Exploring Situational Leadership Using Critical Incident Technique in the Times of COVID-19

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Abstract:

The success of any project is a direct function of project leadership. Projects undertaken in a changing environment require project managers who can adapt their leadership style on demand. This study focuses on the impact of situational leadership in times of crisis, specifically during the period of the COVID-19 pandemic. The methodology used was the critical incident technique, carried out through interviews with project managers and the analysis of 128 incidents described by respondents. It was found that 78% of the project managers used more than one type of leadership and 82% used the directive type. Based on this

research, it was possible to develop a set of rules for effective leadership in troubled situations.

INTRODUCTION 1

The COVID-19 pandemic has brought different and complex challenges for companies. The need for rapid change, agility, and sustainability are closely linked to projects and new ways of managing projects. Leadership is important in the success of any project (Lategan and Fore, 2015). A successful leader motivates and inspires the team, manages conflicts, and makes the right decisions to ensure the success of

Situational leadership is a leadership model that suggests leaders should adapt their leadership style to maximise team performance by considering the demands of the situation. The model, initially presented by Hersey and Blanchard (1969), suggests four styles of situational leadership: directing, coaching, supporting, and delegating.

This study aims to address the following research question: what types of situational leadership helped to manage projects successfully during the COVID-19 pandemic? The Critical Incident Technique (CIT) was considered the most appropriate method for this study, as it allows details to be gathered about specific events that occurred during a project. Eighteen interviews were conducted with project managers in South African companies that developed projects in the areas of health and information technologies. In total, 128 incidents were collected and analysed.

The next sections present the work performed and the main results obtained. In section 2, based on a literature review, the main concepts of CIT, situational leadership, and project success are briefly presented. In section 3, the research methodology is presented, detailing the sample selection, the profile of the respondents, and the protocol used in the interviews. The main results are presented in section 4 describing the types of situational leadership used by the interviewed project managers and discussing the main findings. Finally, the last section provides an overall analysis and summarises the main results.

THEORETICAL BACKGROUND

This study analyses the impact of situational leadership on project success using CIT. This section

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describes the main concepts about CIT and situational leadership. Moreover, a brief background on the field of project management is presented.

2.1 Situational Leadership

The general idea of situational leadership is that there is no single leadership style that adequately addresses the needs of an organisation, but rather that leaders must adapt their style to match the specific context or situation.

The Hersey and Blanchard (1982) situational leadership theory is based on the premise that one must consider the characteristics of the leader and followers as well as the situation to determine the most appropriate form of leadership. The model suggests that there are four primary leadership styles: telling, selling, participating, and delegating.

Blanchard revised the situational leadership model and published an updated version as Situational Leadership II (SLII) in the book, Leadership and the one minute manager (Blanchard et al. (1986). The model posits that, in selecting their leadership type, team leaders will consider the degree of direction they need to give their members versus the level of support they should offer. Accordingly, the SLII model has two dimensions – directive behaviour and supportive behaviour – as illustrated in Figure 1.

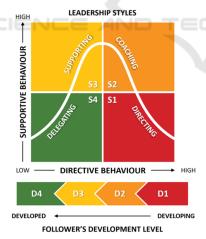


Figure 1: Situational Leadership II model (Blanchard et al., 1986).

The model includes four basic types of leadership, derived by combining the two dimensions mentioned:

- 1. Directing (S1): leaders provide more direction than support to team members.
- 2. Coaching (S2): leaders provide high levels of direction and support to team members.

- 3. Supporting (S3): leaders provide more support than direction to team members.
- 4. Delegating (S4): leaders provide limited direction and support to team members.

The model also indicates that the shift from S1 (directing) to S4 (delegating) aligns to the development level of those being led, where D1 denotes a developing team member and D4 denotes a developed team leader. Development level refers to the extent to which a person has mastered the skills necessary for the task at hand and has developed a positive attitude towards the task. This development level range with two dimensions of competence and commitment replaces the performance readiness range with dimensions of ability and willingness of the original model. The reasoning is that competence is perceived as something that can be developed. whereas ability is seen as natural ability. Equally, commitment may simply diminish over time, rather than suggesting a lack of willingness, which is seen as stubborn resistance in many countries (Blanchard et al., 1993).

A more recent study tested three basic assumptions of the SLII model, namely that the model's four leadership styles are both received and required by followers; and that where followers reported a fit between the style they needed and the style they received, they demonstrated better performance (Zigarmi and Roberts, 2017). Their study highlighted the importance of both the initiating structure and consideration dimensions of the SLII model in various combinations. Three of the four leadership styles of the SLII framework were reported as frequently received, with minimal reports of high directive-low supportive leadership. That said, all four of the leadership styles were reported as needed. This study also found that follower-reported fit between one's needed and received leadership style at work resulted in more favourable scores on nine of the 10 employee outcomes, compared to followerreported misfit. This indicates that leaders must adapt their styles to their followers' needs for optimal performance.

2.2 Critical Incident Technique

Over the past decade, there has been an increasing interest in people's subjective impressions of life — whether work-related, service and product experiences or personal endeavours. The stories people tell give researchers and practitioners insight into how people make sense of the environment in which they operate. This has helped researchers and participants to learn, reflect, and improve the outcome

of their efforts. Within the context of leadership studies, specifically situational leadership, the field benefits from research techniques that highlight the subjectivity of experience, the layers of meaning attached to leader and non-leader actions, and the experiences most characteristic of general organisational life (Bott and Tourish, 2016).

CIT has been used in a multitude of settings and industries (Swanson et al., 2021; Ruiz et al. 2016) doing just that – exploring subjective experiences to help solve real problems (Davis, 2006). It is ideally suited to uncover and unpack these experiences using a systematic approach to obtain rich, qualitative information about significant incidents from first-hand experience. In this case, situational leadership in technology and health projects was explored over the COVID-19 pandemic timeline (January 2020 to December 2021) by asking research participants to describe how their behaviour, actions, or an occurrence positively or negatively impacted a specified project outcome.

CIT is a tool used to gather and analyse information on behaviours that impact performance by uncovering the skills, attitudes, knowledge, and values at play. Flanagan (1954) listed the five CIT steps to follow to secure these outcomes, namely to:

- 1. Ascertain the general aims of the activity being studied;
- 2. Make plans and set specifications;
- 3. Collect the data;
- 4. Analyse the data; and
- 5. Interpret the data and report the results.

CIT is frequently used to collect data based on observations reported from memory. This is usually satisfactory when the incidents are recent and the observers made detailed observations and evaluations at the time of the incident.

To mitigate the risk of poor recall, which could negatively impact the quality of the responses and the interview time, it is suggested that researchers email the interview guide to the participants one week in advance (Bott and Tourish, 2016) and ask them to think about critical incidents to discuss. Incidents can also be restricted to those that occurred in the past year, although this may be problematic in cases where many incidents need to be collected.

However, in this study, the focus on the COVID-19 time frame is sufficiently recent and, in some ways, distinct due to the pandemic's impact on human lives and on the businesses they work in.

Variations in context are critical as they are likely to lead to different results and thus implications. Therefore, the importance of probing questions to uncover any intricacies in the fact-finding stage of the interview must be emphasised. Damoah (2018) and Mol et al. (2017) contended that the dearth of studies on Africa implies a current lack of understanding of pertinent management issues, and have called upon management scholars worldwide to examine the extent to which Africa can influence existing theories.

2.3 Project Management

Projects are designed to fulfil the strategic needs of an organisation, such as market demand, customer requests, technological advances, legal requirements, social needs, and crisis handling (Anantatmula, 2020). According to Gardiner (2017) a project is a temporary effort that exists, is unique, takes shape through progressive elaboration of processes and standards, and is mostly defined by the complexity, size, and scope. Minelli (2020) attested that a project is a temporary effort to create a unique product, service, or a result, and has a definite start and end.

The project management knowledge areas consist of integration, scope, time cost, quality, human resources, communication, risk, procurement, and stakeholder management (Demirkesen and Ozorhon, 2017). Project management is the application of processes, methods, skills, knowledge, and experience to achieve specific project objectives according to the project acceptance criteria within agreed parameters (Kerzner, 2018).

Different authors attest that an event is deemed a project if it meets the following criteria:

- Defined start and end dates;
- Defined objectives and desired results; and
- Budget and scope.

Although there might be more or fewer criteria in a project, there is a consensus that the above are instrumental to the definition of a project.

3 RESEARCH METHODOLOGY

This research aimed to explore the impact of situational leadership in times of crisis, specifically the COVID-19 pandemic between January 2020 and December 2021. The focus was on critical incidents that impacted commercial projects undertaken by companies through medical or technological advancements.

The interpretive and exploratory nature of this study favoured a qualitative approach. CIT was identified as a suitable method, as it allows for the emergence, rather than the imposition, of a collection of incidents based on salient and memorable respondent experiences (Tuuli and Rowlinson, 2010).

The practicality of CIT in project management research has been demonstrated in several studies (Haussner et al., 2016; Kaulio, 2008; Varajão et al., 2014) and its appropriateness for this study was further underscored by its demonstrated reliability, validity, and practicality. Therefore, CIT was used in this study for the following reasons (Ramseook-Munhurrun, 2016):

- Positive and negative critical incidents could be identified, allowing researchers to examine the incidents most significant to the problem being studied.
- Being inductive in nature, hypotheses were not needed, allowing the development of concepts and theories.
- Since the critical incidents are personal experiences, new research evidence related to the phenomena studied could be generated.
- Project managers could use the information derived from the CIT for project improvements.
- The CIT research approach is important for evaluating respondents' attitudes from various projects and settings.

Inductively designed critical incident interviews were conducted to explore the behaviours and actions of project leaders and team members to identify alternative influences arising from organisational actors and contextual factors (Bott and Tourish, 2016). Since context is crucial in research, the choice of the empirical context was deemed appropriate, given the scant attention being paid to research in Africa (Damoah, 2018). Consequently, semi-structured critical incident interviews were used to collect behavioural data from 18 participants from 17 South African organisations working on technology and/or health interventions during the pandemic.

3.1 Sample Selection

Based on its success in previous CIT studies, a convenience sampling approach was adopted to select participants (Gremler, 2004). Participants included project sponsors, project managers, project team members, engineers, designers, and analysts working on commercial technology- or health-related projects that addressed COVID-19 challenges. This diversity of respondents was to ensure that incidents collected were comprehensive in their coverage of the varied perspectives represented in project settings (Flanagan, 1954).

Sample size in CIT studies is determined by the number of critical incidents, rather than the number of interviews required to achieve adequate coverage of the subject of study, as well as the complexity of the problem under investigation (Tuuli and Rowlinson, 2010). Flanagan (1954) suggested that "if the activity or job being defined is relatively simple, it may be satisfactory to collect only 50 incidents. On the other hand, some types of complex activities appear to require several thousand incidents for an adequate statement of requirements." Flanagan added that the investigator needs to be cognisant of saturation, where the addition of further participants reveals few new critical incident behaviours.

Overall, 18 interviews were conducted, each lasting on average one hour. Interviews were recorded and respondents' demographic information captured with their consent. Respondents were requested to recall specific incidents related to the project in their own words. Probes were used to ensure detailed descriptions. To generate the incidents, respondents were asked to describe the positive or negative critical incident that contributed significantly to the outcome of the project. In total, 128 incidents were collected. CIT allowed respondents to "speak for themselves", providing an authentic understanding of critical incidents and insights related to the success of the project under COVID-19 conditions.

Analysis was done by examining the text for narrative structures to identify insights that emerged from the data. Working in teams, the analysts categorised the critical incidents related to situational leadership impacting project success, in the process also validating the categories (Butterfield et al. 2005).

3.2 Profile of Respondents

Eighteen project managers and project sponsors from the technology and health sectors were interviewed via online platforms (i.e., Zoom and Microsoft Teams). The interviews were recorded digitally and transcribed. Majority of respondents were from the technology sector (82%), only three worked in health (18%).

During the interviews, respondents shared a project they completed between January 2020 and December 2021 and recalled the critical incidents in the project's life cycle. The projects were diverse in nature and included establishing a command centre, helping private hospitals navigate the challenges and opportunities posed by COVID-19, delivering 733 000 laptops to learners registered at technical and vocational colleges, offering innovative technology solutions to large manufacturing and retail banking companies, and shifting a call centre to agents' homes. Two of the projects were in companies that

were on the brink of closure at the onset of COVID-19 and managed to become sustainable businesses during the pandemic. The diversity of projects together with the precarious financial positions of some of the companies strengthened the data set and contributed to its reliability.

3.3 Interview Protocol Development

As emphasised in section 2, a clear definition of a critical incident, within the context of the study, is important to ensure that participants do not necessarily see it as a crisis and/or a negative event. For the purpose of this study, a critical incident is a decision and/or action undertaken by a project team member (or a person not directly involved in the project) that contributed significantly to the project outcome in terms of:

- Efficiency measured as duration, cost, or resources required;
- Contribution to business sustainability; and/or
- Impact on participants, beneficiaries, or other stakeholders.

The research team carefully considered whether the interview guide should specify the identification of both positive and negative incidents. If not, it was more likely that respondents would recall negative incidents (Davis, 2006), which have longer-lasting and more intense consequences. After a thorough review of literature, it was decided to request both positive and negative incidents for this study to reveal a commonly experienced range of challenges and situations, as well as diverse themes that may vary across different contexts. The question that was posed - describe the positive/negative critical incident (decision/action that contributed significantly to the outcome of the project) - does not presume that all (or any) leadership behaviours will be relevant, as the research design does not deductively consider behaviours prescribed by a particular leadership theory at its onset.

To find a balance between clarity and dialogue, without invoking unnecessary response bias, the probes listed below were used in the study. They were designed to minimise structure in the interview process and ensure that the discussion was driven by what the respondents felt was important.

- What could have made the action more effective?
- Which aspect of the project outcome was most affected? Please explain why you think so.
- What was the project role of the person who took the unplanned action you described?
- In what way do you believe the critical incident contributed to the project outcome?

- What were the negative/positive effects of the critical incident on the project outcome?
- What could the person have done differently to have a more positive effect on the project outcome?
- What do you believe equipped the person to make this contribution (rank in order of importance)?

4 ANALYSIS AND REPORTING

This section presents the critical incidents identified from 18 transcripts of interviews conducted with project sponsors and project managers of 17 different companies. A total of 128 incidents were reported. This analysis is presented in two sections: 1) types of situational leadership employed by project managers and 2) discussion of findings.

4.1 Types of Situational Leadership Used by Project Managers

For the purpose of this study, each critical incident was categorised according to the four basic types of situational leadership (i.e., directing, coaching, supporting, and delegating). In most of the projects considered (82%), more than one type of situational leadership was used to achieve success (Table 1). Two of the three projects in the health sector used a combination of three types of situational leadership to deliver on their goals, while a third (33%) of technology projects used three types of situational leadership.

Table 1: Number of situational leadership (SL) types used to deliver projects.

	One	Two	Three	Four
Sector	type of SL	types of	types of	types of SL
	SL	SL	SL	SL
Health	0	1	2	0
Technology	3	5	5	1
Total	3	6	7	1
%	18%	35%	41%	6%

The technology company that blended all four types of situational leadership delivered a unique project to clients. Historically, the company provided only electronic components to its clients. During the pandemic, for the first time, the company offered its clients a full technology solution, both hardware and software, to vertically integrate its parts into a complete solution for clients. To accomplish this, the company rolled out a multidisciplinary team. Prior to

COVID-19, the company was put up for sale because it was seen as a commodities business and, at the onset of the pandemic, it had to retrench staff to remain competitive. The remaining employees were given ongoing training to ensure a full understanding of all aspects of the business to enable growth. The team was supported to keep employees engaged throughout the project by implementing various virtual social activities, such as "virtual cook-offs".

The outcome of the situational leadership was that clients now saw the company as a partner in the growth and development of their businesses. Importantly for the company, it has not only remained in business, but is now also able to offer a unique service to its clients, with multiple growth opportunities.

Four in five (82%) project managers used the directing type of situational leadership to deliver their respective projects. This was followed by coaching (65%), supporting (53%), and delegating (41%), as illustrated in Figure 2.

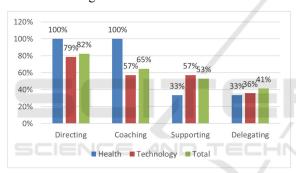


Figure 2: Types of situational leadership by sector.

The critical incidents related to directing (S1) comprised decisions to continue to offer services during the various iterations of COVID-19 lockdowns. This was accomplished by a multitude of decisions and activities, namely:

- Going online and allowing and enabling their employees to work remotely;
- Offering new services and products relevant to the pandemic conditions;
- Creating new structures to mitigate the impact of COVID-19;
- Adapting traditional project management methodology by reducing the planning phase;
- Increasing the frequency of risk assessment meetings; and
- Extending the duration of status meetings to allow for learning and bonding, and breaking down tasks into smaller outputs to demonstrate delivery and keep team members connected.

Coaching (S2), as another situational leadership style, was used by two-thirds of project managers to provide their employees with emotional support and help them remain connected during COVID-19. The critical incidences included:

- Providing training;
- Conducting regular online risk assessment meetings complemented by longer routine project status meetings;
- Sharing information continuously; and
- Providing frameworks for operations in the time of COVID-19.

Other areas of coaching allowed branches to formulate standard operating procedures related to their unique contexts. These comprised:

- Transferring skills to partner organisations;
- Helping clients consider organisational cultures in how they deliver products and services;
- Assisting employees to be heard during online meetings; and
- Trusting employees to work remotely.

Half the projects used the supporting (S3) capability of situational leadership. The critical incidences in this category included:

- Drawing on the company's physical and intellectual resources;
- Increasing the frequency of reporting back to project team members;
- Helping team members remain connected while working remotely, creating virtual social events;
- Employing counsellors to help employees cope with COVID-19 and working remotely;
- Building trust amongst team members; and
- Understanding the cultural diversity of employees, and ensuring that meetings were "intentional and impactful".

The delegating (S4) situational leadership capability was used mainly by project managers who had to deliver on large and complex tasks through multidisciplinary teams. While many of these projects used traditional project management methodology, during COVID-19, they adapted these to meeting more often for short risk assessment updates, reducing the size and time of incremental outcomes, and using more time for progress meetings to share learnings and facilitating connectedness. As such, the critical incidences were:

- Meeting daily to assess risk;
- Providing clear instructions or standard operating procedures;
- Authorising team leaders to take final decisions; and
- Trusting team members.

Of the three companies that did not use the directing situational leadership capability, one applied only the delegating capability, one employed only coaching, and one practised both coaching and supporting. The project that used the delegating situational leadership was steeped in this practice. It was a project of a company with offices across the globe and offered services in diverse country iurisdictions through multidisciplinary resourced with members from the different offices. Consequently, the COVID-19 lockdown reduced the company's face-to-face interactions with its clients, but had limited impact on the teams. Nonetheless, they did make changes, which included meeting more frequently online. The company delivered its projects earlier than planned.

4.2 Discussion of Findings

At the onset of COVID-19 lockdowns, project managers had to make decisions quickly to ensure all their business functions continued to operate, offered new services and products in response to the exigencies of the pandemic, protected their revenue streams, prevented closure of their businesses, and employees' safeguarded their well-being. Consequently, the directing situational leadership capability was used by majority of project managers. Those who did not use the directing capability were technology companies that had historically worked with teams dispersed across offices and countries. These companies had experience working remotely and focused on improving their coaching and delegation situational leadership capabilities.

Nonetheless, working remotely brought to the fore the importance of enabling and supporting employees during the pandemic and helping their respective clients to enhance their business performance. As such, project managers combined directing with coaching, supporting, and delegating capabilities. The coaching capability was frequently utilised because it allowed project managers to build trust by increasing their employees' technical and emotional capabilities. Furthermore, supporting situational leadership capabilities were used to help employees remain connected during a pandemic when everyone was feeling isolated and dealing with illness, loss of family members, and the fear of job loss.

The COVID-19 pandemic appeared to have served as a catalyst to not only consider remote working as an option, but it underscored the companies' soft skills, especially their culture and their employees' emotional well-being. A notable

finding was the adaptation of traditional project management methodologies to respond to the COVID-19 pandemic. Project managers recognised that to successfully deliver on projects with their team members working remotely and limited face-to-face interaction with their clients, they had to frequently provide evidence of progress. Additionally, they recognised that there were too many variables at play, which increased risk and uncertainty daily. Consequently, they made five changes to the traditional project management methodology, namely:

- Reducing the planning time so that clients would feel the "heightened" sense of urgency towards the critical delivery;
- Emphasising "incremental delivery" where they further broke down outputs into smaller pieces of work that could be used to frequently report on progress;
- Conducting frequent risk assessment meetings where many of the projects met daily for a few minutes to "clock in" and get a quick assessment of team members' progress and emotional wellbeing, and to identify and mitigate any new risks.
- Running longer project status meetings to include learning and feedback opportunities, which helped keep their team members connected: and
- Offering many virtual social opportunities for team members and clients to remain connected and ensure their emotional well-being.

While COVID-19 amplified time and resources, project managers took this as a given and believed that the criteria of success on their projects were user satisfaction, business and commercial performance, and quality performance. These latter criteria were considered critical in ensuring that their businesses were sustainable. Analogously, project success factors were expanded to include building trust, collaborating, and ongoing communication with internal and external stakeholders.

The study confirmed that situational leadership offers a useful model for understanding leadership in project management due to its contingency-based assumption. COVID-19 offered not only a means to test this assumption, but to also examine the model's veracity. In this study, project managers' decisions were not only shaped by the exigencies of the pandemic, but also by the level of development or maturity of their teams and clients and the complexity of the projects as described above. COVID-19 underscored the significance of trust and connectedness amongst team members and between the project team and the client as project success

factors. Project managers, who recognised these enabling factors, combined directing with coaching under the situational leadership types. The coaching situational leadership type allowed project managers to build trust and keep both internal and external stakeholders connected.

5 CONCLUSIONS

Project managers used a combination of situational leadership types during COVID-19 to accommodate the many unknown variables affecting their projects and the related uncertainties in a changing environment. They made directive decisions at executive level, including working remotely to ensure that business functions continued. Concomitantly, to ensure success, project managers applied the coaching situational leadership capability to ensure their employees were empowered and remained connected.

Ultimately, company leaders trusted employees to work remotely because they had no alternative under the strict national lockdown. This led to a distributed working model applied at an unprecedented scale worldwide and with great success. This distributed workforce would have been impossible without technologies and many technologies were developed or refined to facilitate the shift. Equally, the increased reliance on technology required an intentional emphasis on human connection and the success stories point to leadership that was able to harness and weather the COVID-19 pandemic.

While it is tempting to conclude that remote working should become the new norm beyond the lifting of COVID-19 restrictions, it is important to bear in mind the unique context in which the remote working model succeeded. Perhaps the most significant aspect of the COVID-19 context was the fact that, just as managers were sceptical of trusting their teams to take accountability without supervision, employees were understandably anxious about being retrenched and eager to demonstrate their value to their organisations.

The situational leadership model points to a need for agility and responsiveness on the part of leaders, so there is a need to adopt a situational work model that accommodates varying combinations of office-based and remote working. Perhaps the most valuable lesson from our collective COVID-19 experience is that human beings are, at our best, agile, resilient, and inclusive, and, at our worst, stubborn, fickle, and dictatorial.

The results obtained suffer from some limitations resulting mainly from the difficulties in collecting more detailed data from the projects. It should also be noted that it would be important to interview participants other than project managers. The lack of information about leadership styles before COVID is also a limitation of the study. As future work it is intended to continue the investigation in order to: obtain in a reliable way the relationship between the leadership styles and the results (positive or negative); study how the leadership styles coexist / evolve during a project; understand in a quantitative way which are the impacts of the leadership styles on the success criteria.

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REFERENCES

- Anantatmula, V.S., 2020. Project Management Concepts. In Operations Management-Emerging Trend in the Digital Era. IntechOpen.
- Blanchard, K. H. (n.d.). Situational Leadership II: A dynamic model for managers and subordinates. *Executive Excellence* [Preprint].
- Blanchard, K. H., Zigarmi, P., & Zigarmi, D. (1986). Leadership and the one minute manager. Collins.
- Blanchard, K. H., Zigarmi, D., & Nelson, R. B. (1993). Situational Leadership® after 25 years: A retrospective. *Journal of Leadership & Organizational Studies*, *1*(1), 21–36. https://doi.org/10.1177/107179199300100104.
- Bott, G., & Tourish, D. (2016). The critical incident technique reappraised: Using critical incidents to illuminate organizational practices and build theory. *Qualitative Research in Organizations and Management*, 11(4), 276–300. https://doi.org/10.1108/QROM-01-2016-1351.
- Butterfield, L. D., Borgen, W. A., Amundson, N. E., & Maglio, A.-S. T. (2005). Fifty years of the critical incident technique: 1954-2004 and beyond. *Qualitative Research*, *5*(4), 475-497. https://doi.org/10.1177/1468 794105056924.
- Damoah, O. B. O. (2018). A critical incident analysis of the export behaviour of SMEs: Evidence from an emerging market. *Critical Perspectives on International*

- Business, 14(2/3), 309–334. https://doi.org/10.1108/cpoib-11-2016-0061.
- Davis, P. J. (2006). Critical incident technique: A learning intervention for organizational problem solving. *Development and Learning in Organizations*, 20(2), 13–16. https://doi.org/10.1108/14777280610645877.
- Demirkesen, Sevilay, and Beliz Ozorhon. (2017). "Impact of integration management on construction project management performance." International Journal of Project Management 35, no. 8 (2017): 1639-1654.
- Flanagan, J. C. (1954). The critical incident technique. *Psychological Bulletin*, *51*(4), 327–357. https://doi.org/10.1037/h0061470.
- Gardiner, P., 2017. Project management: A strategic planning approach. Bloomsbury Publishing.
- Gremler, D.,D. (2004) The Critical Incident Technique in Service Research. Journal of Service Research, Vol 7, No. 1, Aug (65-89).
- Haussner, D., Maemura, Y., & Matous, P. (2016). Exploring critical incidents in international construction projects [Conference presentation]. 7th Civil Engineering Conference in the Asian Region (CECAR), Waikiki, Oahu, Hawaii.
- Hersey, P., & Blanchard, K. H. (1969). Life cycle theory of leadership. *Training & Development Journal*, 23(5), 26–34.
- Hersey, P., & Blanchard, K. H. (1982). *Management of organizational behavior: Utilizing human resources* (4th ed.). Prentice-Hall.
- Lategan, T., & Fore, S. (2015). The impact of leadership styles on project success: Case of a telecommunications company. *Journal of Governance & Regulation*, 4(3), 48–56. https://doi.org/10.22495/jgr_v4_i3_p4.
- Kaulio, M. A. (2008). Project leadership in multi-project settings: Findings from a critical incident study, *International Journal of Project Management*, 26(4), 338–347. https://doi.org/10.1016/j.ijproman.2007.06.0 05.
- Kerzner, H. (2018). Project management best practices: Achieving global excellence. John Wiley & Sons.
- Minelli, P. (2020). Improved methods for managing megaprojects (Doctoral dissertation, Massachusetts Institute of Technology).
- Mol, M. J., Stadler, C., & Ariño, A. (2017). Africa: The new frontier for global strategy scholars. *Global Strategy Journal*, 7(1), 3–9. https://doi.org/10.1002/gsj.1146.
- Ramseook-Munhurrun, P. (2016). A critical incident technique investigation of customers' waiting experiences in service encounters. *Journal of Service Theory and Practice*, 26(3). https://doi.org/10.1108/JSTP-12-2014-0284.
- Ruiz, C. E., Hamlin, R. G., & Carioni, A. (2016). Behavioural determinants of perceived managerial and leadership effectiveness in Argentina. *Human Resource Development International*, 19(4), 267–288. https://doi.org/10.1080/13678868.2016.1147778.
- Swanson, S. R., Davis, J. C., Gonzalez-Fuentes, M., & Robertson, K. R. (2021). In these unprecedented times: A critical incidents technique examination of student perceptions of satisfying and dissatisfying learning

- experiences. *Marketing Education Review*, *31*(3), 209–225. https://doi.org/10.1080/10528008.2021.1952082.
- Tuuli, M. M., & Rowlinson, S. (2010). What empowers individual and teams in project settings? A critical incident analysis. *Engineering Construction and Architectural Management*, 17(1), 9–20. https://doi.org/10.1108/09699981011011285.
- Varajão, J., Dominguez, C., Ribeiro, P., & Paiva, A. (2014).
 Critical success aspects in project management:
 similarities and differences between the construction
 and the software industry. Tehnički Vjesnik Technical
 Gazette, 21(3), 583–589.
- Zigarmi, D., & Roberts, T. P. (2017). A test of three basic assumptions of Situational Leadership® II Model and their implications for HRD practitioners. *European Journal of Training and Development*, 41(3), 241–260. https://doi.org/10.1108/EJTD-05-2016-0035.

