

THE IMPACT OF A FIRST-YEAR ORIENTATION TEAM BUILDING EVENT: A LONGITUDINAL REVIEW

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The purpose of the study is to determine the impact of a one-day orientation team building event (TBE) directed at enhancing first-year students' ability to manage themselves, work as a team, interface with each other, strategise, plan, evolve tactics, and take action that would lead to their team winning the 'amazing race' style event. A quantitative approach, which entailed the completion of a self-administered questionnaire after the TBE over a period of three years, determined the students' perceptions. Findings include: the TBE activities contributed to enhancing participants' ability to communicate with first-year colleagues; built confidence in their abilities including that of completing a task, and enhanced participants' alternative thought processes, ability to be creative, strategise, evolve tactics, take action, and plan. Conclusions include: non-traditional academic programme interventions, such as the TBE, do impact on first-year students' ability to manage themselves, strategise, plan, evolve tactics, and take action, which in turn should contribute to their ability to study, undertake assignments, projects, and successfully complete the undergraduate programme, and the activities built confidence in their abilities, enhanced communication amongst them, and provided an opportunity for them to test alternative thought processes. Recommendations include: the TBE should be undertaken on an annual basis, with the impact thereof on participants to be determined following the completion of a full academic year and again post-graduation, and further potential events directed at enhancing students' abilities and increasing confidence in their abilities should be investigated.

Keywords: education, orientation, students, team building

INTRODUCTION

In recent years, the Department of Construction Management, Nelson Mandela University, has struggled to engage with students to prepare them adequately for the rigours of the first year of study, and undergraduate programme. This is manifest in the students' inability to manage themselves, strategise, plan, evolve tactics, and take action, which in turn should have contributed to their ability to study, undertake assignments, and projects, has increased failure rates, and negatively impacted throughput rates. Poor performance results in rework, a waste of resources, demoralised and disappointed students, stressed students and academic support staff, and a burden to the economy resulting from the inability to secure employment.

Furthermore, a perception has formed, confirmed in industry liaison forums, that students attending employment interviews, or undertaking industry work during employment, lacked skills and attributes to fulfil the management role expected of

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them. This weakness, and the way graduates communicated their abilities and applied knowledge gained during their studies required an intervention at the earliest opportunity in the education process.

The Department's experiences are not unique, as Hill *et al.*, (2018) state that students struggle with the transition from high school to university, which places a responsibility on universities to intervene. Larmar and Ingamells (2010) in turn, inform that there has been increasing focus in higher education on identifying approaches for assisting first-year university students in their transition into the university environment in Australia. Gass (1986) in Vlamis *et al.*, (2011) contend that the first year of college is often a time of immense transition for young adults in terms of their social, moral, and educational development. Orientation is advocated and implemented by many higher education institutions (HEIs) globally to address this transition, and according to Owusu *et al.*, (2014), orientation encompasses activities that support the transition into HEIs.

The aforementioned led to the Department of Construction Management introducing a first-year orientation one-day TBE in 2018, which was styled on the 'Amazing Race' television programme. Given the Department's focus on 'lecturing and learning' research, a survey was conducted among the participants of the first TBE in 2018, and then after subsequent events. The aim of the research being to determine whether the intervention developed confidence in their abilities, enhanced communication amongst them, and provided an opportunity for them to test alternative thought processes, thereby better preparing the students for the challenges of first year and the undergraduate programme. The objectives were to determine whether the activities involved in the TBE contributed to an improvement in participants' understanding and appreciation of ten core competencies; enhanced seventeen skills; developed the ten core competencies, impacted on seven abilities, and enhanced fifteen states / attributes relative to emotional intelligence.

LITERATURE REVIEW

Student Engagement

Student engagement is a key issue with respect to orientation, and Larmar and Ingamells (2010) state that staff can promote it by fostering positive attitudes and relationships with students, inclusive teaching and learning strategies, collaboration between staff and students, and a diversity of social spaces to cater for students that embrace their individuality and various needs. Due to the need to accommodate the various backgrounds of students and promote a positive student culture it is not only staff-student relationships that are important, but relationships between students can promote engagement as students can provide each other support during stressful times. Hence the introduction of the first-year orientation one-day TBE, which promotes interaction between students and team building.

The Impact of Orientation Programmes

Bell *et al.*, (2014) in Hill *et al.*, (2018) state that outdoor orientation programmes significantly impact student development, as well as social and academic success. Hill *et al.*, (2018) cite Barefoot's (2000) contention that orientation programmes have numerous positive outcomes on both students and institutions. Furthermore, the study conducted by Hill *et al.*, (2018) during a four-day university outdoor orientation programme determined a significant improvement of resilience and well-being in participants.

Skills, Competency, and Employability

According to Smallwood (2006), construction management programmes need to empower graduates to manage the business of construction and projects, which requires that the learning environment develops their ability to manage themselves, work as a team, and interface with each other. The Confederation of British Industry (CBI) (2008) report focused on positive attitude and employability, the latter including: self-management - a readiness to accept responsibility and improve performance, flexibility, and time management; team working - respecting others, co-operating, persuading, and contributing to discussions, and problem solving - analysing facts, issues, and applying creative thinking to develop appropriate solutions. The problem-based learning (PBL) approach provides a platform within which “students learn content, strategies, and self-directed learning Skills Through Collaboratively Solving Problems.” (Hmelo-Silver *Et Al.*, 2007)

Core Competences and Emotional Intelligence

Smallwood *et al.*, (2013) noted in ‘Emotional Quotient and Managing Construction Projects’, the ten core competencies that fall within the categories of self-concept, traits, and motives, as well as the fifteen attributes / states of emotional intelligence (EI), impact on students’ performance as well as their performance in the work environment post-graduation. Therefore, tertiary construction management education programmes and training must develop such core competencies (Smallwood and Emuze, 2011) as the employers expect students to perform upon employment. Songer and Walker (2004) describe Emotional Intelligence (EI) as an “individual’s ability to identify emotions in oneself and others and to exhibit appropriate responses to environmental stimuli.” Chinowsky and Brown (2004) in turn point out that students with inadequately developed EI will lack problem solving capabilities as well as other professional attributes such as leadership, communication skills, creativity and an understanding of the external variables impacting upon their business. This emphasises the need to develop the emotional intelligence of construction managers, commencing during tertiary education (Smallwood *et al.*, 2013).

Mo *et al.*, (2007) emphasise that skills include the ability to think across disciplines, team working, and social and environmental awareness. The traditional education model is not providing students with these core skills and acquiring this in the traditional classroom environment is challenging. In the context of higher education, students have the ability to “transition from visualising and listening and actually attempt to ‘do’ what they are being taught” (Jackson, 2015) whilst “team-based discovery learning’ is ‘very effective’ in improving students.” As project managers usually face problems on projects that require them to react to unexpected events and cope with ‘uncertainty’ scenarios (Zwikael and Gonen, 2007), problem solving, stress tolerance, and the ability to forge strong interpersonal relationships become key attributes organisations will seek in graduates.

RESEARCH

Each year the ‘Amazing Race’ TBE entailed the completion of various, but differing activities, which were decided upon by the TBE organiser. The 2018 TBE entailed seven activities: hoop; blindfold object hunt; hike; puzzle; letter matrix; 3 stick triangles and conveying of golf ball. The 2019 TBE entailed five activities: hoop; zip line; obstacle course; caterpillar ski, and alphabet web. The 2020 TBE entailed six

activities: gold shift; hardhat relay; lateral thinking challenges; survivor puzzle; water pipe challenge, and zipline.

Each year the activities were led by the resorts' events' team leaders and entailed one or more of the following: strategising; planning; evolving of tactics and taking of action. Furthermore, completion of the activities required certain skills, whilst core competencies play a role in the completion of such activities, so too the fifteen attributes / states of emotional intelligence. The attendance during the three years was: 21 in 2018; 26 in 2019, and 16 in 2020. The students that attended the TBE were requested to complete a self-administered questionnaire after the completion of the event, and a 100% response was achieved. The questionnaire consisted of thirteen questions, twelve of which were closed-ended, and either a five-point or six-point Likert scale type question. This paper's focus is on the findings relative to five of the questions as presenting comparative findings relative to the specific activities would be challenging due to them differing from year to year.

A measure of central tendency in the form of a mean score (MS) between 1.00 and 5.00 (five-point), and 0.00 and 5.00 (six-point) was computed, based upon the percentage responses to the points on the respective scales to enable interpretation of the responses and to rank variables where necessary. Table 1 indicates the extent to which the TBE activities enhanced seventeen skills in terms of mean scores (MSs) and related rank (R) based upon percentage responses to a scale of 1 (minor) to 5 (major), an additional point did not, and MSs for the three years, and the mean thereof. Given that there are effectively six points on the scale, the MSs are between 0.00 and 5.00, the midpoint being 2.50. It is notable that the MSs for all three years and a mean based thereon are > 2.50, which indicates that in general the TBE activities contributed more of a major than a minor extent to an enhancement in participants' skills.

Table 1: Extent to which the TBE activities enhanced participants' skills

| Skill | Response / Year | | | | | | | |
|------------------------|-----------------|----|------|----|------|----|------|----|
| | 2018 | | 2019 | | 2020 | | Mean | |
| | MS | R | MS | R | MS | R | MS | R |
| Team building | 4.10 | 1 | 4.15 | 1 | 4.31 | 1 | 4.19 | 1 |
| Coordinating | 3.74 | 5 | 3.88 | 3 | 3.87 | 3 | 3.83 | 2 |
| Communicating - oral | 3.81 | 4 | 3.73 | 10 | 3.81 | 4 | 3.78 | 3 |
| Motivating | 3.86 | 3 | 3.84 | 7 | 3.60 | 8 | 3.77 | 4 |
| Planning | 3.67 | 7 | 3.68 | 12 | 3.94 | 2 | 3.76 | 5 |
| Organising | 3.90 | 2 | 3.32 | 17 | 3.79 | 6 | 3.67 | 6 |
| Leadership | 3.55 | 10 | 3.96 | 2 | 3.44 | 12 | 3.65 | 7= |
| Decision making | 3.48 | 11 | 3.85 | 5 | 3.63 | 7 | 3.65 | 7= |
| Procedures development | 3.48 | 12 | 3.88 | 4 | 3.54 | 10 | 3.63 | 9 |
| Initiating | 3.10 | 17 | 3.83 | 8 | 3.80 | 5 | 3.58 | 10 |
| Supervisory | 3.25 | 15 | 3.84 | 6 | 3.50 | 11 | 3.53 | 11 |
| Leading | 3.62 | 8 | 3.76 | 9 | 3.06 | 16 | 3.48 | 12 |
| Interpersonal | 3.29 | 13 | 3.48 | 13 | 3.58 | 9 | 3.45 | 13 |
| Controlling | 3.62 | 9 | 3.70 | 11 | 2.92 | 17 | 3.41 | 14 |
| Persuading | 3.71 | 6 | 3.33 | 16 | 3.07 | 15 | 3.37 | 15 |
| Negotiating | 3.29 | 14 | 3.36 | 14 | 3.43 | 13 | 3.36 | 16 |
| Technical | 3.14 | 16 | 3.33 | 15 | 3.42 | 14 | 3.30 | 17 |

Only 1 / 17 (5.9%) mean MS is $4.17 \leq 5.00$, which indicates the TBE activities enhanced team building as a skill between a near major extent to a major extent /

major extent - team building was the primary objective of the TBE. 13 / 17 (76.5%) mean MSs are $> 3.34 \leq 4.17$, which indicates the TBE activities enhanced the skills between some extent to a near major extent / near major extent. 4 / 13 (30.8%) of the skills in the form of coordinating, oral communicating, motivating, and planning fall within the upper half of this range, namely $> 3.75 \leq 4.17$. It is notable that 2 / 5 functions of management work, namely coordinating and planning are in the upper range. 9 / 13 (69.2%) of the skills fall within the lower half of this range, namely $> 3.34 \leq 3.75$. The remaining three (17.7%) skills' MSs are $> 2.50 \leq 3.34$ - persuading, negotiating, and technical.

Table 2 indicates the extent to which the TBE building activities contributed to an improvement in participants' understanding and appreciation of ten core competencies in terms of MSs, related rank (R), and an overall rank (OR) based upon percentage responses to a scale of 1 (minor) to 5 (major), and an additional point did not, for the three years and the mean thereof. Given that there are effectively six points on the scale, the MSs are between 0.00 and 5.00, the midpoint being 2.50. It is notable that all the MSs are > 2.50 , which indicates that in general the TBE activities contributed more of a major than a minor extent to an improvement in participants' understanding and appreciation of the ten core competencies.

No mean MS is $> 4.17 \leq 5.00$, which indicates between a near major contribution to a major / major contribution. However, the 2020 MSs of attitude, team player, and focus on success, and the 2019 MS of attitude do fall within this range, which were objectives of the TBE. 8 / 10 (80%) mean MSs are $> 3.34 \leq 4.17$, which indicates between a contribution to a near major contribution / near major contribution: Attitude and self-image (self-concept); self-confidence, team player, and handle ambiguity (traits), and focus on success, preservation of team integrity, and preservation of personal integrity (motives).

Table 2: Extent to which the TBE activities contributed to an improvement in participants' understanding and appreciation of ten core competencies

| Core competency | Response / Year | | | | | | | | | | | |
|------------------------------------|-----------------|---|----|------|---|----|------|---|----|------|---|----|
| | 2018 | | | 2019 | | | 2020 | | | Mean | | |
| | MS | R | OR | MS | R | OR | MS | R | OR | MS | R | OR |
| Self-concept: | 3.39 | 3 | | 3.70 | 3 | | 3.50 | 3 | | 3.53 | 3 | |
| Values | 3.29 | 3 | 9 | 3.57 | 3 | 9 | 2.87 | 4 | 10 | 3.24 | 3 | 9 |
| Aptitude | 2.95 | 4 | 10 | 3.32 | 4 | 10 | 3.08 | 3 | 9 | 3.12 | 4 | 10 |
| Attitude | 3.95 | 1 | 2 | 3.78 | 2 | 8 | 4.27 | 1 | 2 | 4.00 | 1 | 3= |
| Self-image | 3.38 | 2 | 7 | 4.13 | 1 | 2 | 3.79 | 2 | 7 | 3.77 | 2 | 7 |
| Traits: | 3.59 | 2 | | 3.92 | 2 | | 3.87 | 2 | | 3.79 | 2 | |
| Self-confidence | 3.52 | 2 | 6 | 4.12 | 1 | 3 | 3.80 | 2 | 6 | 3.81 | 2 | 6 |
| Team player | 3.95 | 1 | 1 | 3.81 | 3 | 7 | 4.25 | 1 | 3 | 4.00 | 1 | 3= |
| Handle ambiguity | 3.30 | 3 | 8 | 3.83 | 2 | 6 | 3.55 | 3 | 8 | 3.56 | 3 | 8 |
| Motives: | 3.76 | 1 | | 4.13 | 1 | | 4.15 | 1 | | 4.01 | 1 | |
| Focus on success | 3.52 | 3 | 5 | 4.31 | 1 | 1 | 4.44 | 1 | 1 | 4.09 | 1 | 1 |
| Preservation of team integrity | 3.90 | 1 | 3 | 4.08 | 2 | 4 | 4.13 | 2 | 4 | 4.04 | 2 | 2 |
| Preservation of personal integrity | 3.86 | 2 | 4 | 4.00 | 3 | 5 | 3.88 | 3 | 5 | 3.91 | 3 | 5 |

Table 3 indicates the extent to which the TBE activities contributed to the development of participants' core competencies in terms of MSs, related rank (R), and an overall rank (OR) based upon percentage responses to a scale of 1 (minor) to 5 (major), and an additional point did not, for the three years and the mean thereof.

Given that there are effectively six points on the scale, the MSs are between 0.00 and 5.00, the midpoint being 2.50. It is notable that all the MSs are > 2.50, which indicates that in general the TBE activities contributed more of a major than a minor extent to an improvement in participants' understanding and appreciation of the ten core competencies.

No mean MS is > 4.17 ≤ 5.00, which indicates between a near major contribution to a major / major contribution. However, the 2019 and 2020 MSs of focus on success, and the 2019 preservation of team integrity MS do fall within this range. All the mean MSs are > 3.34 ≤ 4.17, which indicates the contribution can be deemed to be between a contribution to a near major contribution / near major contribution. Attitude, self-confidence, focus on success, preservation of team integrity, and preservation of personal integrity fall within the upper half of this range, namely > 3.75 ≤ 4.17. In terms of categories of core competencies, motives (MS = 3.97) is ranked first followed by traits (MS = 3.83), and self-concept (3.59). This ranking follows the ranking relative to the extent to which the TBE activities contributed to an improvement in participants' understanding and appreciation of the ten core competencies.

Table 3: Extent to which the TBE activities contributed to the development of participants' core competencies

| Core competency | Response / Year | | | | | | | | | | | |
|------------------------------------|-----------------|---|----|------|---|----|------|---|----|------|---|----|
| | 2018 | | | 2019 | | | 2020 | | | Mean | | |
| | MS | R | OR | MS | R | OR | MS | R | OR | MS | R | OR |
| Self-concept: | 3.60 | 2 | | 3.47 | 3 | | 3.71 | 3 | | 3.59 | 3 | |
| Values | 3.50 | 3 | 8 | 3.33 | 3 | 9 | 3.57 | 3 | 9 | 3.47 | 3 | 9 |
| Aptitude | 3.30 | 4 | 9 | 3.24 | 4 | 10 | 3.50 | 4 | 10 | 3.35 | 4 | 10 |
| Attitude | 3.95 | 1 | 2 | 3.64 | 2 | 8 | 4.07 | 1 | 5 | 3.89 | 1 | 4= |
| Self-image | 3.65 | 2 | 5 | 3.65 | 1 | 7 | 3.69 | 2 | 7 | 3.66 | 2 | 7= |
| Traits: | 3.57 | 3 | | 3.98 | 2 | | 3.94 | 2 | | 3.83 | 2 | |
| Self-confidence | 3.15 | 3 | 10 | 4.04 | 2 | 4 | 4.10 | 1 | 3 | 3.76 | 2 | 6 |
| Team player | 4.05 | 1 | 1 | 4.08 | 1 | 3 | 4.07 | 2 | 6 | 4.07 | 1 | 1 |
| Handle ambiguity | 3.50 | 2 | 7 | 3.83 | 3 | 6 | 3.64 | 3 | 8 | 3.66 | 3 | 7= |
| Motives: | 3.63 | 1 | | 4.15 | 1 | | 4.13 | 1 | | 3.97 | 1 | |
| Focus on success | 3.65 | 2 | 4 | 4.26 | 1 | 1 | 4.20 | 1 | 1 | 4.04 | 1 | 2 |
| Preservation of team integrity | 3.65 | 1 | 3 | 4.18 | 2 | 2 | 4.13 | 2 | 2 | 3.99 | 2 | 3 |
| Preservation of personal integrity | 3.60 | 3 | 6 | 4.00 | 3 | 5 | 4.07 | 3 | 4 | 3.89 | 3 | 4= |

Table 4 indicates the extent to which the TBE activities impacted on participants in terms of MSs, and related rank (R), based upon percentage responses to a scale of 1 (minor) to 5 (major), and an additional point did not, for the three years and the mean thereof. Given that there are effectively six points on the scale, the MSs are between 0.00 and 5.00, the midpoint being 2.50. It is notable that all the MSs are > 2.50,

which indicates that in general the TBE activities impacted more of a major than a minor extent on participants.

Only 1 / 7 (14.3%) MS (2020) and mean MS are $> 4.17 \leq 5.00$, which indicates the impact can be deemed to be between a near major extent and a major / major extent - your ability to communicate with your 1st year colleagues. 4 / 7 (57.1%) mean MSs are $> 3.34 \leq 4.17$, which indicates the impact can be deemed to be between some extent to a near major extent / near major extent: your ability to complete a task, building confidence in your own abilities, enhancing alternative thought processes, and your ability to be creative. The remaining 2 / 7 (28.6%) mean MSs are $> 2.50 \leq 3.34$, which indicates the TBE activities impacted between a near minor extent to some extent / some extent - removing you from your 'comfort zone' and improving your time management skills.

Table 4: Extent to which the TBE activities impacted on participants

| Impact | Response / Year | | | | | | | |
|---|-----------------|---|------|---|------|---|------|---|
| | 2018 | | 2019 | | 2020 | | Mean | |
| | MS | R | MS | R | MS | R | MS | R |
| Your ability to communicate with your 1 st year colleagues | 4.00 | 1 | 4.12 | 2 | 4.56 | 1 | 4.23 | 1 |
| Your ability to complete a task | 3.95 | 3 | 4.19 | 1 | 3.69 | 2 | 3.94 | 2 |
| Building confidence in your own abilities | 4.00 | 2 | 4.08 | 3 | 3.50 | 4 | 3.86 | 3 |
| Enhancing alternative thought processes | 3.86 | 4 | 3.96 | 4 | 3.31 | 5 | 3.71 | 4 |
| Your ability to be creative | 3.67 | 5 | 3.42 | 7 | 3.67 | 3 | 3.59 | 5 |
| Removing you from your 'comfort zone' | 3.33 | 7 | 3.62 | 6 | 2.88 | 6 | 3.28 | 6 |
| Improving your time management skills | 3.52 | 6 | 3.62 | 7 | 2.50 | 5 | 3.21 | 7 |

Table 5 indicates the extent to which the TBE activities enhanced the participants' attributes / states which collectively constitute emotional intelligence in terms of MSs, and related rank (R), based upon percentage responses to a scale of 1 (minor) to 5 (major), for the three years and the mean thereof. Given that there are five points on the scale, the MSs are between 1.00 and 5.00, the midpoint being 3.00. It is notable that all the MSs are > 3.00 , which indicates that in general the TBE activities contributed more of a major than a minor extent to the enhancement of the participants' attributes / states.

Only 2 / 45 (4.4%) MSs and 1 / 15 (6.7%) mean MS are $> 4.20 \leq 5.00$, which indicates that the extent of enhancement is between a near major extent to a major extent / major extent - happiness relative to 2019, 2020, and the mean. 14 / 15 (93.3%) mean MSs are $> 3.40 \leq 4.20$, which indicates that the extent of enhancement is between some extent to a near major extent / near major extent. The MSs of social responsibility, problem solving, optimism, interpersonal relationship, stress tolerance, self-regard, and assertiveness fall within the upper half of the range, namely $> 3.75 \leq 4.20$. The MSs of flexibility, independence, reality testing, impulse control, empathy, self-actualisation, and emotional self-awareness fall within the lower half of the range, namely $> 3.40 \leq 3.80$.

DISCUSSION

Due to the need for brevity, and that the activities differed from year to year, findings from only five of the twelve closed-ended questions were presented. However, the

findings constitute the overarching findings in the form of the contribution of the TBE to an improvement in participants’ understanding and appreciation of ten core competencies; enhancement of seventeen skills; development of the ten core competencies, impact on seven abilities, and enhancement of fifteen states / attributes relative to emotional intelligence.

Table 5: Extent to which the TBE activities enhanced the participants’ attributes / states

| Attribute / State | Response / Year | | | | | | | |
|----------------------------|-----------------|----|------|----|------|----|------|----|
| | 2018 | | 2019 | | 2020 | | Mean | |
| | MS | R | MS | R | MS | R | MS | R |
| Happiness | 4.10 | 2 | 4.38 | 1 | 4.93 | 1 | 4.47 | 1 |
| Social responsibility | 3.90 | 3 | 4.14 | 2 | 4.07 | 5 | 4.04 | 2 |
| Problem solving | 3.80 | 5 | 4.04 | 5 | 4.19 | 2 | 4.01 | 3 |
| Optimism | 3.76 | 7 | 4.13 | 3 | 4.07 | 4 | 3.99 | 4 |
| Interpersonal relationship | 3.79 | 6 | 4.00 | 6 | 4.07 | 3 | 3.95 | 5 |
| Stress tolerance | 4.10 | 1 | 3.91 | 9 | 3.60 | 10 | 3.87 | 6 |
| Self-regard | 3.55 | 13 | 4.08 | 4 | 3.67 | 7 | 3.77 | 7 |
| Assertiveness | 3.75 | 9 | 3.91 | 9 | 3.63 | 9 | 3.76 | 8 |
| Flexibility | 3.85 | 4 | 3.71 | 12 | 3.53 | 11 | 3.70 | 9 |
| Independence | 3.75 | 8 | 3.95 | 7 | 3.27 | 14 | 3.66 | 10 |
| Reality testing | 3.25 | 14 | 3.91 | 9 | 3.62 | 8 | 3.59 | 11 |
| Impulse control | 3.60 | 11 | 3.73 | 11 | 3.40 | 12 | 3.58 | 12 |
| Empathy | 3.20 | 15 | 3.68 | 13 | 3.67 | 6 | 3.52 | 13 |
| Self-actualisation | 3.60 | 10 | 3.65 | 14 | 3.29 | 13 | 3.51 | 14 |
| Emotional self-awareness | 3.55 | 12 | 3.61 | 15 | 3.27 | 15 | 3.48 | 15 |

The findings indicate that the TBE activities enhanced seventeen skills and various abilities and developed the ten core competencies, and fifteen states / attributes relative to emotional intelligence. These constitute objectives of the TBE and complement student engagement in general.

It is notable that relative to the seventeen skills, the enhancement was between some extent to a near major extent / near major extent in the case of thirteen (76.5%) skills, team building, coordinating, oral communicating, motivating, and planning predominated, which also constitute key skills. These were focus points of the TBE activities.

Given that the performance of students and practitioners is affected by the extent to which core competencies manifest themselves, and differentiate between average and above average performance, the extent to which the TBE activities contributed to the development of participants’ core competencies is notable. The findings indicate that the activities made between a contribution to a near major contribution / near major contribution - attitude, self-confidence, focus on success, preservation of team integrity, and preservation of personal integrity predominated. This is in alignment with the findings in the literature, especially that of Larmar and Ingamells (2010) relative to students supporting each other, and Hmelo-Silver *et al.*, relative to the PBL approach.

The ability to communicate with first year colleagues, the ability to complete a task, and building confidence in students' abilities predominated in terms of the extent to which the TBE activities impacted on participants. These were focus points of the TBE, especially the ability to complete a task. This is in alignment with the findings of Hill *et al.*, (2018) arising from the 'impact of an outdoor orientation programme' study.

In terms of the extent to which the TBE activities enhanced the participants' attributes / states, which collectively constitute emotional intelligence, happiness predominated, the extent of enhancement being between a near major extent to a major extent / major extent. The extent of enhancement in the case of the remaining fourteen was between some extent to a near major extent / near major extent - social responsibility, problem solving, optimism, and interpersonal relationship predominated. Developing the ability to solve problems was a focus point of the TBE. Furthermore, student engagement should enhance students' well-being (Hill *et al.*, 2018).

CONCLUSION

Non-traditional academic programme interventions, such as the TBE, do impact on first-year students' ability, to manage themselves, strategise, plan, evolve tactics, and take action, which in turn should contribute to their ability to study, undertake assignments, projects, and successfully complete the undergraduate programme, although this can only be quantified on completion of a full academic year. In addition, the activities developed confidence in their abilities, enhanced communication amongst them, and provided an opportunity for them to test alternative thought processes.

It is thus recommended that the TBE be undertaken on an annual basis, with the impact thereof on participants to be determined following the completion of a full academic year and again post-graduation. Further potential events directed at enhancing students' abilities and increasing confidence in their abilities, as well as providing them opportunities to test alternative thought processes, should be investigated. In addition, the results from this study will be used to enhance the intervention in future years including 'tweaking' events to better align to students' areas of concern as detailed in the comments provided.

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