

The Association between Organisational Commitment And Corporate Social Responsibility-Environmental Performance Within an Integrated Sustainability Balanced Scorecard Framework

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Abstract

This study investigates whether organisational commitment is associated with organisations' CSR performance within sustainability aspects of their internal process. A structural equation model (SEM) tested two sequential direct associations between: (1) senior management employees' affective and continuance organisational commitment and organisations' conventional value-creating internal processes; (2) conventional value-creating internal processes and organisations' CSR performance within sustainability value-creating internal process. The SEM results show an indirect association between affective commitment and CSR performance within sustainability value-creating internal process, which is mediated by the conventional value-creating internal processes. The findings support an integrated sustainability internal process within a sustainability balanced scorecard (SBSC) as depicted in Kaplan and Norton's strategy map. Organisations may develop internal processes that promote CSR outcome characteristics when employees possess higher levels of affective organisational commitment. Future research could investigate a broader range of environmental outcomes within CSR performance.

Keywords: *organisational commitment, strategy map, corporate social responsibility, sustainability balanced scorecard*

Introduction

Financial performance is the final outcome of the financial perspective of a balanced scorecard (BSC) framework from either direct or indirect associations with other BSC perspectives. Many prior studies have focused on the financial perspective as the sole outcome from either direct or indirect associations to develop a sustainability balanced scorecard (SBSC) framework. Such a focus does not follow arguments by Wilson (2003) that corporate sustainability has a broader definition than simply the traditional financial or economic performance. He argues that corporate sustainability also should demonstrate enhanced corporate social responsibility and environmental performance outcomes. More recent specific assertions support CSR-environmental performance as a separate outcome (to financial performance) from continuous or innovative improvements within the internal process of an organization (Ambec & Lanoie, 2008; Mowen *et al.*, 2006; Lee & Kim, 2012).

Kaplan & Norton (2004b) present in their strategy map framework a set off our value-creating processes that represent improvements within the internal process. Improvements in three value-creating processes (process, product, and the workplace) are considered part of the Kaplan & Norton's (1992) original (or conventional) BSC internal process. CSR-environmental performance is a sustainability value-creating internal process and an expansion to the conventional internal process. Any additional CSR-environmental outcomes will be called CSR performance as direct outcomes of the conventional internal processes and be referred to as sustainability value creating internal processes¹. The human capital component of the learning and growth perspective is included in Kaplan & Norton's (2004a) strategy map. According to Burr & Girardi (2002), it is plausible that organizational commitment is the main driver of human capital. One approach to examining the role of organizational commitment in relation to CSR performance is to model the CSR performance within the internal process of the BSC framework (Martin-de-Castro *et al.*, 2011).

People work in organizations hoping to use their set of needs, skills, and expectations, and through goal congruency, they have a higher levels of organizational commitment that helps achieve organizations' and employees' desired outcomes (Vakola & Nikolaou, 2005). Organizational commitment has been conceptualized as an attachment of employees to their organization that is characterized by shared values, a desire to remain in the organization and a willingness to exert effort on its behalf (Mowday *et al.*, 1979)². Peterson (2004) suggests that a link can be expected (1) between organizational commitment and employees' contribution to their organization's CSR performance³ and (2) between employee's work attitudes and organizational performance on

¹ For the sake of brevity in this paper, the value-creating internal processes will be called (1) conventional internal processes, and (2) sustainability internal process.

² In this study (unless stated otherwise in a discussion about the hypothesis development or the subsequent results), for brevity, the term 'organisational commitment' refers to either employee organizational commitment or organisational commitment of employees that has been used in prior research.

³ Corporate social responsibility (CSR) is defined by Carroll (1991) as comprising four components: economic, legal, ethical, and discretionary. The current study assumes that the first two components are positively adhered to, so the survey questions are centred on the latter two components of ethical and discretionary CSR performance.

social issues. CSR performance refers to the extent of a corporation's social responsibility to, and engagement with the community, as well as society and the environment in general⁴.

Knowledge about the association between organizational commitment and CSR performance is important because committed employees are more likely to perform better in achieving organizational CSR goals. In particular, it is important to identify factors that motivate employees to develop organizational outcomes that enhance CSR performances organizations are required to find ways to implement an increasing array of regulatory requirements to comply with social and environmental obligations. Consequently, organizations may benefit from identifying any factors that motivate employees to commit to, and develop, processes that improve the required CSR performance outcomes. However, there is still little understanding about the process through which organizational commitment may influence employee contribution to CSR activities within an organization's value-creating internal processes.

In summary, an extensive literature review did not identify any studies that have focused on whether organizational commitment translates into CSR performance outcomes within the organization's value-creating internal processes. In this study, we focus on the human capital component of the learning and growth perspective and the value-creating internal processes, which reflects an integrated sustainability BSC model. That is, the study will examine, first, whether organizational commitment is associated with organizations' conventional value-creating internal processes, as well as second, whether conventional internal processes is associated with organizations' CSR performance in sustainability internal process.

Literature Review

Empirical research on the BSC and other multi-perspective performance measurement systems generally supports the premise that various non-financial dimensions are associated with (both financial and non-financial) performance outcomes (see Bedford *et al.*, 2008; Malmi, 2001; Mooraj *et al.*, 1999; Ittner *et al.*, 2003; Hoque & James, 2000). These findings complement Wilson's (2003) CSR non-financial dimension as part of organizations' sustainability performance.

Desirable CSR outcomes incorporate interests, rights and needs of organizations' different stakeholders (Dawkins & Lewis, 2003; Maignan & Ferrell, 2004; Ruf *et al.*, 2001). Consequently, it is necessary for organizations to broaden their sustainability objectives not only to accommodate shareholders' goals but also to identify and address the social problems and environmental interests of all stakeholder groups (Griffin, 2002; Maignan, 2001; Peterson, 2004). This motivation is critical for the organization's survival, economic wellbeing, and competitive advantage (Mitchell *et al.*, 1997). It is acknowledged that organizations committing themselves to CSR activities can achieve long-term benefits that are outside the scope of this study⁵.

⁴ The items relating to social responsibility are: (1) Donations to community, (2) Community engagement, (3) Staff seconded to voluntary work, (4) Water conservation, (5) Educational scholarships given, and (6) Percentage of staff minorities.

⁵ These benefits that are outside of the study include brand enhancement, goodwill generation, clearer differentiation, further employees' motivation, higher profitability and greater quality workforce retention (CSR Europe, 2001; Lantos, 2002; Maignan & Ferrell, 2004).

A way to examine how an employee's organizational commitment translates into CSR performance is through a strategy map view of learning and growth as well as value-creating internal processes in the SBSC framework. The learning and growth perspective is integral to the achievement of an organization's sustainable performance outcomes because it is the foundation of the BSC (Kaplan & Norton, 1996b). Figge *et al.* (2002) argue that the same components of the learning and growth perspective described by Kaplan and Norton may be used within the SBSC approach. The attributes of the learning and growth perspective, such as organizational commitment, may motivate an organization to develop a sustainability value-creating internal process in its CSR agenda.

However, there have been very few studies on employees' organizational commitment as an antecedent of CSR performance within the value-creating internal processes of the strategy map within the SBSC philosophy. In particular, no study has examined how an employee's organizational commitment may enhance CSR performance through the value-creating internal processes. Organizational commitment may be considered a dimension of the SBSC's learning and growth perspective (Kaplan & Norton, 1996b; 2004b). That is, organizational commitment may be associated with CSR performance of the sustainability internal process that is mediated by the other value-creating internal processes. Surprisingly, no study to date has empirically examined whether the association between organizational commitment and CSR performance is explained by a set of sequential associations; and which variables mediate the organizational commitment and CSR performance relationship.

Therefore, this study explores this phenomenon through an adaptation of the sustainability value-creating internal process within the BSC strategy map concepts (Kaplan & Norton, 2004b) as part of integrated an SBSC framework. This study recognizes the role of organizational commitment in enhancing CSR performance within the integrated SBSC.

Research Framework

Organizational commitment has been identified as a critical aspect of employee behavior within the human capital component of the learning and growth perspective (Maltz *et al.*, 2003; Kaplan & Norton, 2004a). Human capital is considered to be the most important of the elements within the learning and growth perspective⁶ because it deals with an organization's ability to recruit, train, motivate and manage human resources (Kaplan & Norton, 2004a). Atkinson *et al.* (2004) acknowledged employees' contribution through their effort, skill, motivation, and commitment. While the existing stock of human capital (e.g., skills, talent and expertise) may be difficult to change, the level of organizational commitment may be more amenable to change.

With the strategy map framework, Kaplan & Norton (2004b) identified four value-creating internal processes, which include internal processes are outcomes such as

⁶ Recall that the other two main elements within the learning and growth perspective are information capital and organisational capital.

process, packaging, products and CSR processes. Further, although Kaplan & Norton (2004b) are silent on any order or sequence these improvement occur, it may be argues logically that improvements in process, product, and the workplace achieved in the conventional value-creating internal processes should lead to CSR performance in the sustainability value-creating internal process.

The present study examines how organizational commitment, a component of the SBSC learning and growth perspective, ultimately influences an organization's ability to achieve certain CSR performance of the sustainability value-creating process through the mediating effect of the conventional value-creating internal processes. Thus, these two specific perspectives within the SBSC framework are used to examine the indirect associations between organizational commitment and CSR performance. There is scant evidence about the relationship between organizational commitment and CSR performance even though there is an increased emphasis on CSR through initiatives such as the triple bottom line and the Global Reporting Initiative. Therefore it is important to examine these two proposed sequential direct associations and a SBSC framework is an appropriate framework for such an examination. Hypotheses are constructed in the next section to test these associations.

Hypotheses Development

In this section, discussions and evidence are provided to support the two sequential direct associations. Two hypotheses (labelled H_{1a}, H_{1b}, and H₂) are developed to test these proposed two associations.

Organisational commitment and conventional value-creating internal processes

Organizational commitment is the psychological identification that an individual feels toward his or her employing organization (Mowday *et al.*, 1982). Meyer & Allen (1991) assert that there are three key elements of organizational commitment: affective, normative and continuance commitment. Affective commitment reflects an employee's feelings of emotional attachment and connection to an organization and has implications for he/she decision of maintaining a long term membership with the organization. Continuance commitment refers to an employee's awareness of the costs associated with leaving the organization. An employee remains with an organization based on continuance commitment when the employee feels that he/she needs to retain organizational membership because of the perceived costs associated with leaving the organization. Normative commitment refers to an employee's feelings of obligation or duty toward their organization. That is, employees feel that they *should* remain with their organization (Meyer & Allen, 1991). As the current study is concerned with employees' actual feelings rather than an ideal standard, the focus will be on affective and continuance commitment rather than normative commitment⁷.

⁷ It is also possible for normative commitment to be redundant because it may be highly correlated with affective commitment (Randall, 1990).

Meyer & Allen (1997) postulate an association between organizational commitment and employee performance. Several recent empirical studies have found a significant direct relationship between organizational affective commitment and employee performance (see Quirin *et al.*, 2000, 2001; Donnelly *et al.*, 2000; Smeenk *et al.*, 2009; Vallejo, 2009). Smith (2003) found an indirect association between organizational commitment and employee performance on social responsibility issues (such as organizational citizenship behaviors which involve the employee doing more than is required in order to meet another's needs). He suggested further research needs to be undertaken in this area. Thus, when employees have high levels of organizational commitment, this may result in increased corporate citizenship behaviors, resulting in employees working collectively to deal with issues that achieve greater CSR outcomes. Employees may make such a contribution because they believe that the goals they are striving to achieve will enhance stakeholders' satisfaction.

The present study aims to test empirically whether the affective and continuance commitment elements of organizational commitment are indirectly associated with CSR performance using the following two posited associations. There is empirical evidence to suggest that the greater the degree of organizational commitment, the more likely employees will engage in extra-role behaviors (Meyer *et al.*, 1993; Pearce, 1993). Extra-role behaviors are those behaviors that are not included as part of an employee's official job duties that affect the well-being of the organization or its members. The primary examples of extra-role behaviors are organizational citizenship behaviors (Organ, 1988; Smith *et al.*, 1983); which would include employee efforts, actions and initiatives that are designed to maximize the effective use of organizational resources. Thus, organizational citizenship behaviors could result in employees' taking initiatives that lead to improvements in an organization's internal processes.

Kaplan & Norton (2004a) assert that when employees are committed to the organization's strategy, it is more likely that they will develop and document ways in which the critical internal processes may be enhanced. In this context, affective commitment has been found to have a stronger relationship with work outcomes than continuance commitment (Randall, 1990; Mathieu & Zajac, 1990). This difference may be attributable to the fact that affective (or internal) commitment reflects an attitude that focuses on employees' attachment to their organization and their emotional acceptance of its values and goals (O'Driscoll & Randall, 1999); whereas continuance (or external) commitment corresponds to contractual compliance (Argyris, 1998). There is an implicit suggestion in the literature that there are differences in the level of association for affective commitment versus continuance commitment and conventional value-creating internal processes. Therefore, the following two sub-hypotheses are proposed.

H_{1a}: There is a positive association between affective commitment and the organisation's conventional value-creating internal processes.

H_{1b}: There is a positive association between continuance commitment and the organisation's conventional value-creating internal processes.

Conventional value-creating internal processes and CSR performance

An organization's ability to generate new CSR products or services and such non-financial internal process outcomes may be indicators of improvements in CSR performance (Kaplan & Norton, 2001). Thus, an organizational focus on factors, such as workplace health and safety or product or service innovation abilities, in its conventional value-creating internal process may result in the organization achieving better outcomes in their CSR performance. These efficiencies in the conventional value-creating internal processes are expected to lead to enhanced CSR performance within sustainability value-creating internal process.

It is feasible that internal processes will be developed and refined to enhance CSR outcomes when there is an organizational focus on CSR as a clear component of strategy and culture (Cramer, 2005). Sukeserm & Takehashi (2010) maintain that establishing policy and designing an internal process structure should enhance CSR outcomes. These comments imply that when employees have access to meaningful policies and systems that support CSR, as part of the organization's conventional value-creating internal processes, there is likely to be a positive impact on CSR performance within sustainability value-creating internal process. The following hypothesis is developed based on these discussions.

H₂: There is a positive association between an organisation's sustainability conventional internal processes and its CSR-environmental performance within the sustainability internal process.

Research Method

A survey was developed and subsequently distributed to CEOs, financial controllers, and human resource managers of Australian private sector organizations employing 250 or more staff, which is consistent with prior management accounting studies (Hall, 2008; Lillis, 2002; Grafton *et al.*, 2010). The survey was pilot tested, a sample was selected from Business Who's Who of Australia database using the systematic random sampling method, and responses tested for validity. Companies had manufacturing, retail, service or mining as their primary business activities. Three hundred useable responses (final response rate was approximately 19%) were received.

Demographic Data

Respondents' ages ranged from 24 to 70 years and comprised approximately 76% male and 24% female. On average, respondents had worked for their company for 8.25 years and in their position for 4.64 years. They held various formal qualifications with 72% a bachelor's degree or above, 9% a certificate from TAFE, and 19% some other form of qualification or no formal qualifications⁸.

⁸ Participants were asked to identify goals actually used by their companies from a list of 16 CSR/environmental sustainability goals. On average, around 90% of responses provided evidence that their companies have some form of SBSC. For the CSR sustainability goals, about 97% of responses indicating that their company adopted CSR goals.

Non-Response and Common Method Bias

A non-response bias test was undertaken using the early and late responses received from participants. The first 20% of surveys that were received within the first two weeks of the mail out were included in the group of ‘Early’ responses, while the last 20% of responses received were noted as ‘Late’ responses (Firth, 1978). T-tests did not produce any significant difference between the early respondents and the late respondents any independent variables of the study.

Harman's one factor test (which comprised a confirmatory factor analysis) was used to test for the presence of common method bias. Twelve factors emerged from the data with the largest single factor accounting for 26.586 per cent of the variance⁹. It appears unlikely that common method bias had a significant influence on the results, and therefore is not a concern in this study because there were multiple factors extracted and the first factor did not account for a majority of the variance¹⁰.

Variable Measurement Model

Table 1 and Table 2 provide a summary of the results for these confirmatory factor analyses and discriminant validity analysis. The composite reliabilities (CR) in each of the two tables exceeded the level of 0.70, which Hair *et al.* (2006) suggest supports good reliability of the constructs. Discriminant validity of the constructs was completed using a variance extraction test. The average variance (AVE) explained for each factor ranged from .44 to .56, which points to good evidence of discriminant validity (Fornell & Larcker, 1981; Hair *et al.*, 2006).

Table 1. Confirmatory Factor Analysis for Affective and Continuance Commitment

Construct	CR	AVE	Summary of Item	SFL
Affective Commitment	0.78	0.54	A sense of belonging to my organisation	.725
			Not feeling ‘emotionally attached’ to the organisation.	.826
			The organisation has a great deal of meaning to me.	.841
			I feel the organisation's problems are my own.	.711
			I could easily become as attached to another organisation as to this one.	.519
			I am willing to put in the effort beyond that normally expected to help the organisation succeed.	.746
Continuance Commitment	0.90	0.51	I continue to work here because resigning would require considerable personal sacrifice.	.712
			Too few options are available if I resigned.	.771
			It would be difficult to find another acceptable job.	.783
			It would be hard for me to leave my organisation right now, even if I wanted to.	.720
			Too much in my life would be disrupted if I decided I resigned in the near future.	.734
			I am not afraid of what might happen if I quit my job without having another one lined up.	.528

CR = Composite reliability as determined by $(\sum SFL)^2 / (\sum SFL)^2 + \sum e$ (see Fornell & Larcker, 1981)

AVE = Average Variance Extracted

SFL = Standardised factor loading

⁹ This compares favorably with Rutherford *et al.* (2007) who reported that the largest single factor accounted for 32.7 per cent of variance in their study.

¹⁰ See Golden (2006); McFadden *et al.* (2006).

Table 2. Confirmatory Factor Analysis for Internal Process, Customer and Corporate Social Responsibility Sustainability BSC

Construct	CR	AVE	Item	Value Creating Processes	SFL
Conventional value-creating internal processes	0.86	0.44	Workplace relations	Improve CSR	.737
			Employee health and safety	Improve CSR	.719
			Employee retention rate	Improved Process	.680
			Research and development	Improved Product, Process & Packaging	.672
			Decrease in percentage of waste and rework	Improved Process	.647
			Product (or service) quality	Improved Product	.628
			Decrease in percentage of sales returns	Improved Product	.628
			Comparative costs with similar unit of competitors	Improved Process	.589
CSR performance within sustainability internal process	0.90	0.56	Donations to charitable/community organisations	Community	.851
			Expenditure for community engagement/ sponsorship	Community	.822
			Secondment of staff to voluntary work with charitable/community organisations	Community	.772
			Expenditure on educational scholarships	Community	.645
			Percentage of staff who are members of visible minorities	Employment	.639

CR = Composite reliability as determined by $(\sum SFL)^2 / (\sum SFL)^2 + \sum e$ (see Fornell & Larcker, 1981)

AVE = Average Variance Extracted

SFL = Standardised factor loading

Table 3 correlation results were below the commonly accepted threshold of 0.70 confirming that it is unlikely multicollinearity was present between the latent variables (see Hair *et al.*, 2006).

Table 3. Pearson Correlation for likelihood of multicollinearity

		Affective commitment	Continuance commitment	Internal Processes#	CSR##
Affective commitment	Pearson Correlation	1	-.331**	.369**	.206*
	Sig. (2-tailed)		.000	.000	.018
	N	298	295	218	132
Continuance commitment	Pearson Correlation	-.331**	1	-.249**	-.136
	Sig. (2-tailed)	.000		.000	.122
	N	295	295	216	131
Internal Processes	Pearson Correlation	.369**	-.249**	1	.210*
	Sig. (2-tailed)	.000	.000		.020
	N	218	216	219	123
CSR	Pearson Correlation	.206*	-.136	.210*	1
	Sig. (2-tailed)	.018	.122	.020	
	N	132	131	123	133

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Internal Processes = Conventional value-creating internal processes

CSR = CSR performance within sustainability value-creating internal process

This study adopted the two-stage process recommended by Schumacher and Lomax (1996). Stage One involved conducting separate measurement models for each latent variable. Construct validity¹¹ of the latent variables in this study was assessed by confirmatory factor analysis (Stage One). These indices reported in the following sections are significant at greater than 0.90, indicating that the model fit is robust (Tabachnick & Fidell, 2001).

Organisational Commitment Measures

An organizational commitment model developed by Meyer and Allen (1991) has often been used in business research (See Smith & Hall, 2008; Viator & Pasewark, 2005; Fogarty & Kalbers, 2006). In the present study, Meyer and Allen's two-component model for organizational commitment (affective and continuance commitment) was used as a factor pertaining to human capital to ascertain its association with the variables of the study¹².

Each participant rated their individual organizational commitment for fourteen items relating to organizational commitment (six affective commitment items and eight continuance commitment items) using a 7-point Likert-type scale anchored at both ends with 1 = "Strongly Disagree" to 7 = "Strongly Agree". A confirmatory factor analysis produced goodness of fit indices that support this measurement model; affective commitment (GFI = 0.993, AGFI = 0.991, RMSEA = 0.048) continuance commitment (GFI = 0.991, AGFI = 0.969, RMSEA = 0.035)¹³. Significant indices (greater than 0.90) indicate the model fit is robust (Tabachnick & Fidell, 2001). The internal reliability of factor's measure was strong (Cronbach Alpha: Affective Commitment 0.818; Continuance Commitment 0.797).

Conventional value-creating internal processes and CSR performance measures

Past studies investigating other multi-dimensional concepts have used either objective measure (e.g. Lawrence & Lorsh, 1967; Davis *et al.*, 1992) or subjective measures (e.g. Govindarajan, 1984, 1988; Abernethy & Stoelwinder, 1991). The measures for these two variables in this study were taken from prior literature (Kaplan & Norton, 1996a; Hoque & James, 2000; Iselin *et al.*, 2008). Thirteen items were adapted from Iselin *et al.* (2008) relating to, respectively, ten items for conventional value-creating internal processes and three items for CSR performance within sustainability value-creating internal process. Another five CSR items within sustainability value-creating internal process were adapted from Norman & MacDonald's (2004) to capture a

¹¹ Construct validity relates to "the ability of a measure to confirm a network of related hypotheses generated from a theory based on the concepts" (Zikmund, 2003, p. 302).

¹² Meyer and Allen's two-component model has been used in prior accounting research (e.g., Fogarty and Kalbers, 2006).

¹³ Affective commitment contained 6 items, all of which loaded onto one dimension in a rotated component factor analysis. Continuance Commitment contained 8 items, 6 of which loaded onto the rotated component matrix.

broader set of indicators concerning corporate ethical and social responsibility outcomes. Overall, there were 18 items for the value-creating internal processes; 10 conventional value-creating internal processes and 8 CSR sustainability value-creating internal process¹⁴. Thus, the CSR dependent variable is a multi-dimensional concept.

Each participant was asked to rate, using a 7-point Likert-type scale, his/her firm's internal process and CSR performance against the industry's average for each statement, where 1 = "Significantly Below Average" to 7 = "Significantly Above Average". The goodness of fit indices were robust for both the conventional value-creating processes (GFI = 0.992, AGFI = 0.978, RMSEA = 0.000)¹⁵ and CSR sustainability value-creating process performance (GFI = 0.995, AGFI = 0.950, RMSEA = 0.060)¹⁶. Stage Two involves the construction of a structural equation model and the results are reported in the Results section¹⁷.

Results

Statistical Analyses

Structural equation modeling (SEM) was used to test the hypotheses of the study; H_{1a}, H_{1b}, and H₂. SEM is the preferred method of analysis because it allows the analysis of multiple relationships simultaneously, provides measures of overall model fit, and explains the significance of relationships between variables (Kline, 1998; Baines & Langfield-Smith, 2003). These functions, as well as accounting for the effects of measurement error in multi-item variables, are considered to be advantages of SEM over path analysis (Viator, 2001).

Results of Hypotheses Tests

Figure 2 below shows the significant and the non-significant associations between the variables of the study. The estimates of the coefficients are displayed for each association between the latent variables. The results of the current study reveal that there are two significant SEM structural paths found within the three path model.

Each 'goodness-of-fit' index reports a significant overall model fit. The overall model fit, as measured by the RMSEA, is less than .05 (0.0276) and therefore a robust fit. Additionally, other goodness-of-fit indices are significant at greater than 0.90 (GFI 0.993, AGFI 0.976, NFI 0.979, CFI 0.996) indicating that the model fit is robust (Tabachnick & Fidell, 2001)¹⁸.

¹⁴ The internal process construct included items assessing issues such as product quality, decreased waste, decreased error and returns, workplace relations, employee satisfaction, employee retention, and health and safety. The construct of CSR performance covers issues relating to the organisation's performance in the following areas: level of community engagement and donations to the community; secondment of staff to provide voluntary work in the community; the proportion of staff minorities within their firm; and finally, the commitment to water conservation within their organisation.

¹⁵ Internal process comprised 10 items, two of which did not load onto the rotated component matrix factor solution.

¹⁶ CSR comprised 8 items, three of which did not load onto the rotated component matrix factor solution.

¹⁷ See Schumacher and Lomax (1996).

¹⁸ These statistics are reports because the CMIN statistic does not provide reliable evidence of the goodness-of-fit for the model as the sample size for the current study is greater than 200 respondents (Smith and Langfield Smith, 2004)

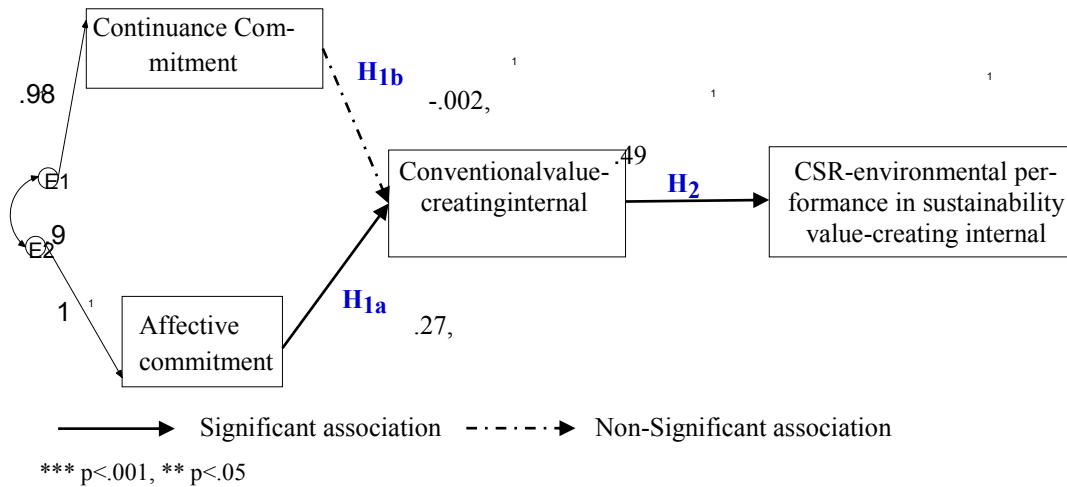


Figure 2. Significant and non-significant associations

The SEM results (critical ratio = 4.528; coefficient estimate = 0.268; $P < .001$) show a significant positive path between the affective commitment component of organizational commitment and conventional value-creating internal processes. The results support sub-hypothesis 1_a. However, sub-hypothesis 1_b cannot be supported because there is no significant association between the continuance commitment component and conventional value-creating internal processes. A significant positive result (critical ratio = 9.101; Coefficient Estimate = 0.489; $P < .001$) was found for the association between the conventional internal processes and CSR performance outcomes from the sustainability internal process, which supports hypothesis 2.

These two significant paths represent an indirect association between affective commitment and CSR performance (the sustainability value-creating internal process), which is mediated by the conventional value-creating internal processes. No significant indirect association was found between continuance commitment and CSR-environmental performance outcomes from the sustainability value-creating internal process.

Discussion

The results of the structural equation model indicate that organizational commitment has an indirect association with organizational CSR performance. This association occurs through two sequential direct associations. The first direct association is between affective commitment (but not continuance commitment) of employees and the conventional value-creating internal processes. This finding suggests that when employees have affective commitment for their organization, they will place a greater emphasis on adapting and enhancing organizational processes so that they improve the workplace environment¹⁹. These employee-initiated enhancements may result in enhanced workplace compliance, organizational conventional internal process efficiency and effectiveness.

¹⁹ Recall that the internal process construct comprises items such as workplace health and safety, workplace relations and staff turnover, as well as research and development, decrease of wastage and error, decrease in returns, product quality and comparative costs.

The association is consistent with prior findings between organizational commitment and organizational citizenship behaviors (see Felfe & Yan, 2009; Erturk *et al.*, 2004; Chiaburu & Byrne, 2009; Parnell & Crandall, 2003). Evidence of organizational citizenship behaviors has implications for the current study because employee-initiated enhancements of their firm's internal processes are a form of organizational citizenship behavior, and as such, may provide some explanation as to how affective organizational commitment may affect the internal process perspective. The result for continuance commitment is consistent with the prior findings (Randall, 1990; Mathieu & Zajac, 1990).

Finally, the direct association between the conventional value-creating internal processes and CSR (sustainability value-creating internal process) performance has notional support. This support is from Hanke & Starke (2009), with similar observations made by Van der Woerd & Van den Brink (2004) where a link between the internal process perspective and 'Society and Planet' is present in their "Responsive Business Scorecard". SBSC enables organizations to assess their performance on profit, people and planet perspectives, while integrating stakeholder demands within their learning and growth and value-creating internal processes. Enhanced conventional internal processes may improve CSR performance. Examples of enhanced outcomes are decreasing electricity consumption, which, reduces carbon emissions, and thus, improves air quality and may have health benefits for society. Similarly, organizational efforts to reduce water consumption in the value-creating internal processes should result in more clean water being available for communities to access for private domestic use. Also, reducing the amount of waste and rework in the manufacturing process are examples of improvements in CSR outcomes. These may be achieved through an organization's quality improvement program (conventional value-creating internal processes), which may reduce toxin levels produced as a by-product of the production process. Similarly, reducing the amount of resources involved in packaging needed to produce a good or service for the market are CSR outcomes. Thus, efficient and effective conventional value-creating internal processes are a way to improve organizations' CSR performance in their sustainability value-creating internal process.

Conclusion

This paper contributes to the literature by providing evidence about the stakeholders' sustainable benefits related to the indirect association between organizational commitment elements and CSR-environmental performance that is mediated by the conventional value-creating internal processes. The results of the study contribute to an understanding of how committed employees play a vital role in assisting organizations to achieve better CSR-environmental outcomes for their community. This understanding can help management identify the critical success factors (CSFs) need as part of the organization's performance measures that are used to achieve organizational sustainability²⁰.

²⁰ Van Veen-Dirks and Wijn (2002) advocate identifying critical success factors as complementary to traditional balanced scorecard measures.

In summary, the current study provides some evidence of how affective organizational commitment contributes to developing an organization's (conventional) value-creating internal processes of a SBSC framework. This development should then be reflected an organization's sustainability through its improved CSR performance. We conclude that organizations, with employees who have higher levels of affective organizational commitment, may develop value-creating internal processes that exhibit CSR outcome promoting characteristics within sustainability value-creating internal process.

Organizations subject to new regulatory social and environmental compliance requirements may be aided by the evidence about two sequential direct associations for this indirect association. First, organizations with have the ability to identify factors that motivate employees to develop enhanced organizational value-creating internal processes. Second, these organizational internal process enhancements may be a primary way to comply with socio-political and legal environment improved CSR performance requirements. Consequently, the results of the study contribute to an understanding of how committed employees play a vital role in assisting organizations to achieve better CSR outcomes for their community.

Research limitations and implications for Further Research

There are several limitations that should be acknowledged. First, the use of cross-sectional data does not account for any changes in circumstances of the organization. That is, participant's responses may differ over a period of time, especially after a period of organizational change. Therefore, the results may not hold true if data were collected at a future time. Second, the responses were based on the perceptions of senior and middle managers, which may differ from the perceptions of base-level employees. An examination of base-level employees' perceptions by future research may yield comparative information for theory development and use in practice. Third, structural equation modeling itself cannot "prove" causality (Smith & Langfield-Smith, 2004). Therefore it cannot be assumed that causal relationships exist between measures of the BSC perspectives in this study, i.e., these measures may simply be correlated or interdependent (Norreklit, 2000). Therefore the direction of the associations found was only inferred from theory (Smith & Langfield-Smith, 2004).

Fourth, an organization's value-creating internal processes that exhibit CSR outcomes within sustainability internal process maybe influence by organizational commitment and other unidentified factors. The identification of other factors is an area for future research. For example, psychological empowerment has been identified as being an antecedent of organizational commitment (Smith, 2003). Therefore, it may be another factor likely to affect internal process. Alternatively, the level of formal or informal training of staff as well as the selection and motivation of the organization's human resources are factors that may impact the development of internal processes. Future research could investigate how the SBSC may be used to examine a broader range of CSR factors, particularly those involving environmental performance outcomes.

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