reasons, in order to overcome such adversities in their acts of tax administration, today's tax officials are required to be equipped with cognitive and behavioral capacity to treat problems. The adversity quotient was made to evaluate the ability to achieve goals by challenging without succumbing to many adversities, and this can be seen as a capacity, productivity, and innovation within an organization.[1]

Stoltz(1997) defined adversity quotient as one that determines success in an individual's life or workplace, and composed adversity quotient factors (AQP) with control, ownership, reach and endurance. As a similar concept with adversity quotient exists resilience. Resilience is the ability[2] to overcome various kinds of hardships, stress, adversity, and unexpected events experienced in job performance. It means flexibility and adaptability as an ability to adapt despite serious adversity or danger, which is a threat to adaptation and development.[4][5] Members with high resilience do their best to overcome adversity and achieve their goals ,during which higher resilience becomes a cause to produce a positive result despite some distress and adversity. [6][7][8]

Accordingly, this study examine the moderating effect of resilience in the relationship between adversity quotient factors and job performance. Important personal competence and competence factors related to job performance for the tax official are adversity and resilience because they have physical responsibility for securing tax revenue. As a representative indicator of the effectiveness of organizational management, job performance is very important for active organization as it becomes a very important standard to achieve the goal of individual work.[9] Job performance is a degree of improvement of given work performance and successfully performed work[10], and provides not only managerial decisions such as training and compensation but also information on improvement or termination of performance.[11]

This study defines the job performance as the successful achievement of the task goals given to the tax officials and the excellence of the tasks achieved. Recently, though adversity is becoming more and more popular as a social psychological factor of an organization member's. But, it is true that there few studies on adversity factors for tax officials. Therefore, in this study, we propose that the relationship between adversity quotient factors and job performance will be different in their adaptive flexibility by using adaptive flexibility as a moderating variable. In addition, this study empirically analyzes the relationship between adversity quotient factors and job performance based on resilience by breaking away from fragmentary causal relationship. This study is expected to provide important basic data for the performance management of tax organization as well as the efficiency of tax administration.

2. Theoretical Background

Adversity means personal and environmental characteristics related to negative development.[12] Adversity quotient factors are concepts understood in a broad sense, which include emotional intelligence, self-efficacy, and self-control that are closely related to job satisfaction and adaptation to organization in individual aspects. Stoltz(2000) states that adversity and adversity quotient are factors determining success in individual life and narrowly in the workplace, and have been applied to various studies in recent years. The adversity quotient(AQ) can be integratively explained. It is a measure of who is the one who can overcome the crisis when an individual is in crisis. The detailed domain consists of control, ownership, reach, and endurance.

Control means personal control in crisis, and ownership is personal initiative to overcome crisis. Reach means the influence on other parts of individuals' lives in the event of a crisis. Endurance means how long

they perceive the situation of crisis lasts. Adversity quotient factors, which are variables that can explain the organizational adaptation of workers, are closely related to resilience and emotional intelligence. Especially, it is an important competency factor highly related to job performance. In a rapidly changing and diverse competitive society, we cannot help but face many adversities. Among them, the more cases of overcoming and succeeding in inevitable and difficult adversity, the more adversity quotient is noteworthy as a capability indicator. The adversity quotient factor is the internal factor for the organizational adjustment of tax officials because the utilization value for practical application is high. There are no publications and theses studying the quotient. In addition, there are few studies on adversity quotient factors, which can be a plan to increase organizational adaptation that actually affects job performance.

Resilience [13] is defined as a process of dynamic change through interaction with the environment by understanding qualitatively positive adaptation to various adversities. Resilience, given the assumption that one shall be exposed to severe risks and serious misfortunes, is the concept emphasizing that even if the work process faces a great threat, it should acquire positive adaptations that meet the developmental tasks and social expectations required in the social context.[14][15] Heo Sim-yang (2011) recognized the resilience not only as the ability to devise various solutions through flexible thinking in a difficult situation and to perceive difficult situations as controllable, but also as the ability to provide various alternative explanations about events and human behaviors during work.[16]

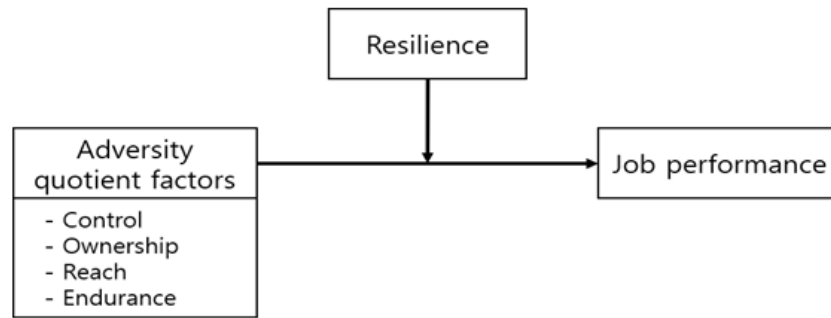
Job performance, which refers to organizational members' successful achievement on the job, can be analyzed based on the quantitative and qualitative performance and the propulsion of work[17]. The evaluation was based on the reduction of trial and error, the degree of utilization on the task, and the improvement of the job performance[18]. Choi, Jeom-sook(2012) analyzed the performance of job performance based on four criteria: improvement of work performance, contribution of organization work systematization, contribution to achievement of organizational goal, and quality level of work performance. Lee, Kyung-ho(2010) based the standard of improvement of work performance ability, improvement of work utilization, prevention of trial and error of work performance, simplification of work process procedure, and economic cost reduction.[20]

3. Research Design

Research model and hypothesis setting

This study aims to approach the effect of adversity quotient factors on job performance from a comprehensive perspective by using a moderating variable of adversity quotient factors that an independent variable of adversity quotient factors will be different in accordance to adversity flexibility. This study is expected to be provided as basic data for job establishment and performance management for tax officials so that they can perform their job efficiently. So, a study model in [Figure 1] is proposed based on theoretical backgrounds and existing precedents. This study bases the degree of quality and quantity achieved by tax officials and that of execution successfully made on job performance.

Fig. 1 Research Model



This study is about the moderating role of resilience in the relationship between adversity quotient factors and job performance. Through the perception of adversity quotient factors, organizational members exert flexibility in thinking in the job performance process, which has a positive effect on job performance. Therefore, in order to achieve the successful job performance of tax officials, it is important to identify the causal relationship between the adversity quotient factors, resilience and job performance in the process of performing the work.

Based on the above theoretical bases and precedents, this study sets up hypothesis 1, and it does so on hypothesis 2 in that, though adversity quotient factors have a relevant effect on job performance, resilience has a moderating effect in relation to adversity quotient and job performance.

H1: Adversity quotient factors will affect job performance.

1-1: Control will have a positive (+) effect.

1-2: Ownership will have a positive (+) effect on job performance

1-3: Scope will have a positive (+) effect on job performance.

1-4: Consistency will have a positive (+) effect on job performance.

H2: Resilience will moderate the relationship between adversity quotient factors and job performance.

2-1: Resilience will moderate the relationship between control and job performance.

2-2: Resilience will moderate the relationship between ownership and job performance.

2-3: Resilience will moderate the relationship between scope and job performance.

2-4: Resilience will moderate the relationship between consistency and job performance.

3.2. Research subject and operational definition

The sample of this study was collected from tax officials working at tax offices in Busan and Gyeongnam in June 2019. A total of 267 subjects were selected and 255 questionnaires were finally used for this study, excluding 12 unrecovered questionnaires and 12 unfaithful questionnaires. The survey period was from June 9 to July 10, 2019, for a total of 31 days.

Table 1. Demographical features

Distinction			Frequency (%)
Tax officials	Gender	male	196(76.9)
		female	59(23.1)

	Working period	less than 10 years	106(41.6)
		15-less than 20 years	94(36.9)
		more than 20 years	55(21.6)
	Job position	9th grade	81(31.8)
		8th grade	66(25.9)
		7th grade	67(26.3)
		above 6th grade	41(16.1)
	Details on tax	corporate tax	38(14.9)
		income tax	42(16.5)
		value added tax	84(32.9)
		property tax	48(18.8)
		guitar	43(16.9)

To develop the questionnaires to verify the research hypothesis, the operational definition of the variables was set as follows. The adversity quotient is a measure of human ability to overcome adversity and how humans overcome adversity. It is composed of a measure of control, ownership, reach, and endurance developed as a measure of who is the person that can overcome the crisis when an individual faces a crisis.

Resilience refers to the ability to adaptively transform cognitive frameworks in accordance with the stimulus of changing environment. This study modified and used the scales which had been developed by Dennis & Vander Wal (2010) [21] and modified by Heo Sim Yang (2011).

Organizational performance is an indicator of the effectiveness of organizational management as the achieved degree of the work of the organization members, which is also an important standard to measure the achievement of individual work goals. This study reconfigured and used the scale used by Choi, Jeom-sook (2012).

4. Empirical Analysis

4.1. Validity and Reliability of Variables

The factor analysis shows that all the scales used to measure the variables in [Table 2] have appropriate convergence and discriminant validity. Also, the level of reliability level for each variable was mostly high, which turns out to be appropriate for analysis in this study.

Table 2. The result of factor analysis on research variables

Variables		Items measured	Factor loading value	Eigenvalue	cumulative description dispersion(%)	Reliability(α)
Adversity quotient factor	Control	control 1	.748	1.814	61.151	.689
		control 2	.678			
		control 3	.647			
	Ownership	ownership 1	.722	3.013	24.535	.795
		ownership 2	.712			
		ownership 3	.704			
		ownership 4	.697			
		ownership 5	.617			

	Reach	reach 1	.749	2.277	54.445	.756
		reach 2	.689			
		reach 3	.638			
		reach 4	.632			
	Endurance	endurance 1	.767	2.940	35.425	.808
		endurance 2	.723			
		endurance 3	.660			
		endurance 4	.648			
		endurance 5	.628			
	Resilience	resilience 1	.795	2.859	46.013	.804
		resilience 2	.759			
		resilience 3	.749			
		resilience 4	.634			
		resilience 5	.627			
	Job performance	job performance 1		3.611	13.374	.880
		job performance 2	.847			
		job performance 3	.821			
		job performance 4	.758			
		job performance 5	.745			

4.2. Correlation Analysis

Correlation between main variables is shown in Table 3. The control, ownership, reach, and endurance of the variables of adversity quotient were all turned out to have a relevant relationship with the result variable, or job performance.

Table 3. Correlation analysis between measurement variables

Variables	control	ownership	reach	endurance	resilience	job performance
control	1.000					
ownership	.317**	1.000				
reach	.412**	.260**	1.000			
endurance	.346**	.552**	.347**	1.000		
resilience	.313**	.227**	.400**	.320**	1.000	
job performance	.313**	.322**	.381**	.341**	.395**	1.000
mean value	3.2969	3.3667	3.8960	3.1603	3.7267	4.1033
standard deviation	.68776	.78254	.66296	.91369	.59672	.64817

p<0.05*, p<0.01**

4.3. Hypothesis Test

The results of moderated multiple regression were presented in Table 4 to test the hypothesis that resilience would have a moderating effect on the relationship between the adversity quotient factors on the part of tax officials and their job performance.

As a result of the analysis, the total explanatory power of the regression model set with control, ownership, reach, and endurance as independent variables was 21% ($R^2=.214$) and $F=21.495$, which showed that the adequacy of the model has its statistical significance ($p<.001$). And the explanatory power of model 2 in which resilience were inserted as a moderating variable is found to be 25% ($R^2=.253$), which increased by .039 compared to that of Model 1. Though the value of F decreased by .191%, it was statistically significant. In other words, model 2 showed that the job performance was well explained by putting in the resilience. In model 3, which was put in to confirm the interaction between adversity quotient factors and resilience on the part of tax officials, the modified explanatory power of the model increased .007 compared to model 2 as 25% ($R^2=.251$), and F value decreased to 9.192, but it was statistically significant ($p<.001$).

Table 4. The result of moderating regression analysis on job performance

	[model 1]			[model 2]			[model 3]		
	B	β	p-Value	B	β	p-Value	B	β	p-Value
(constant)	2.082			1.585			1.091		
control	.111	.118	.044**	.084	.089	.124	.072	.076	.858
ownership	.243	.248	.019**	.178	.182	.002***	.137	.163	.044**
reach	.122	.147	.000***	.116	.140	.022**	.136	.175	.031**
endurance	.095	.133	.038**	.067	.095	.134	.347	.488	.241
resilience				.253	.232	.000***	.366	.336	.048**
control x resilience							-.005	.028	.964
ownership x resilience							.219	.172	.008***
reach x resilience							.149	.238	.013**
endurance x resilience							-.075	-.516	.339
revised R2	.214			.253			.251		
R2's amount of change	.225			.266			.273		
F's amount of increase	21.495			21.304			12.112		
significant probability	.000***			.000***			.000***		

$p < 0.1^*$, $p < 0.05^{**}$, $p < 0.01^{***}$

[model1] dependant variable←independent variable,

[model2] dependant variable←independent variable, control variable,

[model3] dependant variable←independent variable, control variable, interactional variables (independent variables x regulation variables)

This result can be seen as a significant one in explaining the interaction between adversity quotient factors and resilience. Focused on model 2, the ownership(=.178, $p=0.002$) and range(=.116, $p=0.022$) included in the category of the adversity quotient factors had a significant positive (+) effect on job performance, and the resilience(=.253, $p=0.000$) also had a statistically significant effect on job performance. Therefore, the adversity quotient factor had a positive effect on job performance, so hypothesis 1 was adopted. Once the interaction terms were examined in detail in the model 3, the ownership consciousness x flexibility and range x flexibility had a significant effect on job performance, but the control x flexibility and persistence x flexibility had no moderating effect, so the hypothesis 2-1 and hypothesis 2-4 were rejected whereas the hypothesis 2-2 and hypothesis 2-3 were adopted.

5. Conclusion

This study aimed to empirically investigate the relationship between adversity quotient factors, resilience and job performance of tax officials. This is considered meaningful in that it provides implications for enhancing the job performance of tax organizations.

The results of analyses are as follows.

First, the adversity quotient factors affecting job performance were control ($B=.111$, $p=0.044$), ownership ($B=.242$, $p=0.019$), reach ($B=.122$, $p=0.000$) and endurance ($B=.095$, $p=0.038$). So, hypothesis 1-1, hypothesis 1-2, hypothesis 1-3, hypothesis 1-4 were supported. Also, the regression coefficient (b) sign was positive (+), and therefore the higher the perception of adversity, the higher the job performance. Such results have a positive effect on job performance, and they are consistent with the result of previous studies that stated that adversity quotient factors have a comprehensive positive effect. This study also confirms the results of the existing studies.

Second, it is shown that the main effect in the moderating regression analysis that resilience would control the relationship between adversity quotient factors and job performance was meaningful, but, in the interaction term, only ownership and range were supported in this study. The sense of ownership allows people with excellent ability to overcome the crisis and to flexibly cope with various ways of changing environment or situation. To this end, the boss must recognize the difference in the subordinates' individual interest and desire so that they can exercise their potential, and the ownership will be inspired through personal consideration. This means that they are possessing the ability to see their responsibility in the overall perspective.

The reach is the ability to keep the crisis in place without spreading it to other areas, which makes life much easier to deal with adversity, despair and challenges. In the situation of adversity, because the more tax officials look at themselves in a limited way, the more they are immersed in the services they provide to customers, we are able to know that they can increase their job performance in the situation. Therefore, in order to increase the job performance of tax officials, the organizations should lead their subordinates to recognize their resilience based on mutual trust between leaders and subordinates, whereby inducing and promoting the creativity of subordinates and further linking their creative ideas to the development of excellent competitiveness.

Despite the implications of this study, the limitations of this study are as follows:

First, because this study is the results of analysis on tax officials in Busan and Gyeongnam area, there is surely a limit to generalize the results of the study. It is necessary to expand the region and organization in the future and make efforts to generalize the research.

Second, a possibility that job performance may differ depending on the position or duties of tax officials exists in analyzing the moderating effect of resilience. Studies afterwards need to extract samples in detail and analyze them extensively.

Third, a possibility of systematic errors is implied because the data on variables are measured by the questionnaire response, studies afterwards should be conducted that can increase external validity by using various data.

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