



Leadership Style and Innovativeness in the Plantation Sector: The Mediating Role of Organizational Culture

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This study investigates the importance of innovativeness in leadership practices. The mediating role of organizational culture towards the relationship between leaders' authenticity and employees' innovativeness was further examined. About 235 managers were randomly selected from 22 Regional Plantation Companies (RPCs) from the private sector and 3 large state-run plantation companies in Sri Lanka. 210 (90%) usable responses were utilized for the analysis. In testing hypotheses, a multivariate general linear model in SPSS was applied, along with Sobel's formula, to test the mediating effects. The results indicated that the relationships among the three major study variables: leadership authenticity, organizational culture, and innovativeness were significant. The findings also assured that the dimensions of organizational culture (involvement and consistency) partially mediated the relationship between authentic leadership and organizational innovativeness. It was also observed that the mediating effect of organizational culture on innovativeness was relatively less due to the lack of management support in the Sri Lankan plantation sector.

Key words: *Leadership style, Authentic Leadership, Organizational Culture, Innovativeness, Plantation, Sri Lanka.*

Introduction

Background of the Study

In the past half century, the plantation industry has enormously contributed to Sri Lanka's economic and social. This includes it being the highest foreign exchange earner until the mid-eighties and it being one of the biggest direct and indirect employment generating industries. The coconut plantations in particular, ensure the food security of the country and the tea sector accounts for 14% of total export income and 59% of total agricultural exports. Sri Lanka is yet to find an alternative crop or an industry, which has the capacity to fill this vacuum.

Export earnings in 2010 for Sri Lankan tea and rubber, remain at a meagre USD 1.37 billion and USD 0.17 billion, respectively, whilst the revived garment industry, has contributed USD 3.35 billion (Central Bank of Sri Lanka, 2006; 2011; 2012). Although the extent of cultivation is much larger in comparison to Sri Lanka, export earnings in 2010, for Malaysian and Indonesian oil palm, stands at USD18.6 billion and USD15.2 billion, respectively, whilst also providing direct employment opportunities for 3.5 million workers across Malaysia and Indonesia (Malaysian Palm Oil Board, 2011). On the other hand, the Sri Lankan plantation sector, which are considered to be highly traditional and labour-intensive, directly employed 802,492 people in 2011, which is about 9.4% of the total work force, whilst in the garment industry, employment opportunities are around 486,000 (Department of Labour, 2012).

It can be seen that although the Sri Lankan plantation industry is about 145 years old, its innovativeness seems to be absent. With the passage of time, different opportunities have been available for Sri Lanka to enhance its economic standing through optimising the utilisation of land and labour. This could have been done by shifting into other crops which have better land productivity, increased labour productivity by mechanisation of traditional agricultural and harvesting practices, shifting parts of the labour force to more economically viable industries, and placing more emphasis on value addition through innovative initiatives. As a result of failing to do so, in the recent past allegations have been levelled against the plantation sector as to the imbalance of resources utilised, and the economical contribution made, in comparison to other industries. This sector is now faced with serious existential challenges due to low labour and land productivity, which have resulted in escalating costs of production with a relatively lower price yield for produce, mainly due to the lack of innovative orientation (Ministry of Plantation Industries, 2012).

Therefore, this study focused on some of the real issues, such as the importance and extent of innovativeness, the culture that encourages innovativeness and its relatedness to leadership practices, particularly in the plantation sector of Sri Lanka.

Problem of the Study

Although scholars the world over, have extensively researched leadership, organizational culture and innovativeness in isolation, and at times a combination of two or three of these areas together in a global context, there is an absence of research in a Sri Lankan plantation context. The non-availability of any substantial research in non-agronomy areas in the Sri Lankan plantation sector, and the absence of any theoretical basis to build a research platform, clearly indicates that there are unanswered questions in relation to innovativeness, favourable organisational culture and leadership practices in the plantation sector.

The Sri Lankan plantation sector, which commenced one 145 years ago, has maintained its status quo whilst making incremental changes to the existing crops and its value addition. Although tea, rubber and coconut continue to be the main crops, value addition in terms of quality and quantity remains way below desired levels. The absence of innovativeness through favourable leadership styles and organisational cultures are the possible reasons for the lack of value addition activities. As a result, the plantation industry, which was held in high esteem by the nation, due its significant contribution to the economy through GDP and foreign exchange earnings, direct and indirect employment, earning opportunities created and positive environmental effects, is fading away with diminishing economic and societal contributions, to such an extent that is compelling regulators to force changes directed to its management for its existence.

Another negative impact of this unanswered question is the diminishing revenue to the state by way of taxes from the industry, whilst simultaneously granting funds to many state sector plantations for their existence in order to avoid socio-political pressure on the government. There is a diminishing pattern of percentage of contribution from the tea industry to the GDP during the past decade. An increased contribution from other novel sectors has been a main reason for this diminishing pattern.

The Sri Lankan plantation sector is lagging far behind in terms of value addition due to the lack of innovative orientation. In spite of national policy targeted at increasing the value add of tea quantity to 70%, total value additions remain at 42%. In 2011, 58% of total tea exports consisted of bulk tea, only 26% were packed tea and 8% were tea bags (Central Bank of Sri Lanka, 2006; 2011; 2012). It is sad to note that due to this lack of innovativeness, even after 140 years of existence, Sri Lanka still exports 58% of its total tea in a non-value-added form.

With costs escalating at a greater rate than price for produce, the marginal land (non-viable for the main crops) extent has increased and this is compelling the estate sector to replant with high yielding new clones or diversify from low yielding tea, rubber and coconut land with other crops. Current financial constraints faced by the estate sector, non-availability of special

financial grants, concessions from the state or financial institutions due investment appraisal criteria, and relevance of a longer payback period, further aggravates the situation (Jayakody & Shyamali, 2002).

The cost of production has caused tremendous pressure on privately managed regional plantation companies as well as state managed plantation companies. Wages of plantation workers are the major cost component of the total cost of production. All plantation workers are unionised, and to make the situation even worse, these unions are politically affiliated. Although the burden of wage hikes and other employee benefits take place on a regular basis, the other reason identified for the failure of the plantation industry to have better business performance is the lack of innovativeness. Addressing this long overdue gap will help the resurgence of the Sri Lankan plantation industry, or at least its continual existence. This situation demands that the plantation industry creates a favourable environment that will enhance innovativeness for better business performance.

Literature Review

Authentic Leadership

Authenticity, as first referenced in management and organizational literature, viewed the authentic capacity of a leader as a litmus test of executive quality (Kliuchnikov, 2011; Emuwa, 2013). With renewed interest in recent years on positive leadership (Emuwa, 2013) there has been scholarly focus on the development of the authentic leadership construct (Emuwa, 2013). The core of authentic leadership extends beyond the authenticity of the leader as a person, to encompass authentic relations with followers (Emuwa, 2013). This relationship is characterized by: (a) transparency, openness and trust, (b) guidance toward worthy objectives, and (c) an emphasis on follower development (Emuwa, 2013). Consequently, authentic leaders' behaviours are reflected in their followers' actions (Emuwa, 2013) and their followers' development (Emuwa, 2013).

Authentic leadership can also be defined as a pattern of transparent and ethical leader behaviour that encourages openness in the sharing of information that is needed to make decisions, while also accepting followers' input (Avolio, Walumbwa & Weber, 2009). This definition, and subsequent work on authentic leadership, was explained at the outset as multi-level, which includes the leader, follower, and context, specifically in the way it is conceptualized and measured (Avolio et al., 2009).

Organizational Innovativeness

Innovation can be given different meanings in different contexts. Essentially the main characteristic of innovation is change. Hence, it is difficult to have a theory of innovation,

because the notion of change is still not fully understood. In this research, the definition proposed by the OECD is adopted: “Innovation consists of all those scientific, technical, commercial and financial steps necessary for the successful development and marketing of new or improved manufactured products, the commercial use of new or improved processes or equipment or the introduction of a new approach to a social service.” Most empirical research and surveys of firms shows that innovation leads to new products and services that are higher in quality and cheaper to produce. Innovation can be given different meanings in different contexts. Essentially the main characteristic of innovation is change (OECD); R&D is only one of these steps (Neely & Hii, 1998). Recognizing the importance of organisational innovativeness is a recent phenomenon in the plantation industry.

Customer demand, on the other hand, keeps adding pressure on innovativeness, compelling producers to make constant improvements and replacements to product lines with shorter product life cycles in order to remain competitive in the global market (Tidd, Bessant & Pavitt, 2001). Innovation has been recognized as driver of economic growth for a long time and a large number of surveys and researches confirms that innovation leads to novel products and services, with higher quality and lower prices (Gamal, Rayes, Salah & Sabry, 2011).

According to Gamal et al., (2011), innovation is “the introduction of a new product, service or process through a certain business model in to the marketplace, either by utilization or commercialization” and includes product innovation, service innovation, process innovation and business model innovation, to provide competitive advantages to an organization.

Denti (2011) in an attempt to differentiate the concepts of innovation and creativity, explains that researchers frequently and interchangeably use the concepts of innovation and creativity in the literature (Basadur, 2004), and that the concepts of innovation and creativity are intertwined. According to Simonton (2003), when these two concepts are combined they produce original outcomes, and creativity will lead to innovation as it is a process that consists of multiple stages (Amabile, Conti, Coon, Lazenby & Herron, 1996; Scott & Bruce, 1987). Though creativity is required at various stages of the process to turn ideas into outcomes, it is only a part of the innovation process. Unlike creativity, innovation is often aimed at deriving a benefit to the organization through an implementation-focused process, but the aim of creativity is not necessarily to derive a benefit through an implementation process (Anderson, Carsten, De Dreu & Nijstad, 2004). Some authors differentiate creativity with innovation, arguing that creativity is limited to idea generation, whereas innovation goes beyond ideation to realize and apply these ideas through a process (Anderson et al., 2004; Mumford & Gustafson, 1988; Shalley & Gilson, 2004).



Importance of innovativeness

In the present day context there is no room for so-called “innovative corporations” due to sporadic efforts and inspired actions; rather, innovative processes are achieved through a continued, progressive effort. Letamendia & Marzo (1993) emphasize that a company's innovative action must be a constant one, and not result from occasional efforts, this means that an “innovative attitude” or innovativeness, is a key factor for the success of a progressive organization. Hurley and Hult (1998) define innovativeness as ‘the notion of openness to new ideas as an aspect of a firm's culture...a measure of the organization's orientation toward innovation.’ Thus, innovativeness refers to the organizational wide tendency to introduce ‘newness and novelty’ through experimentation and research in the development of new products, services and processes (Dess & Lumpkin, 2005).

Kristina Jaskyte, from the University of Georgia, USA, explains that leaders can help develop, shape, and maintain a desired organizational culture, which may in turn, may affect organizational innovativeness by creating new sets of shared values (Conger & Kanungo, 1987; Schein, 1990; Trice & Beyer, 1993). Though there is a vast body of research on creativity and innovation, especially in research and development environments, the emphasis placed on understanding the relationship between domains of leadership and innovation is very little (Byrne, Lubowe & Blitz, 2007), because in complex environment such as in organizations, leader impact on innovation has been studied as one of several influencing factors (Kaiser, Hogan & Craig, 2008).

According to Mumford, Scott, Gaddis & Strange, (2002), supervisors are a hindrance to creativity as they do not facilitate but obstruct the creative ideas conceived and generated by employees (Jung, Wu & Chow, 2008). On the contrary, other researchers argue the importance of the leaders and supervisors in creating the required environment and circumstances essential to facilitate the flourishing of innovativeness among employees (Kaiser et al., 2008; Mumford et al., 2002; Shalley & Gilson, 2004). In emphasizing the importance of autonomy and resource allocation by leaders, research refers to Howell & Avolio (1993), who emphasize that organisations with clear communication, which supports and encourages innovation, and those who provide the required resources and autonomy, are identified as having the strongest criteria for a good supervisor and employee relationship (Jung, Wu & Chow, 2008).

Many authors argue that inter-functional and inter-departmental collaboration, through autonomy, are a strong criteria for innovation as they create a favourable environment (Jung et al., 2008; Miller, Droge & Toulouse, 1988). As employees consider that such environments permit them to depart from established practices, whilst still conforming to broad parameters, and engage them, for the good of the organisation without negative consequences (Dougherty & Hardy, 1996).

Leadership Authenticity and Organisational Culture

Kuada (2010)'s research on African culture and leadership attributed 'weak leadership' as the most important reason (Ochala, 2007) for the Sub-Sahara African (SSA) 'disastrous' economic growth compared to Asian economies such as South Korea and Malaysia who were in similar status of growth five decades ago.

Other contributory reasons cited by scholars are institutional and structural weaknesses (Killick, Freund, & Fersht, 1999), limited attention to private enterprise development (Fafchamps, Teal & Toyé, 2001) poor governance, management ineptitude (Kamoche, 1997) and limited staff motivation (Okpara, 2006; Okpara & Wynn, 2008) and it is interesting to note the direct relationship of above contributory reasons to leadership.

A cohort of studies on leadership theories in the 1980s have suggested that culture provides a frame of reference or logic by which leadership behaviour can be understood (Dorfman, Hanges & Brodbeck, 2006). But some of the cultural rules of behaviour tend to act as drags on effective leadership and management practices and thereby constrain entrepreneurship and economic growth (Kuada, 2008, 2009).

Organisational Culture and Innovativeness

Denti (2011) argues that to an extent, innovation depends on the culture of the organisation and the degree of organizational support. Mann (2005) believes that organizational support can be divided into three forms: 1) organizational encouragement of innovation, 2) access to requisite resources, and 3) empowerment and the level of availability of resources and values, all of which may lead to actual improvement in innovation performance (Bain, Ballantyne, Mills & Lester, 2002; Ekvall & Ryhammar, 1999). According to West & Anderson (1996), 'Organizational support for innovation' was identified as the strongest factor for determining the overall innovation in the hospital sector.

Nowadays, with the rapid changes taking place in external environments, organisations with sporadic efforts and uninspired actions can hardly identify themselves as "innovative corporations" due to the fact that innovative processes are achieved through a planned, continued and progressive effort. A company's innovative action must be a constant, ongoing one, and not result from occasional efforts (Letamendia & Marzo, 1993). Therefore, it is evident that an "innovative attitude" or 'innovativeness culture' is a key element for an organization to sustain innovativeness. Cultural perception is a prerequisite for innovative behaviour to have effective results (Vracking, 1990).

At times it may appear that innovation has an incidental and capricious character, whereas in fact, it is a result of preparation and a previous disposition to handle challenging situations and opportunities. Porter (1991), elaborating on the origins of innovation, explains that it may vary from pressure to necessity or even to adverse conditions.

Leadership Authenticity and Innovativeness

Though there is vast body of research on creativity and innovation, especially in research and development environments, little attention has been paid to the relationship between innovation and the leadership domains (Byrne et al., 2007), because in complex environment such as in organizations, leader impact on innovation has been studied as one of several influencing factors (Kaiser et al., 2008).

Leadership authenticity positively and significantly relates to organizational innovativeness (Kaiser et al., 2008), and findings revealed that leaders inspire followers to perform beyond expectations and be transparent, ethical and open to suggestions in maintaining the level of innovativeness for betterment of the organizations. However, the plantation managers who possess creativity, achieve little results due to the unavailability of organizational culture with the trait of innovativeness (Letamendia & Marzo, 1993).

Figure 1. Conceptual framework

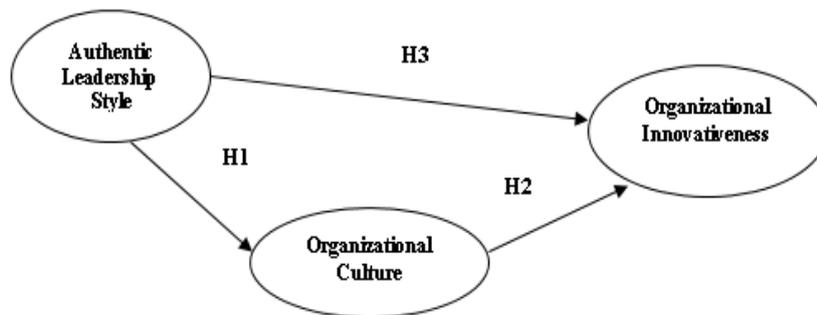


Figure 1. Conceptual framework

Hypothesis

- H1: *There is a positive relationship between authentic leadership style and organisational culture.*
- H2: *There is a positive relationship between organisational culture and organisational innovativeness.*

- H3: *There is a positive relationship between authentic leadership style and organisational innovativeness.*
- H4: *Organisational culture mediates the relationship between leadership authenticity and organisational innovativeness/effectiveness.*

Methodology

The Study Population

The Sri Lankan plantation industry consists of 22 Regional Plantation Companies (RPCs), which are managed by the private sector and 3 large plantation companies managed by the state. The population in this study was estate managers of the 22 privately managed RPCs and the 3 state managed plantation management companies in Sri Lanka. The total number of estate managers, at the time of data collection, was 400.

Sampling and Questionnaire Administration

Based on Krejcie and Morgan (1990), the recommended sample size for a population of 400 was 196. The sample size in this study was taken as 235, after inflating by 20% for non-response. Questionnaires were then sent to the selected estate managers through e-mail. Out of the 235 managers, 224 responses were received back, representing a response rate of 95%. However, only 210 of them were found to be usable for further analysis.

Research Instruments

The main source of data collection was through a self-administered questionnaire. Most of the items in the questionnaire were adopted from various sources as shown in Table 1. The questions, from the respective sources, are well validated and have been used by other researchers. All the items in the questionnaire were measured on a Likert scale of 1 to 4; where a response of 1 indicated strongly disagree, while a value of 4 indicated strongly agreement to the statements.

Table 1: Sources from where the items were adopted

Section	Concept	Instrument
1	Authentic leadership	Timothy, 2011
2	Organisational Culture	Fey & Denison, 2003
3	Innovativeness	Neely & hii, 1998

The questionnaire was initially pilot tested amongst 30 plantation managers. This was to ensure the internal consistency of the items to the local context. The results of the reliability analyses

for the items in each construct are presented in Table 2. The Cronbach's alphas for all the constructs were above 0.7, which is considered to be good.

Table 2: Number of items distributed according to the dimension and Cronbach's Alpha

Concept	Sub domain	Number of items		Cronbach's Alpha
		Initial	Final	
Leadership	Authentic	8	8	0.821
Organisational Culture	Involvement	3	3	0.714
	Consistency	3	3	0.812
	Adoptability	3	3	0.699
	Mission	3	3	0.789
Innovativeness		8	8	0.921

Data Analysis

Data was entered in the Statistical Packages for Social Science (SPSS) Version 17 software. The data was thoroughly cleaned prior to analysis. First, the inter-item correlations between the items were tested to rule out the lack of convergent and discriminant validity within the construct. Then, factor analyses were used to test the dimensionality of the items in each construct. In factor analyses, the Kaiser-Meier-Olkin (KMO) values were used as a measure of data reducibility. The percentage explained variations were also noted. Since the items are reflective in nature, the principal axis factoring method was used as the extraction method. In cases with more than one dimension, the factors were rotated using the Promax rotation method. Factors were named based on the factor loadings in the pattern matrix.

If the data reducibility was found to be satisfactory, a summated score (the mean of the items in the construct) was obtained as a measure of the estate managers' perception on the concept. In testing hypotheses in this study, the multivariate general linear model in procedure in SPSS was used. For the test of mediating effects, the Sobel's formula was used. For all tests, the level of significance was set at 0.05.

Results of Hypotheses Testing

Relationships between authentic leadership style and organisational culture

The first objective of this research is to test the relationship between organisational leadership style and organisational culture. The general linear multivariate regression was performed to examine the relationships between these constructs. The results of regression coefficients are presented in table 3.

Table 3: Results for the test of Relationship between authentic leadership and organizational culture dimensions

Dependent variable	Independent Variable	B	Std. Error	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
OCI	Intercept	.885	.211	4.203	.000	.470	1.300
	AL	.232	.107	2.159	.032	.020	.444
OCC	Intercept	1.056	.211	5.011	.000	.640	1.471
	AL	.412	.107	3.837	.000	.200	.624
OCA	Intercept	.707	.242	2.923	.004	.230	1.185
	AL	.244	.123	1.979	.049	.001	.488
OCM	Intercept	.776	.228	3.411	.001	.327	1.225
	AL	.244	.116	2.103	.037	.015	.473

It can be seen from the table above that AL was a significant predictor for OCI. The results show that the higher the score in AL, the higher the score is in OCI. The R-squared value for OCI is 0.369, which means that 37% of the variation in OCI can be explained by AL. AL was also a significant predictor for OCC. The results imply that the higher the score in AL, the higher is the score in OCC. The R-squared value for OCC is 0.316, which means that 32% of the variation in OCC was explained by AL.

With respect to OCA, AL was the significant predictor. The results imply that the higher the score in AL, the higher the score is in OCA. The R-squared value for OCC is 0.308, which means that 31% of the variation in OCC was explained by AL. For OCM, AL was again the significant predictor. The results show that the higher the score in AL, the higher the score is in OCM. The R-squared value for OCC is 0.347, which means that 35% of the variation in OCC was explained by AL.

Relationships between organisational culture and innovativeness

The second objective of this research is to test the relationship between organisational culture and innovativeness. A general linear multivariate regression was performed to examine the relationship between these constructs. The results of regression coefficients are presented in the following Table.

The table below shows that for OBI, only OCI, OCC and OCM were significant predictors. The results imply that the higher the scores in OCI, OCC and OCM, the higher would be the score of OBI. The R-squared value for OBI is 0.524, which means that 54% of the variation in OBI can be explained by OCI, OCC, OCA and OCM, most of which is coming from OCI, OCC and OCM. As for LBI, only OCI was a significant predictor, indicating that the higher

the score in OCI, the higher the score is in LBI. The R-squared value for LBI is 0.181, which means that 18% of the variation in LBI can be explained by OCI, OCC, OCA and OCM, most of which comes from OCI.

Table 4: Results for the test of relationship between organisational culture and innovativeness dimensions

Dependent variable	Independent Variable	B	Std. Error	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
OBI	Intercept	.728	.183	3.971	.000	.366	1.089
	OCI	.363	.074	4.909	.000	.217	.509
	OCC	.216	.069	3.126	.002	.080	.352
	OCA	.080	.064	1.251	.212	-.046	.205
	OCM	.191	.064	2.990	.003	.065	.317
LBI	Intercept	1.700	.255	6.667	.000	1.197	2.203
	OCI	.375	.103	3.640	.000	.172	.578
	OCC	.083	.096	.862	.390	-.107	.272
	OCA	-.033	.089	-.374	.709	-.208	.141
	OCM	.027	.089	.299	.766	-.149	.202

Relationships between authentic leadership and innovativeness

The third objective of this research is to test the relationship between leadership style and innovativeness. Again, a general linear multivariate regression was performed to examine the relationship between these constructs. The results of the regression coefficients are presented in Table below.

Table 5: Results of the relationships between authentic leadership and innovativeness dimensions

Dependent variable	Independent Variable	B	Std. Error	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
OBI	Intercept	.276	.156	1.769	.078	-.032	.583
	AL	.332	.079	4.180	.000	.175	.489
LBI	Intercept	1.076	.243	4.424	.000	.596	1.555
	AL	.192	.124	1.551	.122	-.052	.437

The table above shows that for OBI, AL was a significant predictor. The results show that the higher the scores are in AL, the higher the scores are in OBI. The R-squared value for OBI is 0.659, which means that 66% of the variation in OBI was explained by AL. For LBI, AL was

the significant predictor. It shows that the higher the score in AL, the higher the score is in LBI. The R-squared value for LBI is 0.235, which means that 24% of the variation in LBI was explained by AL.

Summary Results of Hypothesis

As shown in Table 6 below, the domain of authentic leadership style significantly related to all domains of organisational culture. Hence, Hypothesis 1 is fully supported by the data.

Table 6: Summary on relationship between authenticity and organizational culture

AL →	OCI	0.032	There are significant relationships between the leadership domain of AL and all the dimensions of organisational culture domain
AL →	OCC	<0.001	
AL →	OCA	0.049	
AL →	OCM	0.037	

Table 7 below illustrates that the domain of authentic leadership style is significantly related to OBI, one of the two domains of organisational culture. Hence, Hypothesis 3 is supported by the data

Table 7: Summary on relationship between authenticity and organizational innovativeness

AL →	OBI	<0.001	There is a significant relationship between the leadership domain of AL and the organisational innovativeness domain of OBI
AL →	LBI	0.122	

The following table shows that some domains of organisational culture are significantly related to some domains of organisational innovativeness. Hence, Hypothesis 2 is supported by the data.

Table 8: Summary on relationship between organizational culture and innovativeness

Organizational Culture	Organizational Innovativeness	p-value	Conclusion
OCI →	OBI	<0.001	There are significant relationships between the organisational culture domain of OCI and both domains of organisational innovativeness
OCI →	LBI	<0.001	
OCC →	OBI	0.002	There is a significant relationship between the organisational culture domain of OCC and OBI domain of organisational innovativeness
OCC →	LBI	0.390	

OCA → OCA →	OBI LBI	0.212 0.709	There is no significant relationship between the organisational culture domain of OCA and the domains of organisational innovativeness
OCM → OCM →	OBI LBI	0.003 0.766	There is a significant relationship between the organisational culture domain of OCM and OBI domain of organisational innovativeness

Mediating Effect of Organizational Culture

In the following Table, the OCI and OCC domains of organisational culture are shown to significantly mediate the relationship between the authentic leadership style domain and the domains of organisational innovativeness. Hence, Hypothesis 4 is supported by the data.

Table 9: Summary on mediating effect of organizational culture in the relationship between leadership authenticity and organizational innovativeness

Leadership Style	Organisational Culture	Organisational Innovativeness	p-value*	Conclusion
AL →	OCI →	LBI	0.029	The organisational culture domain of OCI mediates the relationship between the leadership style domain of AL and the organisation innovativeness domain of LBI
AL →	OCC →	OBI	0.028	The organisational culture domain of OCC mediates the relationship between the leadership style domain of AL and the organisational innovativeness domain of OBI

*Computed using Sobel's formula for mediating effect.



Discussions and Conclusion

This study considered three major variables, namely authentic leadership style (Northouse, 2012), organizational innovativeness, and organizational culture. Organizational innovativeness is the dependent variable and is measured based on the established work of Neely & Hii (1998). Likewise, organizational culture (the mediating variable) consists of four widely accepted traits: involvement, consistency, adaptability and mission (Denison & Mishra, 1995). Factor analysis as well as multiple linear regression tests confirmed the fit of the data obtained from the plantation managers. As such, this study has addressed the gap of unavailability of non-agronomy based formal research, enriching the literature relevant to leadership authenticity, organizational innovativeness and organizational culture.

Plantation managers who possess LBI through their creativity, achieve little extra results due to the unavailability of organizational culture with the trait of innovativeness. As a matter of fact, the interviews have confirmed the lack of management support for innovativeness in the plantation sector. The findings imply the importance of leaders and supervisors in creating the required environment and circumstances essential to facilitate innovation, which include autonomy, resource allocation (Kaiser et al., 2008; Mumford et al., 2002; Shalley & Gilson, 2004; Jung et al., 2008) and organizational communication (Howell & Avolio, 1993).

The influence of leadership authenticity on organizational culture in the Sri Lankan plantation sector is relatively greater than other sectors, mainly due to the colonial influence at the commencement of the sector, and the high power distance difference between the managers and the managed. The findings revealed a significant positive relationship between leadership style and organizational culture, but the mediating effect of organizational culture on innovativeness is relatively less due to the culture in the Sri Lankan plantation sector, which is not geared towards innovativeness. This is mainly due to reasons such as the educational background of the employees, 150 year old systems and practices adopted by the plantation sector, deeply rooted values, and ethics or beliefs of the employees of the Sri Lankan plantation sector; all of these surfaced from the results of the interviews and the subsequent statistical analysis.

As a mediator, 'mission' displayed a positive relationship with authentic leadership styles due to its importance for long-term orientation. On the other hand, 'consistency' had a positive relationship only with authentic leadership for OBI. The findings are supportive of the literature, where consistent and uniformed behaviour of employees at all levels forms the core of an authentic leadership style, which extends beyond the authenticity of the leader as a person to develop an authentic relationships with followers (Emuwa, 2013).



A study discovered that authentic leadership style has a significant positive relationship with all of the four cultural traits of involvement, consistency, adaptability and mission. An authentic leader as a person encompasses authentic relations with followers and this relationship is characterized by: (a) transparency, openness and trust; (b) guidance toward worthy objectives; and (c) an emphasis on follower development (Emuwa, 2013). Authentic leadership can also be defined as a pattern of transparent and ethical leader behaviour that encourages openness in sharing information that is needed to make decisions, whilst also accepting the input of followers (Avolio et al., 2009).

This study's results clearly provide a guide to understand, develop and implement strategies of organizational innovativeness through the most effective combination of leadership styles and organizational culture. Innovativeness is very important to the Sri Lankan plantation sector. Greater internal focus whilst neglecting external forces and the environment has led to a lack of innovativeness which has resulted in the deteriorating performance of the sector. The findings of this research should be of great assistance to policy makers and plantation management in order to revive the industry. It is hoped that the findings shed some light on the measures to be taken by the sector in order to remain relevant in times to come. For researchers, it is hoped that more studies can be done to build upon the current work.



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