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## AN INVESTIGATION ON THE RELATIONSHIP BETWEEN CRITICAL EXISTENTIAL THINKING AND SCHOOL TRANSFORMATIONAL LEADERSHIP IN SECONDARY SCHOOLS IN FAKO DIVISION OF THE SOUTH WEST REGION OF CAMEROON

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### ABSTRACT

This study examined the relationship between Critical Existential Thinking (CET) and School Transformational Leadership in Secondary Schools in Fako Division. A convergent mixed research design was used where both qualitative and quantitative research methods were taken into consideration and data were taken at same time, analyzed and results were compared. The population for the study consisted of 3698 teachers, 54471 students and 2510 school administrators drawn from 123 secondary schools in Fako Division. Purposive sampling technique was used in selecting the different school types as well as the class. Using the random sampling technique, a sample of 299 teachers, 75 school administrators and 30 students were drawn from 37 schools that took part in the study. The instruments used for data collection were the Spiritual Intelligence Self-Report Inventory (SISRI-24), an interview guide for students and a questionnaire for teachers which were validated by researcher's peers and other experts. Cronbach's Alpha Correlation Coefficient was used to determine the overall reliability analysis coefficient of the instruments and was projected to be 0.912 and 0.867 for principal's perspective, and 0.857 for teacher's perspective. The data collected were analyzed using frequency, proportion, multiple response analysis and binary logistic regression model to test the hypotheses at  $P \leq .05$  level of significance. Descriptively, analysis showed that critical existential thinking (CET) significantly predicts transformational leadership ( $p\text{-value} = 0.001 < 0.05$ ) but the relationship was low as indicated by a predictive power value of 27.0% (Cox & Snell R Square). In overall, principal's spiritual intelligence significantly predicts transformational leadership ( $P=0.029$ ;  $EP=40.4\%$ ). The predictive effect was significant on the overall conceptual component and sub-conceptual component ( $P<0.05$ ). The effect was the highest on intellectual stimulation followed by inspirational motivation. Based on the findings, it was recommended that teachers and administrators should practice meditation which helps to train the mind, making their body calm, shifting them towards mental clarity. When one meditates, you focus better on an object/subject thereby redirecting thoughts, makes the individual spiritual powerful and strong and having greater spiritual strength will enable you to comprehend the bigger picture more precisely and consciously. the teachers and administrators should be able to know and recognize what they believe in, value and what really motivates them.

### KEYWORDS

Spiritual Intelligence, Transformational Leadership, Critical Existential Thinking, Secondary School



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## Introduction

The concept of intelligence has been looked at in different ways within different cultural settings. For years, spirituality and finding the meaning of life have been considered essential phenomena in the context of human existence. Zohar introduced the term spiritual intelligence (SI) in 1997, and since that time researchers have been seeking to clarify the concept. Dougherty (2011), stated that there is very little research with empirical support that relates leadership to Spiritual Intelligence. It is even harder to search for existing research on school administrator's transformational leadership and spirituality in this part of the globe. According to Nsamenang (2005), intelligence is the quality that allows human to adapt, the capacity to learn, reason and adjust to changing conditions. He is among those psychologists who maintained that intelligence is a capacity for adaptive and goal-directed behaviour. Some psychologists do maintain that intelligence is multifaceted and people can be intelligent in different aspects (Gardner, 1993). Covey (2004) opined that, "Spiritual intelligence is the central and most fundamental of all the intelligences, because it becomes the source of guidance for the others. Spiritual intelligence is strongly connected to the fulfillment of a human being's profound need – to feel that everything has a meaning, a purpose. It is the intelligence that makes us whole and renders our integrity. It is the intelligence of the soul, the profound self-intelligence. It is the intelligence that makes us ask ourselves fundamental, existential questions and overcome the boundaries we were used to. According to Zohar & Marshall (2009), SQ has a transformative function. It allows people to be creative, to change the rules and modify the situations. By acting upon limits and boundaries, SQ allows the change of the situation, thus making the people participate fully in the organizations where they belong. Bennis stipulated that, "what's missing at work is meaning, purpose beyond oneself, wholeness, integration; we're all on a spiritual quest for meaning, and that the underlying cause of organizational dysfunctions, ineffectiveness, and all manner of human stress is the lack of spiritual intelligence in the workplace" (Mitroff & Denton, 1999). Leadership as a topic has generated a lot of buzz since the 1970's. There are so many well-known researchers such as Burns (1978) and Bass (1985) who have proposed so many different dimensions of leadership that are still being used till this day. The implications of spiritual intelligence for the enhancement of transformational leadership at workplace especially within the school settings formed a crucial aspect of this study.

## Background to the Study

Historically, spirituality has been part of human life from a very long time. In the past, spirituality was mainly limited to the boundaries of religion. Emmons (2000), opined that "Spirituality moves around enquiry, experience, sainthood, it searches for ultimate meaning, higher consciousness, and supernatural; whereas, spiritual intelligence predicts the performance and compatibility resulted out of these fields". As such, spirituality is the central theme of all religions, and can be said to be religion's most vital function. The term "spiritual intelligence" was invented and presented in one of Zohar's volumes from 1997. Initially, Zohar studied physics and philosophy, with subsequent in-depth studies in philosophy, religion and psychology. The term was developed by this author together with psychiatrist and psychotherapist Marshall in 2000, when they published the volume SQ: Spiritual intelligence, The Ultimate intelligence, which was also translated in Romanian in 2011. As explained by Zohar & Marshall (2000), Spiritual Intelligence of a person is the intelligence of soul. It is the intelligence which has healing effect on us and this makes us whole. With this intelligence we recognize our existing values and can discover new values creatively.

The concept of transformational leadership was initially introduced by Downton (1973), the first to coin the term "Transformational leadership", a concept further developed by leadership expert and

presidential biographer James MacGregor Burns. According to Burns (2010), transformational leadership can be seen when "leaders and followers make each other advance to a higher level of morality and motivation. Transformational leadership theory, since its early days of development has been a mainstay of organizational change based on its tenets of moral and ethical leadership behaviors that encourage the heart rather than control the behaviors (Bass, 1985, 1990, 1997; Burns, 1978; Kouzes & Posner, 2002; Yukl, 1994). A considerable number of past research and literature on transformational leadership focused on the characteristics of the leaders themselves rather than on the interactions between the leader and his or her followers. Charisma, creativity, consideration, sound moral judgment, and ethical decision-making are some of these characteristics (Friedman, 2004; Fry & Cohen, 2009; Fry & Slocum, 2008; Hyde, 2004; Rogers, 2003; Yang, 2006).

Greenleaf (1970) and Maslow laid the groundwork for workplace spirituality with books such as *Towards a Psychology of Being* (1962) and *Religions, Values and Peak Experiences* (1970). Greenleaf and Maslow were both of the Abrahamic faiths (the latter considered himself an atheist), embodying an implicit bias of the field of workplace spirituality to this day. An extensive review of the workplace spirituality literature did not report any references before 1970, and few between 1970 and the early 1990s. However, in the early nineties, the field of workplace spirituality began to blossom (Neal, 2018). McCormick (1994) wrote about managerial challenges in workplace spirituality and examined five themes: compassion, right livelihood, selfless service, work as a form of meditation, and the problems of pluralism. Neck and Milliman (1994) focused on the inner work of workplace spirituality, describing "Thought self-leadership." Scholars continued to build on their work throughout the nineties, resulting in a significant increase in publications in the field. In 1995, the business media began to pay attention to workplace spirituality from a practitioner perspective. By the midnineties, it became common for professional scholarly organizations such as the Organizational Behavior Teaching Society, the US regional Academies of Management and the Management Education Division (MED) at the Academy of Management to list workplace spirituality presentations in their conference programs. The majority of these were experiential, and they drew scholars who had a deep personal interest in spirituality. They tended not to be research based at that early stage. However, a handful of doctoral students began doing dissertations in the field. The first of these was David Trott's dissertation (1996), titled "Spiritual well-being of workers: An exploratory study of spirituality in the workplace." Hamilton Beazley (1997) completed his dissertation titled "Meaning and measurement of spirituality in organizational settings: Development of a spirituality assessment scale." Both dissertations helped to lay the groundwork for empirical research from that point on. Several years later, Kinjerski and Skrypnek (2004) developed the Spirituality at Work Survey (SAWS) which is still widely used in quantitative studies. In the early 2000s, one of the hindrances to increased recognition of the field was the difficulty of getting published in mainstream journals that were either skeptical about the field or found the topics it engages with too threatening (King, 2008). Since the early 2000s the field has matured substantially.

### **Spiritual Intelligence**

Spiritual intelligence is a new concept that has gained momentum and now several instruments have been developed to measure it. Spirituality is now widely investigated in the psychological literature, especially in relation to several other phenomena, such as personality (Emmons 1999; MacDonald 2000), searching for the meaning of life (Park 2005), coping (Pargament, 1997), well-being (Emmons 1999), and health (Koenig 1997, 2011). Spiritual intelligence is defined as the ability to construct meaning through intuitively seeing interconnectedness between life-world experience and the inner spheres of the individual psyche (Rogers, 2003; Yang, 2006). SI, at the appropriate level of self-

consciousness and wisdom may facilitate a person's search for meaning in life and may aid them in achieving complex spiritual goals (e.g., conversion, dealing with a crisis, obtaining salvation, etc.). Spiritual intelligence is an innate human potential and is concerned with the inner life of mind and spirit. Emmons (1999, 2000a), asserted that SI is a form of intelligence involving a set of capacities and abilities that enables people to solve problems and attain goals in their everyday lives. The author further explained that SI results in a deeper sense of meaning and purpose. He added that SI deepens a wide range of important skills (both life skills and work skills). Griffiths understands SI to be a consequent effect of the presence and action of both the intellectual and the emotional intelligence modalities.

According to Wigglesworth (2012), spiritual intelligence is an essential component of both personal and professional development.

With SQ we access the voice of our noblest self — our higher self — and let it drive our lives. There is an undeniable connection between the personal and the professional, between the inner life of the self and the outer world of effectiveness and impact. In other words, your personal development changes you. Who you are, ultimately determines how you lead (Wigglesworth, 2012). It is no surprise that SI correlates with emotional intelligence (EI). Tisdell (2003) contends that spirituality is an important part of the human experience, which is fundamental to understanding how individuals construct meaningful knowledge. The researcher further asserted that spirituality has a deep cultural dimension that informs intellectual development. Spiritual leadership involves motivating and inspiring workers through a magnificent vision and culture based on altruist values to produce a more motivated, committed, and productive workforce. The process of meaning making is manifested in and mediated by cultural context.

The predictor variable of spiritual intelligence used a 24-question assessment entitled The Spiritual Intelligence Self-Report Inventory (SISRI-24), developed by King (2008) that measures a person's own perceived spiritual insights. The author of the instrument (The Spiritual Intelligence Self-Report Inventory – King, 2008) defines spiritual intelligence as a set of capacities that contributes to the entire consciousness, the integration and adaptive application of the non-material and transcendental aspects of one's own existence, leading to results such as the profound existential reflection, developing the meaning of life, acknowledging the transcendence of the self, the control of the spiritual states (King, 2008; King & DeCiocco, 2009). The inventory implies a structure with four dimensions of the spiritual intelligence: critical existential thinking (CET), personal meaning production (PMP), transcendental consciousness (TC) and consciousness state expansion (CSE). This article focus on one dimension which is critical existential thinking

### *Critical Existential Thinking*

Critical existential thinking implies the capacity to critically contemplate the meaning and significance of life and other metaphysical existential aspects (for example reality, universe, space, time, death); to come to original existential conclusions or philosophies; and to contemplate non-existential issues in relation to one's existence (i.e., from an existential perspective). Engaging in the fundamental questions of existence, such as the meaning of life and what happens after death, is a universal human experience, and most people have formed beliefs around existential issues. Furthermore, the ability to consider and make sense of ultimate issues is valued in every culture, especially in areas such as philosophy, the arts, theoretical science, and religion (Gardner, 1999), and several scholars have discussed the psychotherapeutic benefit of addressing existential issues (Frankl,

1963; Spinelli, 2005; Yalom, 1980). Therefore, considering existential issues and making sense of one's existence may be important for optimal human functioning.

existential thinking has to do with considering issues related to one's personal existence. Gardner (1999) referred to these issues as ultimate and transcendental, which describes concerns above and beyond superficial matters. These ultimate concerns involve one's relation to the grand organization of the cosmos, such as the nature of reality, as well as the most fundamental, inescapable parts of the human condition, such as the meaning of life and the inevitability of death (Yalom, 1980). In this way, existential thinking is concerned with aspirations beyond the self (Hartelius, Caplan, & Rardin, 2007). However, Gardner (1999) asserted that existential thinking also involves locating oneself in respect to existential issues. This implies that existential thinking includes a process whereby people determine their personal relationships to, and make meaning out of, larger existential issues. As described by Spinelli (2005), all people derive meaning from their lived experiences and reactions to stimuli in the world. In this way, meanings are tied to the individual, because they are constructed relationally.

### **Workplace Spirituality**

Spiritual intelligence can be developed and is shown to be very beneficial for leadership and organizational performance. There has been "an explosion of interest in workplace spirituality" (Parameshwar, 2005). The idea of spirituality is increasing in prominence among recent publications in educational psychology and theory (Dent, Higgins, & Wharff, 2005; Edwards, 2003; Emmons, 1999, 2000a, 2000b; Fry, 2003; Fry & Cohen, 2009; Fry & Slocum, 2008; Gardner, 2000; Hyde, 2004; Mayer, 2000; Neiman, 2000; Rogers, 2003; Vaughan, 2002; Yang, 2006; Zohar, 2005). Several authors have stated that spiritual leadership and spiritual intelligence are needed to face the challenges of the 21st century. Mitroff and Denton (1999) said, "In plainest terms, unless organizations not only acknowledge the soul but also attempt to deal directly with spiritual concerns in the workplace, they will not meet the challenges of the next millennium". "Leadership in the third millennium must be based on the power of purpose, love, caring, and compassion," says Mackey in relation to spiritual intelligence in the workplace (Mackey & Sisodia, 2013). Leadership consultants Covey (2004) and Wheatly (2002), declare that the need for a union of spirituality and work is an unavoidable consequence of the chaotic times in which we live (Amram, 2009). Hildebrant (2011) says, "The demands of the various factions of stakeholders are creating a leadership climate where spiritual leadership is overcoming the bureaucratic approach of the 20th century.

The workplace environment keeps on changing, indicating its dynamic nature as well as unpredictability. The workplace constitutes people, and with people, there is a need for leadership. The nature of work is constantly changing (Biberman and Whitty 1997). This is evident in the kinds of jobs that employees used to be engaged for. Organizational soul and workforce spirit have often been overlooked and ignored by many (Biberman and Whitty 1997). Work life reaches and touches into the very soul and spirit of all employees at work. Those at work are constantly seeking ways to improve themselves and a sense of contribution to their work life. Workplace unity creates a stronger organization, one that can withstand the uncertainties in this dynamic business environment. This form of spirit requires not only the spiritual intelligence but also emotional intelligence. Workplace spirituality has been defined as the framework of organizational values that leads to a sense of the transcendence and interconnectedness of all life, so that workers experience personal fulfillment on the job (Giacalone & Jurkiewicz, 2003). This sense of transcendence, having a calling through one's work (vocation) and the need for membership in the corporate culture, community and social connections provides the foundation for a theory of workplace spirituality.

Workplace spirituality is therefore framed within a holistic or system context of interwoven cultural, organizational, and personal values. It must demonstrate its value by influencing performance, productivity and other relevant effectiveness and performance criteria. Evidence exists that suggests a link between workplace spirituality and enhanced individual creativity (Freshman, 1999), increased honesty and trust within the organization (Fry & Slocum 2008; Giacalone & Jurkiewicz, 2003), an enhanced sense of personal fulfillment of employees (Burack, 1999) and an increased commitment to organizational goals (McKee et al., 2011). Spirituality in workplace is characterized by a revival of the spirit of community in work, shared power, greater value for diversity, global stewardship, service-learning atmosphere, recognition that human beings have a basic need for “relevance, recognition, meaning and self-transcendence.” Workplace spirituality enhances workplace performance (Jurkiewicz, C.L & Giacalone, R.A 2004). Amram, (2009) stated that the growing interest in workplace spirituality can be explained in part by Maslow’s hierarchy of needs. As the standard of living increased, so that people are not worried about survival and safety, their concerns have shifted to self-actualization and spiritual needs such as self-transcendence. “Work forms one of people’s most significant communities, they expect work (where they spend the bulk of their daily hours) to satisfy their deeply held need for meaning” (Amram 2009).

### **Transformational Leadership**

Leadership is a process by which an individual exerts influence over other people and inspires, motivates, and directs their activities to help achieve group or organization goals (Jones, George, and Hill, 1998). Transformational leadership is a style of leadership where a leader works with subordinates to identify needed change, creating a vision to guide the change through inspiration, and executing the change in tandem with committed members of a group (Beth, 2000). Bass (1999) justified that transformational leaders are those who create an independent and challenging work environment increases the job satisfaction of their followers. Three ways in which leaders can transform their followers according to Bass (1999) is to create high awareness of task importance and values; looking into the big picture: focus on group or organizational goals rather than self interest and discovering followers’ higher-order needs. Transformational leaders believe people will follow a person who inspires them, has vision and passion, and can achieve great things. The way to get things done is by injecting enthusiasm and energy (Leadership Styles, 2006). Transformational leaders create something new from something old (Pagan, 2008). They are generally energetic, enthusiastic, and passionate. Not only are these leaders concerned and involved in the process; they are also focused on helping every member of the group succeed as well. They are also good at conflict resolution. Transformational leaders spend time listening, summarizing, coordinating and guiding what that is said, making key interventions and visualizing the idea, values, image to those involved in order to make sense of the situation they are facing (Morgan, 1997). Transformational leaders are sometimes called quiet leaders. They are the ones that lead by example. Their style tends to use rapport, inspiration, or empathy to engage followers. They are known to possess courage, confidence, and the willingness to make sacrifices for the greater good.

This is a selfless leadership which is difficult to find in this 21st century but is possible with leaders endowed with spiritual intelligence. As transformational leadership seeks for the greater good of the organization, so do spiritual intelligence seek of the greater good of others rather than self. Therefore, spiritual intelligence built the culture on which transformational leadership takes place. Spiritually grounded leaders exercising high levels of spiritual intelligence are animated thinkers who possess meaningful thought patterns, novel ideas, and rich imaginations because the soul is harmoniously integrated with the mind (Kessler, 2000; Moffett, 1994). The link between spiritual intelligence and

transformational leadership can be strengthened through an examination of the following shared characteristics of charisma, ethical considerations, and creativity.

In our current context of Cameroon, the workplace has been turned into a tense environment due to downsizing, restructuring, outsourcing and layoffs as well as a growing inequity in wages (Mohan & Uys 2006). Employees become discouraged, as evidenced in rising absenteeism, low morale and substandard performance, and this makes it increasingly difficult for organizations to remain competitive in the changing global marketplace. Employee creativity needs a fuller expression at work but such expression is difficult when work itself is immensely repetitive and not meaningful (Neck & Milliman 1994). There is the crisis of confidence in leadership due to corporate frauds, worker's sense of betrayal provoked by downsizing and outsourcing, economic recession, unemployment, sex scandals, and general distrust are leading people on a search for spiritual solutions to ameliorate the resulting tensions (Hildebrant, 2011; Parameshwar, 2005). Leaders have developed an insatiable hunger for acquiring wealth and resources far in excess of human need. Greed and material acquisition seem to drive individual actions. The consequence has been constant internal wars within the individuals at workplace. External appearances govern the nature of human aspirations. We tend to be unconscious of the exploitation of human and natural resources in the process. The domination of the free market economy has given rise to an intimidating perception that money could buy anything. Even those unqualified buy positions just to satisfy their ego. The right people are not given the right jobs. Recommendations at workplace are based on the satisfaction of the boss 'greedy ego. Hard work and expertise do not really count in our organizations. For any workplace to experience transformational leadership, the leader should know the purpose of his or her existence and connection to the universe. Also, the leader should have the ability to create personal meaning in life; The above attributes seem to be lacking in most leaders. The purpose therefore of this research is to highlight the correlation between critical existential thinking and school transformational leadership being the workplace especially for developing countries like Cameroon.

### **Research Objective**

To examine the relationship between Critical Existential Thinking (CET) and School Transformational Leadership in secondary schools in Fako Division.

### **Methodology**

#### **The Research Design**

This study used the mixed method approach. Specifically, employing the convergent mixed method design. This design was employed because both quantitative and qualitative data provided different forms of information.

#### **Population and Target Population**

The population for this study consisted of 2510 school administrators (principals and vice principals) of secondary schools in Fako Division. It also consisted of 3698 teachers and 54471 students respectively. This statistic was gotten from the Regional Delegation of Secondary Education for the South West region, annual statistical booklet for the 2021/2022 academic year (see appendix VII).

The target population was made up of an estimated number of 1677 school administrators specifically the principals and vice principals, and 2189 permanent teachers drawn from secondary schools in five sub-divisions of Fako Division. 13859 students were also targeted for the study. Permanent teachers with at least two years of stay in the various schools were used because it was believed that they are in

a better position to provide 140 vital information on school administrator's transformational leadership. The accessible population for this study was made up of 178 school administrators, 1849 permanent teachers and 352 students drawn from four sub-divisions (Tiko, Limbe, Buea, and Idenau) in Fako division.

### Sample and Sampling Technique

The sample for this study consisted of 75 school administrators, 299 teachers and 30 students. A total of 37 schools were sampled for the study, with 15 being governmental, 10 confessionals and 12 lay private. In these schools, 3 administrators were sampled in some while 2 administrators were sampled in others especially the lay private schools and confessional schools making a total of 75. As for the teachers, sample size was estimated using sample calculation for one proportion with the support of EpiInfo 6.04d (CDC, 2001) as explained by Nana (2018).

Simple random sampling technique was used in selecting the different school types (confessional, lay-private and public schools). This was to ensure equal distribution of the schools used for the study. The simple random sampling technique was however used to select the thirty-seven schools selected for data collection. Purposive sampling was used in selecting the sample given that only school administrators and more essentially principals and vice principals were targeted and were being sampled, as well as permanent teachers and students. Permanent teachers with at least two years of stay were purposively used for the study because it was assumed that they must have had a personal understanding of the administrators involved. Students were equally purposively incorporated in the study by means of interview so as to support the findings gotten from school administrators.

### Research Instrument

The instruments used for data collection in this study were a structured questionnaire which was designed for teachers to appraise transformational leadership, the Spiritual Intelligence Self-Report Inventory (SISRI-24) by David King which focused on sampling opinion of school administrators on transformational leadership constructed on a four point Likert scale of SA-Strongly Agree; A-Agree; D Disagree; and SD-Strongly Disagree, and an interview guide for students.

### Method of Data Analysis

All survey questionnaires and discussions were entered into a pre-designed Epi Data Version 3.1 (Epi Data Association, Odense Denmark, 2008) database which had in-built consistency and validation checks. Further consistency, data range and validation checks were also performed in SPSS version 21.0 (IBM Inc., 2012) to identify invalid codes. The validated data base was then analyzed following statistical standards. Other validation tests included missing value analysis and reliability analysis to measure the internal consistency of responses. The sample flow table also enables us to make sure that the return rate does not drop below the 80% threshold of the initial calculated sample size. The questionnaire was made of categorical variables and data were analyzed using counting techniques namely frequency and proportions while Multiple-Responses Analysis was used to calculate the aggregate score for conceptual components (Nana, 2018). Conceptual indicators' scores were layered with gender using cross tabulations and compared among categories of background indicators and respondents using Chi- 154 Square test of independence. Data were presented using frequency table and chart. All statistics were presented at the 95% Confidence Level (CL), Alpha =0.05.

### Test of hypotheses

Given that the variables involved in the various hypothesis testing are essentially categorical, Logistic Regression model was employed to test the hypotheses. The Ordinary Least Squares (OLS) estimation



in multiple regressions is to obtain coefficient estimates and the usual best fit of the model to the data, but when confounders are involved, OLS no longer apply with the same efficiency. Logistic Regression uses maximum likelihood estimation to fit the model. It is one of the suitable alternative model when dealing with multiple categorical predictors in a given outcome variable that preferably should be categorical as well. Maximum likelihood produces values that maximize the likelihood function (LF). This is represented below in equation form as:  $L = \prod (P_i^{y_i} * (1-P_i)^{1-y_i}) \dots \dots \dots (3.3)$

**Where:**  $y_i$  is the observed value of  $y$  each case  $i$ ,  $P_i$  is the predicted probability of case  $i$  and the symbol  $\prod$  is the multiplicative equivalent of the summation sign ( $\sum$ ) and multiplies the values for each case. In order to avoid the challenges associated with multiplying probabilities, the likelihood functions (LF) can be transformed into logged likelihood 155 function (LLF). Thus, the smaller the LLF compared to a base line model with only the constant in the equation the better the result of the fit equation.

A chi- square test between the base line model and the LLF is to assess the significance of the difference between the estimated and the baseline models. Consequently, if a series of nested models with varying independent variables are used, the change in the LLF and the resultant  $\chi^2$  change can assess which model is better. This is measured by the Omnibus Test of Model Coefficient. The Likelihood Ratio Test on his own enables us to appraise how significant is the effect of predictors considered individually. In fact, the overall effect of a conceptual component might be significant, but among the indicators making up that conceptual component, what is the contribution level of each of them. The Pseudo R-squared is similar to the adjusted R-squared in the traditional OLS analysis. However, Pseudo-R<sup>2</sup> used to measure the reduction of error between the baseline and estimated models can also measure fit. In the context of this study, the significance of the variability explained by the model and the magnitude of this variability were of interest as well as the effect of individual predictors.

## Findings

### Research Question: How does Critical Existential Thinking (CET) relates with School Transformational Leadership?

**Table 1:**

*Principles' Perspectives of Critical Existential Thinking (CET) (Collapsed liker-scale)*

Items	Not at all true of me	Not very true of me & somewhat true of me	Very true of me & completely true of me	Mean	Standard Deviation
I have often questioned or pondered the nature of reality.	22.7% (17)	32.0% (24)	45.3% (34)	2.0	1.4
I have spent time contemplating the purpose or reason for my existence.	29.3% (22)	34.7% (26)	36.0% (27)	1.8	1.4
I am able to deeply contemplate what is happens after death.	25.3% (19)	36.0% (27)	38.7% (29)	1.8	1.4
I have developed my own theories about such things as life, death, reality, and	21.3% (16)	34.7% (26)	44.0% (33)	2.0	1.4

existence.

I have often contemplated the relationship between human beings and the rest of the universe.	17.3% (13)	29.3% (22)	53.3% (40)	2.2	1.3
I have deeply contemplated whether or not there is some greater power or force (e.g., god, goddess, divine being, higher energy etc.).	21.3% (16)	32.0% (24)	46.7% (35)	2.0	1.4
<b>MRS</b>	22.5% (118)	32.2% (169)	45.3% (238)	2.0	1.4

Information from table 26 above reveals that, 31.2% of principals indicated that critical existential thinking is very evident in them and 14.1% also indicated that is completely their true characteristics. 22.5% and 13.9% of teachers do not at all carried out critical existential thinking while 18.3% slightly carried out critical existential thinking. However, to better appreciate the trend or weight of the principals' responses for quick comprehension of the findings, a collapsed version of the table is seen below. This collapsed version was done independently so as to avoid over crowding of statistics on the above table.

In overall, critical existential thinking was very evident in 45.3% of principals, less evident for 32.2% and not at all for 22.5% of the principals. The overall mean of 2.0 below the cutoff point of 3.0 on a scale of 1-5 indicate that critical existential thinking among many of the principals is not high. Specifically, 45.3% (34) of principals describe themselves to completely often question or pondered the nature of reality while 32.0% (24) do not often and 22.7% (17) completely do not. Also, 36.0% (27) of principals completely describe themselves to spent time contemplating the purpose or reason of their existence while 34.7% (26) do that slightly and 29.3% (22) do not at all. Furthermore, 38.7% (29) of principals completely describe themselves as able to deeply contemplate what is happens after death while 34.7% (26) do not so much have such ability while 21.3% (16) completely lack it. Also, 44.0% (33) of principals have completely developed their own theories about things as life, death, reality, and existence while 34.7% (26) have not done so much and 21.3% (16) have not at all. Furthermore, 55.3% (40) of principals often contemplated the relationship between human beings and the rest of the universe, while 29.3% (22) does that sometimes and 17.3% (13) not at all. Finally, 46.7% (33) of principals completely and deeply contemplated whether or not there is some greater power or force while 32.0% (24) do not often complete of such and 21.3% (16) do not at all.

**Table2:**  
*Binary Logistic Regression depicting significant predictors of Critical Existential Thinking (CET)*

Predictors*	B	S.E.	Wald	Sig.	Exp(B)	95% C.I.for EXP(B)	
						Lower	Upper
I have often questioned or pondered the nature of reality.	1.129	.639	3.117	.077	3.092	.883	10.829
I have spent time contemplating the	1.032	.549	3.531	.049	2.806	1.001	8.233

purpose or reason for my existence.							
I am able to deeply contemplate what is happens after death.	.518	.480	1.167	.280	1.679	.656	4.303
I have developed my own theories about such things as life, death, reality, and existence.	-.826	.665	1.543	.214	.438	.119	1.612
I frequently contemplate the meaning of events in my life.	- 1.453	.597	5.913	.015	.234	.073	.754
I have often contemplated the relationship between human beings and the rest of the universe.	1.372	.680	4.077	.043	3.945	1.041	14.951
I have deeply contemplated whether or not there is some greater power or force (e g, god, goddess, divine being, higher energy etc.).	-.570	.630	.818	.366	.566	.165	1.944

\*Predictive component: Critical Existential Thinking (CET)

The result showed that among the 7 test items of critical existential thinking, three of them appear to have significant effect on transformational leaders ( $p$ -value < 0.05) which are (I have spent time contemplating the purpose or reason for my existence, I frequently contemplate the meaning of events in my life and I have often contemplated the relationship between human beings and the rest of the universe). This implies that principals that portray of the above three critical existential thinking attributes stand a higher chance to exhibit transformational leadership than their counterpart who do not. Detail analysis of the above three indicators is present below.

**Table 3:**  
*Association between 'significant indicators of critical existential thinking and transformational leadership*

Significant indicators of critical existential thinking	Stats	Transformational leadership		Total
		Below media n	Median and above	
I have spent time contemplating the purpose or reason for my existence	Not at all true of me	n 16	6	22
		% 72.7%	27.3%	
	Not very true of me & somewhat true of me	n 14	12	26
		% 53.8%	46.2%	
	Very true of me &	n 9	18	27

	completely true of me	%	33.3%	66.7%	
	Not at all true of me	n	11	4	15
		%	73.3%	26.7%	
I frequently contemplate the meaning of events in my life	Not very true of me & somewhat true of me	n	6	14	20
		%	30.0%	70.0%	
	Very true of me & completely true of me	n	22	18	40
		%	55.0%	45.0%	
I have often contemplated the relationship between human beings and the rest of the universe	Not at all true of me	N	10	3	13
		%	76.9%	23.1%	
	Not very true of me & somewhat true of me	N	15	7	22
		%	68.2%	31.8%	
	Very true of me & completely true of me	N	14	26	40
		%	35.0%	65.0%	

As depicted above, more of principals adequately who spent time contemplating the purpose or reason for their existence, frequently contemplate the meaning of events in their life and have often contemplated the relationship between human beings and the rest of the universe were found to practice transformational leadership significantly more than those who do not. This takes us to the verification of hypothesis one below.

**Research Hypothesis: There is a significant relationship between critical existential thinking (CET) and school transformational leadership.**

**Table 4:**  
*Binary Logistic Regression depicting the predictive power of Critical Existential Thinking (CET) on transformational leadership*

Dependent conceptual components	Independent Conceptual component: CET		
	Omnibus Tests of Model Coefficients		Cox & Snell R Square
	Chi-square	P-Value	(Predictive Power/ Explanatory Power)
Individualized Consideration	3.006	0.884	3.9
Inspirational Motivation	10.602	0.157	13.2
Idealized Influence	23.404	0.001	26.8
Intellectual Stimulation	19.708	0.006	23.1
Transformational leadership	23.385	0.001	27.0

In overall, the findings showed that critical existential thinking (CET) significantly predicts transformational leadership ( $p\text{-value} = 0.001 < 0.05$ ) but the relationship is low as indicated by a predictive power value of 27.0% (Cox & Snell R Square). Specifically, critical existential thinking had more effect on idealized influence (predictive power value =26.8%), followed by intellectual stimulation 23.1%, inspirational motivation 13.2% and lastly individualized consideration 3.9%. Thus, the hypothesis that states there is a significant relationship between critical existential thinking (CET) and school transformational leadership was accepted.

Students' opinion on critical existential thinking (CET) were also gathered via interview and the findings are presented below.

### **Students' Opinion on if Principals Talk Relating to the Nature of Reality**

Themes that emerge from this perspective included; No such talks and yes which are further explained in detail below.

From the transcribed interview, 13 of the respondents revealed that the principals have never taken out time to talk to them about topics related to nature and reality. This result is not in conformity with that of principals who stated that, it is very true and completely true of them to talk about issues of nature and reality to students, to about 45.3% of the responses meanwhile only 22.7% said it was not at all true of them. Students stated that principals do not talk too much and that the principals are too busy to create time for such talks. Meanwhile, a larger number of the respondents about 17 of them said that the principal take out time to discuss with the students about nature and reality every week, some said every Tuesday, others said on the assembly ground. These also corroborates with responses that the principals gave. As such, one could draw from all this that, though the principal, to a great extent doesn't talk on topics of nature and reality, the little they say will always go a long way to help the students.

### **Findings**

Findings revealed that critical existential thinking significantly predicts transformational leadership. This is in line with Gardner (1999) who opined that critical existential thinking always has an influence on transformational leadership as engaging with the fundamental questions of existence, such as the meaning of life and what happens after death, is a universal human experience, and most people have formed beliefs around existential issues that influence their leadership. Furthermore, the ability to consider and make sense of ultimate issues is valued in every culture, especially in areas such as philosophy, the arts, theoretical science, and religion and several scholars have discussed the psychotherapeutic benefit of addressing existential issues (Spinelli, 2005). Therefore, considering existential issues and making sense of one's existence may be important for optimal human functioning. Principals revealed that they often questioned or pondered the nature of reality and they have spent time contemplating the purposes or reasons for their existence.

This is in line with Gardner (1999) who asserted that existential thinking also involves locating oneself in respect to existential issues. This implies that existential thinking includes a process whereby people determine their personal relationships to, and make meaning out of larger existential issues. Similarly, existential thinking involves engaging with the ultimate concerns of the human condition and establishing meaning between these issues and oneself. For instance, when made to reflect on their deaths, people tend to report a greater sense of gratitude (Frias, Watkins, Webber, & Froh, 2011). Frias et al. (2011) explained that when people confront their mortality, they see life as a limited and valuable resource, which increases their gratitude for their own life. In this example, people create meaning from their engagement with an existential issue (i.e., death) and apply it to themselves.

Teachers were more satisfied with principal's transformational leadership approach. They opined that principals deserved collaboration and respect since the principal always consult teachers before taking decision. This is in line with Bass and Avolio (1994) who opined that behaviours related to intellectual stimulation include seeking differing perspectives when solving problems, suggesting new

ways of examining how to complete assignments and encouraging re-thinking of ideas that have not been questioned in the past. Individualized consideration is directed at treating the followers as individuals and not just members of a group. Behaviours related to individualized consideration include spending time in teaching and coaching, helping others develop their strengths and listening attentively to others' concerns (Bass and Avolio, 1994). 196 Principals were generally satisfied with their transformational leadership approach as they perceived themselves as role models.

Findings equally revealed that principals were significantly more convinced of the adequacy of their transformational leadership than teachers. The principal listens to the concerns and needs of each follower and provides support and is empathetic to each person's situation and background. Bass and Avolio (1994) opined that when a leader shows individualized consideration, they are also aware of the unique talents that each follower brings to the workplace and support them in developing and demonstrating these key skills and behaviours. This leads the follower to aspire to develop further and they show intrinsic motivation when performing their work.

Additionally, the findings revealed that the predictive effect was significant on the overall conceptual component with two sub-conceptual components. The effect was the highest on idealized influence, followed by inspirational motivation. This is in congruence with Emmons (2000) who argued that idealized factor is a predictor of transformational leadership. Emmons (2000) argued that people have the ability to achieve transcendence, attain higher states of consciousness, sanctify everyday experiences, use spiritual resources, and engage in virtuous behaviour. Others have the capacity to ask ultimate questions about the meaning of life, and to simultaneously experience the seamless connection between each of us and the world in which we live (Wolman, 2001), and as a capacity for a deep understanding of existential questions and insight into multiple levels of consciousness (Vaughan, 2002).

King and DeCicco (2009) described spiritual intelligence as "a set of mental capacities which contribute to the awareness, integration, and adaptive application of the non-material and transcendent aspects of one's existence, leading to such outcomes as deep existential reflection, enhancement of meaning, recognition of a transcendent self, and mastery of spiritual states" (p. 69). These definitions contain aspects of existential thinking, from asking ultimate questions to understanding existential issues deeply. If existential thinking involves a meaning-making process, it may be a critical part of understanding how people establish, discover, or maintain a sense of meaning in their lives. However, two distinctions are needed to hypothesize about this process. More so, the findings revealed that the principal and teachers have the intellectual capacity to critically complete the nature of existence, reality, the universe, space, time metaphysics issues and also the capacity to contemplate non-existential in relation to one's existence. This is in line with Vygotsky who believed that intellectual development originates only through the historical, cultural, and social relationships and interactions experienced by individuals.

According to Vygotsky (1978), because learning takes place within both social and cultural environments, then to a certain extent, what is learned reflects these two entities implying that discrepancies may be reflective of cultural restrictions. Essentially, Vygotsky advocated selections that came from a socio-historical point of view, of reaching beyond, of advancing the processes of human knowledge, in a way, helping to form a new person (Rosa, & Montero, 1990). This formation of a "new person" complements the SI principles of existentialism and personal meaning production advocated by King (2008). Although Vygotsky did not mention the spiritual specifically, there are implications that learning may be enhanced by incorporating the culture of one's family. Ratner

(1991) observed that just as language, religion, and customs are not the accidental discovery of an individual, so all higher psychological functions are creations of the social community.

### **Conclusion**

The objective was to examine the relationship between critical existential thinking and school transformational leadership. It was concluded that there is a significant correlation between critical existential thinking and school transformational leadership.

### **Recommendation**

Teachers and administrators should do more of brainstorming which develops new ideas, concepts, and solutions on subjects/objects. Also, brainstorming stimulates creative thinking that helps to divert them towards understanding bigger picture. Teachers and administrators should also practice meditation which helps to train the mind, making their body calm, shifting them towards mental clarity. When one meditates, you focus better on an object/subject thereby redirecting thoughts, makes the individual spiritually powerful and strong and having greater spiritual strength, will enable you to comprehend the bigger picture more precisely and consciously. Administrators/teachers should aspire more beyond themselves, be critical thinkers which will give them the ability to think clearly and rationally and understanding the logical connection between different ideas. It will also help them to analyze information and facts to reach at meaningful judgment in their leadership.

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