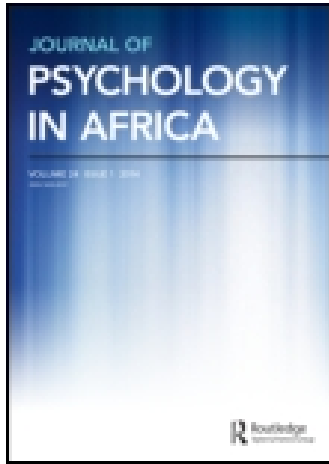


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Efficacy Evaluation of a Leadership Development Assessment Centre For Managers

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This study evaluated the efficacy of a leadership development intervention using an assessment centre approach. Participants were 72 managers and peer workers (50%) with a steel manufacturing organisation from the Gauteng province of South Africa (females = 17% and males = 83%). A randomised group design was used to evaluate the programme. The intervention involved a leadership development assessment centre which included simulations to develop a leader. Pre-post intervention data were collected using the New Leadership Behaviour Inventory – Version 2 (LBI - 2). The results indicate that the leadership development intervention was effective in developing the key competencies of a leader. The most significant increase was found between the pre- and post-test for the competency, and articulating vision. Leaders should have a vision for themselves and the company and should share a dream and direction which their subordinates and peers wish to share and follow.

Keywords: development assessment centre, leadership, manager, intervention, efficacy

Leadership development is important for reaching the strategic goals of an organisation, this should include developing traditional leadership competencies such as communication, conflict management, and problem solving (Rupp, Baldwin, & Bashshur, 2006). Various approaches to leadership development can be utilized, including assessment centres (Schlebusch and Roodt, 2008). While a traditional assessment centre (AC) assesses participants' performance for selection purposes, a development assessment centre (DAC) is utilised to determine development needs of employees (Schlebusch and Roodt, 2008). DACs are often used to assess the training and development needs of managers (Freschi, 2009). Appelbaum, Harel, and Shapiro (1998) accentuate that development assessment centres (DACs) should be seen as the starting point for developing leaders in the organisation. Moreover, DACs is the most popular method to use when it comes to developing managers (Conger & Benjamin, 1999). Rupp, Baldwin, and Bashshur (2006) explain that DACs provide the managers with the assistance in coaching, feedback, and experiential learning opportunities. The main focus of DACs is developing traditional leadership competencies such as communication, conflict management, and problem solving. DACs are prevailing progressively more in United States organisations (Kudisch et al., 2001), the United Kingdom and in the Eastern nations (Lee, 2002). A study by Meiring (2006) shows that there is an increase of usage of development assessment centres in South Africa, although its impact on the participants is still being questioned.

DACs have repeatedly been used and have shown to be successful for selection or promotion purposes (Carrick & Williams, 1999; Thornton & Rupp, 2005). However, Schlebusch (2011) states that DACs are used to determine the participant's existing areas of strength and areas that need further development in order to align future development with real needs. Thornton and Rupp (2005) defined DACs as assessments and

a gathering of workplace reproduction exercises that provide individuals with practice, feedback, and developmental coaching on a set of developable behavioural dimensions that were found to be critical for their professional success. In summary, developmental assessment centres have both an assessment and a development component, while selection and diagnostic assessment centres are designed to assess an individual's competence (Joiner, 2009).

DACs show ability to improve the decisions made about a key factor of organisational success such as the leaders that are recruited, promoted and appointed to senior positions (Scarf, 2010). DACs form a well-known part of many organisations' leadership development strategies, and the promotion mechanism for the career development of high potential managers and professionals (Atwater, Ostroff, Yammariono, & Fleenor, 1998). DAC methodology often includes different exercises in order to simulate key aspects of management and leadership (Atwater, Roush, & Fischthal, 1995). Campbell and Bray already predicted in 1993 that DACs will be a key predictor of future performance.

Qualities of Effective DACs

DACs offer an objective and vigorous method of enhancing the individuals, the organisations, and awareness of skills, strengths and gaps (Šukalová & Hrašková, 2006). DACs further give an exclusive opportunity to objectively scrutinize and measure how people really perform tasks, handle decision making, relate to each other, and demonstrate self-awareness. A well-designed personalised DAC is an efficient tool for measuring the significant behaviours important to employees' present success and future potential (Šukalová & Hrašková, 2006).

Additional characteristics of development centres include that they do not have a pass or fail criteria, but are geared towards developing the individual (Nel, 2010). Furthermore, these

centres can address the organisational need over a longer period of time. The intention of DACs is that it should be used with internal candidates and can have a 1:1 ratio of assessor to participant, while it may not involve line managers as assessors. Nel (2010) further states that DACs place more emphasis on self-assessment, while focussing on the individual's potential, and are geared to meet needs of both the individual and the organisation.

Goals of the Study

This study sought to evaluate the efficacy of a leadership development intervention using a DAC with a steel industry partner in South Africa. The specific research question was: What is the validity of a DAC intervention to develop leadership in a manufacturing sector environment?

Method

Participants and setting

The sample consisted of 72 middle management employees ($n=36$) of a steel manufacturing organisation and their peer co-workers ($n=36$). The managers nominated the subordinates/peers for the study who had significant exposure to their leadership skills/competencies. The majority of the participants (83.3%) were male, Afrikaans speaking (47.1%) and White (52.8%).

Description of the DAC intervention

The implementation of the development assessment centre took place over a three-day period which included various sessions. Each day and session involved specific objectives and methods. Table 1 presents the structure of the intervention: in-basket technique, individual and group sessions.

As can be seen from the results, during day 1, session 1 included an in-basket exercise. The participants were each requested to complete a series of leadership exercises and to indicate how they see themselves as leaders. During the second session, role-plays were utilised to determine quick decision making and adaptability of the participants. Secondly, a meeting with the entire group was held. In this meeting the group was given a specific scenario to discuss and to come up with good

and innovative ideas and solutions. The group also had to appoint a person who would be the group leader.

Session 3 included the administration of the New Leadership Behaviour Inventory – Version 2 on the managers, peer and/or subordinate. Lastly, feedback was given to the manager concerning his/her performance over the past three days.

Measures

For the pre-post intervention outcome measurement, participants completed the New Leadership Behaviour Inventory – Version 2 (NLBI – 2) (Spangenberg & Theron, 2011). The NLBI-2 is a measure of the degree to which a leader or manager demonstrates competencies such as Developing vision, Trust, Articulating vision, Strategy and Risk. The NLBI – 2 comprises of 120 items with a score range of 1 (rarely) to 5 (very frequently) Previous studies reported internal consistency reliability measures of 0.74 to 0.80 (Durrheim, 2008).

Procedure

Authorisation and permission to conduct the study was granted by the research ethics committee of the North West University as well as the organisations' management and the participants. Participants' granted individual written consent. During the first assessment, the group participated in the development programme exercises such as in-basket exercise and interview. They also completed the NLBI-questionnaire. The development programme was conducted over a three (3) day period. On the first day of the development programme an in-basket exercise was administered. On the second day, interviews were conducted and a meeting was held and the NLBI-questionnaire was completed, and on the last day, the participants received feedback regarding their performance of the previous two days. The development programme was presented by five professional consultants from different companies, and they are all registered Industrial Psychologists. After the one-month interval, the participants, peers and subordinates were requested to once again complete the NLBI-questionnaire.

Data Analysis

The data analysis was carried out using SPSS (SPSS Inc., 2009). Paired-samples and independent samples *t*-tests were

Table 1

The Content and Methodology of the Development Assessment Centre for Managers

Objective	Objective	Method	Length
Day 1: In-basket exercise	The participants should be able to recognise effective leadership skills and communication skills	Group exercises; Individual exercises	8 hours
Day 2: Session 1: Interviews	The participants should be able to make quick decisions under pressure and see all their decisions through as projected.	Role play interviews	3 hours
Session 2: Meeting	The participant should be able to work cohesively within a group and be able to take part in all group discussions	Group discussion	4 hours
Session 3: LBI(2)	Each participant rates him/herself as an effective manager against 120 items	Paper and pencil	1 hour
Day 3: Feedback	Each participant receives feedback regarding the previous two days.		

conducted to establish the significance of differences between the pre- and post-test. An independent-samples *t*-test was used to compare the mean score between the pre- and post-tests. Effect sizes (i.e., eta squared) were calculated to determine the magnitude of the differences between the pre- and post-test. The guidelines as set by Cohen (1988) were utilised to interpret the values, namely .01= small effect, .06=moderate effect and .14=large effect.

Results

The following section reports on the results of the study. The results indicate that there were statically significant increases across all the leadership competencies between the pre-test and the post-test measurements (see Table 1 for descriptive statistics). The largest increase manifested between the Articulating vision competency, pre- and post-test ($M = -0.92$; $SD = 0.49$; $t(35) = -11.16$; $p = 0.00$), as well as the Systems competency's pre- and post-test ($M = -0.79$; $SD = 0.40$; $t(35) = -11.81$; $p = 0.00$). The smallest increase was noticeable between the pre- and post-test of the Co-ordination competency ($M = -0.43$; $SD = 0.88$; $t(35) = -2.95$; $p = 0.00$).

No significant differences in the scores for participants or their peers and sub-ordinates were found across any of the leadership competencies. The extent to which these two groups differ across the leadership competencies was small; the eta squared values ranged between 0.000 ($t(35) = -1.54$; $p = 0.13$) and 0.042 ($t(35) = 1.76$; $p = 0.08$).

Conclusion

Statistically significant increases were recorded in leadership competencies between the pre-test and the post-test measurements. The largest increase manifested between the pre- and post-test for the competency, Articulating vision. This finding is similar to that by Heathfield (2012). A leadership vision is manifested in the organisation's leaders' beliefs, actions, goals and values.

The results suggest an increase in the leadership competency of optimising structures and systems post intervention. A similar finding was reported by Fischer and Engelbrecht (1992) concerning task structuring, development and empathy. Fischer and Engelbrecht state that Thornton and Byham (1982) indicate that these competencies seem to show the biggest improvement over time. Furthermore, Kaminski (2000) states that adaption to change has become common for all types of organisations and that the effects of change are multifaceted. Hence there will be an increase in the adaption of structures, processes and procedures to support implementation of strategy in a changing environment.

The smallest increase was noticeable in the results of the facilitating interdepartmental co-ordination competency during the pre- and post-test. This is the competency that facilitates interdepartmental co-ordination and helps subordinates and peers to see the big picture. It seems that more development is needed to assist these managers to facilitate co-ordination. DiFonzo (2007) believes that a lack of communication regarding change from the top management to the rest of the company is the reason why employees do not want to buy-in on change. Furthermore, this is also the reason why the managers do not want to communicate change to their subordinates or peers, because their own management is not following the correct channels to implement change (DiFonzo, 2007), explaining the lack of sufficient increase in this competency.

The conclusion can be drawn that the results of the evaluation of a leadership development centre in a manufacturing organisation in the steel industry are positive. It seems that the middle-level managers who participated in this study showed an increase in the leadership competencies, as measured by the NLBI (2) after the DAC had been implemented. Moreover, the DAC showed particular increase regarding the leadership competencies of articulating vision and optimising structures and systems, which correlates with previous studies. Hence the results are in line with literature regarding the improvement of leadership and confirm that a DAC can indeed improve leadership abilities and skills.

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